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Annotated bibliography of Palearctic species of Drosophilidae (Diptera)

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Introduction

The total number of publications dealing with drosophilids may well exceed 25 000, and it is often difficult to find all the relevant papers which deal with a certain aspect. Most of these publications are concerned with genetics, physiology, biochemistry, developmental biology and other such related topics; these were already reviewed by ASHBURNER and NOVITSKI (1976). However other aspects such as taxonomy, faunistics etc. have not yet been fully documented. This bibliography is based on references to the taxonomic and faunistical aspects of Palearctic species, critically reviewed under six keywords. All species included in the "Catalogue of Palearctic Diptera" (BÄCHLI and ROCHA PITÉ, in press) are dealt with, with the exception of the doubtful species. The species are alphabetically arranged within each genus.

The six keywords include the following information:

General features of adults: We refer to all descriptive notes, such as full descriptions of morphology and anatomy, diagnoses, comparisons with other species etc.

Figures: All papers with morphological and anatomical illustrations of adults, as well as those of eggs, larvae and puparia are mentioned.

Keys: We refer to all keys, including those of early stages. Keys which are out-of-date, or those made for areas outside of the Palearctic region have been included as they could give additional descriptive information.

Development: Because of the extensive experimental work being done on some species we restrict ourselves to references to basic descriptive notes of eggs, larvae and puparia.

Biology: We do not quote laboratory work papers, but we include all references to wild populations in a wide sense, covering information on distribution in time and space, breeding, feeding, collecting and so on.

Distribution: Only original records are quoted; distributional notes in catalogues, reviews and check lists have been omitted except for cases where no other references were found. The quotations are separately given for each country. The European countries are arranged in alphabetical order, including the whole of the USSR and Turkey. The other countries are arranged according to their geographic position, from west to east. The range of the Palearctic region is taken from BÄCHLI and ROCHA PITÉ (1981). Articles in *Drosophila* Information Service (DIS) are treated as preliminary reports, which are usually published later elsewhere. In order to shorten the bibliography we do not quote DIS except in cases where no other publications were found. In these cases DIS is cited by volume and page number.

We critically checked the distributional publications and excluded references considered doubtful because of possible misidentifications of species. However many questionable records may still be included. Countries without reliable records are labelled with a question-mark. In order to complete the information about the species distribution, we also mention countries with only unpublished records, which have been acquired from personal information or from collections we have seen.

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Annotated list of species

Acletoxenus FRAUENFELD, 1868

Acletoxenus formosus LOEW, 1864

Other names used: *A. syrphoides* FRAUENFELD (syn.), *A. ornata* MEIGEN (misident.).

General features of adults: COLLIN (1902a, 1902b), DUDA (1934), FRAUENFELD (1868a, 1868b), LOEW (1864), MALLOCH (1929), OLDENBERG (1914), SÉGUY (1934a, 1934b), WALKER (1853).

Figures: COLLIN (1902a), DUDA (1924a, 1934), FRAUENFELD (1868b), PAPP (1973), SÉGUY (1934b).

Keys: DUDA (1924a, 1934), ENDERLEIN (1936), FONSECA (1965), LAŠTOVKA and MÁCA (1977), MCALPINE (1968), MALLOCH (1929), PAPP (1973), SÉGUY (1934b), ŠTAKELBERG (1970).

Development: FRAUENFELD (1868a).

Biology: BRAUER (1883), COLYER and HAMMOND (1951), FRAUENFELD (1868a), GAUTIER (1923), KNAB (1914), SÉGUY (1933b, 1934a, 1934b, 1950, 1951), STURTEVANT (1921), WALKER (1853).

Distribution:

AUSTRIA: BASDEN (1961), FRAUENFELD (1868a), OLDENBERG (1914), STROBL (1900a, 1901). — CZECHOSLOVAKIA: LAŠTOVKA and MÁCA (1977), MÁCA (1972b). — FRANCE: GAUTIER (1923), SÉGUY (1934a, 1934b). — GERMAN DEMOCRATIC REPUBLIC: OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: DUDA (1934), LOEW (1864). — GREAT BRITAIN: ADAMS (1902), COLLIN (1902a, 1911), FONSECA (1965), JENKINSON (1901), WALKER (1853). — HUNGARY: ARADI (1959), PAPP (1973), SOÓS (1945). — ITALY: FRAUENFELD (1868a), ZANGHERI (1950). — NETHERLANDS: DE MEIJERE (1935, 1939b). — POLAND: DUDA (1934), LOEW (1864). — ROMANIA: ARADI (1959), PAPP (1973), SOÓS (1945). — SWITZERLAND: unpublished. — YUGOSLAVIA: ARADI (1959), FRAUENFELD (1868a), SOÓS (1945), STROBL (1898a, 1900a). — CANARY IS.: DUDA (1934), FREY (1936). — ISRAEL: BASDEN (1966).

Amiota LOEW, 1862

Amiota acuta OKADA, 1968

General features of adults: OKADA (1968c, 1971a).

Figures: OKADA (1968c).

Key: OKADA (1971a).

Biology: OKADA (1968c).

Distribution:

JAPAN: OKADA (1968c).

Amiota albilabris ROTH in ZETTERSTEDT, 1860

Other name used: *A. albo guttata* var. *obscuripes* STROBL (syn.).

General features of adults: BASDEN (1961), COLLIN (1952), MÁCA (1980), OKADA (1960a, 1961a, 1971a), OLDENBERG (1914), STROBL (1910), WAHLGREN (1927), ZETTERSTEDT (1860).

Figures: BEPPU et al. (1977), MÁCA (1980), OKADA (1960a), PAPP (1973).

Keys: BEPPU et al. (1977), DUDA (1934), FONSECA (1965), MÁCA (1980), OKADA (1960a, 1971a), PAPP (1973), WAHLGREN (1927).

Biology: KIMURA and TODA (1976), MINAMI et al. (1979), TODA (1977).

Distribution:

AUSTRIA: BASDEN (1961), STROBL (1894, 1910). — CZECHOSLOVAKIA: MÁČA (1980). — FINLAND: FREY et al. (1941). — GREAT BRITAIN: COLLIN (1952), FONSECA (1965). — ROMANIA: MÁČA (1980), PAPP (1973). — SWEDEN: WAHLGREN (1927), ZETTERSTEDT (1860). — SWITZERLAND: BÄCHLI (1974c), MÁČA (1980). — YUGOSLAVIA: BASDEN (1961), STROBL (1910). — JAPAN: KIMURA and TODA (1976), MÁČA (1980), MINAMI et al. (1979), OKADA (1960a), TODA (1977).

***Amiota alboguttata* WAHLBERG, 1839**

Other names used: *A. obscuripes* STROBL (misident.), *A. leucostoma* BECKER (syn.), *Phortica* sp., *Amiota* sp.

General features of adults: BASDEN (1957b), BASDEN and HARNDEN (1956), BECKER (1908a), COLLIN (1911), DUDA (1926b, 1934), MÁČA (1980), OKADA (1971a), OLDENBERG (1914), WAHLBERG (1839), WAHLGREN (1927), ZETTERSTEDT (1847). Figures: DUDA (1934), MÁČA (1980), PAPP (1973).

Keys: BASDEN (1954b), DUDA (1924a, 1934), FONSECA (1965), LAŠTOVKA and MÁČA (1977), MÁČA (1980), OKADA (1971a), OLDENBERG (1914), PAPP (1973), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), WAHLGREN (1927).

Biology: BASDEN (1954b), BASDEN and HARNDEN (1956), BUXTON (1960), EDWARDS (1936), FREY (1932), KÜHLHORN (1978), MOMMA (1957), STORÅ (1957), WAKELY (1953).

Distribution:

CZECHOSLOVAKIA: LAŠTOVKA and MÁČA (1977), MÁČA (1980). — FINLAND: FREY (1929, 1932), LUMME et al. (1978), STORÅ (1956, 1957). — FRANCE: unpublished. — GERMAN DEMOCRATIC REPUBLIC: OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: KÜHLHORN (1978). — GREAT BRITAIN: BASDEN (1952, 1954b), COLLIN (1911), EDWARDS (1936), FONSECA (1965), WAKELY (1953), YERBURY (1913). — HUNGARY: PAPP (1973). — ITALY: OLDENBERG (1914). — NETHERLANDS: DE MEIJERE (1939b), VAN DER WULP and DE MEIJERE (1898). — NORWAY: BASDEN and HARNDEN (1956). — ROMANIA: ARADI (1959), BECKER (1908a), DUDA (1934), OLDENBERG (1914, 1922), SOČES (1945). — SWEDEN: RINGDAHL (1941), WAHLBERG (1839), WAHLGREN (1927), ZETTERSTEDT (1847, 1855, 1860). — SWITZERLAND: BÄCHLI (1974b), MÁČA (1980). — USSR: ŠTAKELBERG (1930, 1970).

Comment:

This species was also recorded in S. Korea, Japan and Alaska, but these records may refer to other species.

***Amiota aquilotaurusata* TAKADA, BEPPU and TODA, 1979**

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Amiota balaenodentata* TAKADA, BEPPU and TODA, 1979**

Other name used: *Amiota* sp. 8.

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Biology: MINAMI et al. (1979).

Distribution:

JAPAN: MINAMI et al. (1979), TAKADA et al. (1979).

***Amiota basdeni* FONSECA, 1965**

Other name used: *Amiota* sp.

General features of adults: FONSECA (1965), MÁČA (1980).

Figures: MÁČA (1980).

Keys: FONSECA (1965), MÁČA (1980).

Development: MÁČA (1980).

Distribution:

CZECHOSLOVAKIA: MÁČA (1980). — GREAT BRITAIN: FONSECA (1965), MÁČA (1980). — HUNGARY: MÁČA (1980). — SWITZERLAND: BÄCHLI (1972b, 1973a, 1975a, 1975b), MÁČA (1980).

***Amiota chungii* OKADA, 1971**

Other name used: *A. alboguttata* forma *koreana* OKADA and CHUNG

General features of adults: CHUNG and RHO (1959), OKADA (1971a), OKADA and CHUNG (1960), TAKADA et al. (1979).

Figures: OKADA and CHUNG (1960).

Keys: LEE (1964c), OKADA (1971a).

Biology: OKADA and CHUNG (1960).

Distribution:

S. KOREA: LEE (1964c, 1966b), OKADA (1971a), OKADA and CHUNG (1960).

***Amiota clavata* OKADA, 1971**

Other name used: *A. alboguttata* forma *clavata* OKADA.

General features of adults: OKADA (1960a, 1971a).

Figures: BEPPU et al. (1977), OKADA (1960a).

Keys: BEPPU et al. (1977), OKADA (1960a, 1971a).

Biology: KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), MINAMI et al. (1979), TODA (1977).

Distribution:

JAPAN: KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), MINAMI et al. (1979), OKADA (1960a, 1971a), TODA (1977).

***Amiota conifera* OKADA, 1977**

Other names used: *A. conifera takadai* OKADA, *Amiota* sp. like *variegata*.

General features of adults: OKADA (1977a), TAKADA (1960).

Figures: OKADA (1977a), TAKADA (1960).

Key: OKADA (1977a).

Biology: MINAMI et al. (1979), TAKADA (1960).

Distribution:

JAPAN: BEPPU (1978), MINAMI (1979), MINAMI et al. (1979), OKADA (1977a), TAKADA (1960).

***Amiota curvistyla* OKADA, 1971**

General features of adults: OKADA (1971a).

Figures: OKADA (1971a).

Key: OKADA (1971a).

Distribution:

JAPAN: OKADA (1971a).

***Amiota delta* TAKADA, BEPPU and TODA, 1979**

Other name used: *Amiota* sp. 3.

General features of adults: MÁCA (1980), TAKADA et al. (1979).

Figures: BEPPU et al. (1977), TAKADA et al. (1979).

Key: BEPPU et al. (1977).

Distribution:

JAPAN: TAKADA et al. (1979).

***Amiota dentata* OKADA, 1971**

General features of adults: OKADA (1971a).

Figures: OKADA (1971a).

Key: OKADA (1971a).

Distribution:

JAPAN: OKADA (1971a).

***Amiota dispina* OKADA, 1960**

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1960a, 1971a), TAKADA et al. (1979).

Figures: OKADA (1960a).

Keys: BEPPU et al. (1977), OKADA (1960a, 1971a), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), MINAMI et al. (1979), OKADA (1960a), TODA (1973b, 1977).

Distribution:

S. KOREA: KANG et al. (1965b), LEE (1966b). — JAPAN: KANEKO and TOKUMITSU (1969), KANEKO et al. (1969), MINAMI et al. (1979), OKADA (1960a), TODA (1973b, 1977).

***Amiota elongata* OKADA, 1971**

Other name used: *A. alboguttata* forma *elongata* OKADA.

General features of adults: OKADA (1960a, 1971a).

Figures: BEPPU et al. (1977), OKADA (1960a).

Keys: BEPPU et al. (1977), OKADA (1960a, 1971a).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976), KIMURA and TODA (1976), MINAMI et al. (1979), TODA (1977).

Distribution:

JAPAN: KANEKO and TOKUMITSU (1969), KANEKO et al. (1969), KIMURA (1976b), KIMURA and TODA (1976), MINAMI et al. (1979), OKADA (1960a, 1971a), TODA (1977).

***Amiota erinacea* MÁCA, 1977**

General features of adults: MÁCA (1977).

Figures: MÁCA (1977).

Key: MÁCA (1977).

Biology: MÁCA (1977).

Distribution:

BULGARIA: MÁCA (1977).

***Amiota falcilis* TAKADA, BEPPU and TODA, 1979**

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Amiota filipes* MÁCA, 1980**

General features of adults: MÁCA (1980).

Figures: MÁCA (1980).

Key: MÁCA (1980).

Biology: MÁCA (1980).

Distribution:

CZECHOSLOVAKIA: MÁCA (1980).

***Amiota flagellata* OKADA, 1971**

General features of adults: MÁCA (1980), NISHIHARU (1979), OKADA (1971a).

Figures: OKADA (1971a).

Key: OKADA (1971a).

Biology: MINAMI et al. (1979).

Distribution:

JAPAN: MINAMI et al. (1979), OKADA (1971a).

***Amiota flavopruinosa* DUDA, 1934**

Other name used: *A. lacteoguttata* PORTSCHINSKY (misident.).

General features of adults: DUDA (1934), MÁCA (1980).

Figures: MÁCA (1980).

Keys: DUDA (1934), MÁCA (1980).

Distribution:

CZECHOSLOVAKIA: MÁCA (1980). — GERMAN DEMOCRATIC REPUBLIC: MÁCA (1980), OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: DUDA (1934), MÁCA (1980). — SWITZERLAND: MÁCA (1980). — YUGOSLAVIA: MÁCA (1980).

***Amiota forficula* TAKADA, BEPPU and TODA, 1979**

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Amiota furcata* OKADA, 1971**

Other name used: *A. alboguttata* forma *furcata* OKADA.

General features of adults: OKADA (1960a, 1971a, 1971b, 1977a).

Figures: BEPPU et al. (1977), OKADA (1960a, 1968c, 1971b).

Keys: BEPPU et al. (1977), OKADA (1960a, 1971a).

Biology: KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), MINAMI et al. (1979), SAITO et al. (1962), TODA (1977).

Distribution:

JAPAN: KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1969), KIMURA and TODA (1976), MINAMI et al. (1979), OKADA (1960a, 1971a, 1971b), SAITO et al. (1962), TAKADA (1968, 1971), TODA (1977), WAKAHAMA (1962a, 1964, 1966).

***Amiota kappa* MÁCA, 1977**

General features of adults: MÁCA (1977), OKADA (1977a).

Figures: MÁCA (1977), OKADA (1977a).

Keys: MÁCA (1977), OKADA (1977a).

Distribution:

JAPAN: MÁCA (1977), OKADA (1977a).

***Amiota lanceolata* OKADA, 1971**

General features of adults: OKADA (1971a), TAKADA et al. (1979).

Figures: OKADA (1971a).

Key: OKADA (1971a).

Distribution:

JAPAN: OKADA (1971a).

***Amiota lata* BECKER, 1907**

General features of adults: BECKER (1907b), DUDA (1934).

Key: DUDA (1934).

Distribution:

CHINA: BECKER (1907b), DUDA (1934).

***Amiota magna* OKADA, 1960**

General features of adults: MÁCA (1977), OKADA (1960a, 1971a, 1977a).

Figures: MÁCA (1977), OKADA (1960a, 1968a, 1977a).

Keys: MÁCA (1977), OKADA (1960a, 1971a, 1977a).

Development: OKADA (1968a, 1968a).

Biology: NAGATA (1960), OKADA (1960a, 1962, 1968a), WAKAHAMA (1962b, 1964).

Distribution:

JAPAN: KAWANISHI et al. (1975), MÁCA (1977), OKADA (1960a, 1962, 1966b, 1968a), WAKAHAMA (1962a, 1962b, 1962c, 1964).

***Amiota nagatai* OKADA, 1971**

Other name used: *A. alboguttata* forma *nagatai* OKADA.

General features of adults: OKADA (1960a, 1971a).

Figures: OKADA (1960a).

Keys: OKADA (1960a, 1971a).

Biology: OKADA (1960a).

Distribution:

JAPAN: OKADA (1960a, 1971a).

Recorded also on the Ryukyu Islands.

***Amiota neochungi* TAKADA, BEPPU and TODA, 1979**

General features of adults: MÁCA (1980), TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Amiota okadai* MÁCA, 1977**

Other name used: *A. variegata* FALLÉN (misident.).

General features of adults: MÁCA (1977), OKADA (1956, 1977a).

Figures: MÁCA (1977), OKADA (1956, 1977a).

Keys: MÁCA (1977), OKADA (1956, 1977a).

Biology: MINAMI et al. (1979).

Distribution:

JAPAN: MÁCA (1977), MINAMI (1979), MINAMI et al. (1979), OKADA (1977a).

***Amiota oldenbergi* DUDA, 1924**

General features of adults: DUDA (1926b, 1934), MÁCA (1977).

Figures: DUDA (1924a, 1934), MÁCA (1977).

Keys: DUDA (1924a, 1934), MÁCA (1977), SÉGUY (1934a, 1934b).

Distribution:

GERMAN DEMOCRATIC REPUBLIC: DUDA (1924a, 1934), MÁCA (1977), ROHLFIEN and EWALD (1972).

***Amiota onchopyga* NISHIHARU, 1979**

General features of adults: NISHIHARU (1979).

Figures: NISHIHARU (1979).

Distribution:

JAPAN: NISHIHARU (1979).

***Amiota orchidea* OKADA, 1968**

General features of adults: OKADA (1968c, 1971a).

Figures: OKADA (1968c).

Key: OKADA (1971a).

Distribution:

JAPAN: OKADA (1968c).

***Amiota palpifera* OKADA, 1971**

General features of adults: OKADA (1971a).

Figures: OKADA (1971a).

Key: OKADA (1971a).

Distribution:

JAPAN: OKADA (1971a).

***Amiota promissa* OKADA, 1960**

General features of adults: OKADA (1960a, 1968c, 1971a).

Figures: OKADA (1960a).

Keys: OKADA (1960a, 1971a).

Distribution:

JAPAN: OKADA (1960a), TAKADA et al. (1979).

***Amiota rufescens* OLDENBERG, 1914**

Other name used: *A. leucostoma* LOEW (misident.).

General features of adults: DUDA (1926b, 1934), MÁCA (1980), OKADA (1968c), OLDENBERG (1914), WAKAHAMA and OKADA (1958).

Figures: MÁCA (1980).

Keys: DUDA (1924a, 1934), FONSECA (1965), MÁCA (1980), OLDENBERG (1914), PAPP (1973), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970).

Biology: SCHMID (1968).

Distribution:

FINLAND: unpublished. — GREAT BRITAIN: FONSECA (1965). — ROMANIA: ARADI (1959), DUDA (1934), MÁCA (1980), OLDENBERG (1914), PAPP (1973), ROHLFIEN and EWALD (1972), Soós (1945). — SWITZERLAND: MÁCA (1980), SCHMID (1968). — USSR: DUDA (1934), ŠTAKELBERG (1930, 1970).

Comment:

All European records of *A. leucostoma* LOEW may refer to *A. rufescens* OLDENBERG.

***Amiota semivirgo* MÁCA, 1977**

Other name used: *A. variegata* FALLÉN (misident.).

General features of adults: MÁCA (1977).

Figures: MÁCA (1977).

Key: MÁCA (1977).

Distribution:

AUSTRIA: unpublished. — CZECHOSLOVAKIA: MÁCA (1977). — ROMANIA: MÁCA (1977). — SWITZERLAND: BÄCHLI (1972c, 1973a, 1979). — YUGOSLAVIA: unpublished.

***Amiota sigma* OKADA, 1971**

General features of adults: OKADA (1971a), TAKADA et al. (1979).

Figures: OKADA (1971a).

Key: OKADA (1971a).

Distribution:

JAPAN: OKADA (1971a).

***Amiota sinuata* OKADA, 1968**

General features of adults: OKADA (1968c, 1971a).

Figures: OKADA (1968c).

Key: OKADA (1971a).

Biology: OKADA (1968c).

Distribution:

JAPAN: OKADA (1968c).

***Amiota stylopyga* WAKAHAMA and OKADA, 1958**

Other names used: *A. leucostoma* LOEW (misident.), *Amiota* sp. I.

General features of adults: MÁCA (1980), OKADA (1961a, 1971a), WAKAHAMA and OKADA (1958).

Figures: BEPPU et al. (1977), WAKAHAMA and OKADA (1958).

Keys: BEPPU et al. (1977), OKADA (1971a), TAKADA (1971).

Biology: BEPPU and TODA (1976), KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1957), TODA (1973a, 1977), WAKAHAMA and OKADA (1958).

Distribution:

S. KOREA: KANG et al. (1965), LEE (1966b). — JAPAN: BEPPU and TODA (1976), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968), KIMURA and TODA (1976), MÁCA (1980), MINAMI et al. (1979), MOMMA (1957), OKADA (1960a), TAKADA (1968), TODA (1973a, 1977), WAKAHAMA (1964), WAKAHAMA and OKADA (1958).

***Amiota subfurcata* OKADA, 1971**

Other name used: *A. alboguttata* forma *furcata* OKADA.

General features of adults: OKADA (1960a, 1971a, 1971b, 1977a).

Figures: BEPPU et al. (1977), OKADA (1960a, 1971b).

Keys: BEPPU et al. (1977), OKADA (1971a).

Biology: KIMURA and TODA (1976), MINAMI et al. (1979).

Distribution:

JAPAN: KIMURA and TODA (1976), MINAMI et al. (1979), OKADA (1960a, 1971a, 1971b).

Recorded also in Taiwan.

***Amiota subtsuradiata* DUDA, 1934**

General features of adults: DUDA (1934), MÁCA (1980), OKADA (1960a).

Figures: MÁCA (1980), PAPP (1973).

Keys: DUDA (1934), MÁCA (1980), PAPP (1973), ŠTAKELBERG (1970).

Distribution:

FINLAND: DUDA (1934), MÁCA (1980). — ? HUNGARY: PAPP (1973). — POLAND: DUDA (1934). — ROMANIA: ARADI (1959), DUDA (1934), Soós (1945). — USSR: DUDA (1934), ŠTAKELBERG (1970).

Recorded also in North America.

Comment:

Some records, especially in North America, may refer to other species.

***Amiota taurusata* TAKADA, BEPPU and TODA, 1979**

Other name used: *Amiota* sp. 1.

General features of adults: TAKADA et al. (1979).

Figures: BEPPU et al. (1977), TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Amiota trifurcata* OKADA, 1968**

General features of adults: OKADA (1968c, 1971a).

Figures: BEPPU et al. (1977), OKADA (1968c).

Keys: BEPPU et al. (1977), OKADA (1971a).

Biology: MINAMI et al. (1979), TODA (1977).

Distribution:

JAPAN: MINAMI et al. (1979), OKADA (1968c), TODA (1977).

***Amiota trochlea* TAKADA and TODA, 1973**

General features of adults: TAKADA and TODA (1973).

Figures: BEPPU et al. (1977), TAKADA and TODA (1973).

Key: BEPPU et al. (1977).

Biology: MINAMI et al. (1979).

Distribution:

JAPAN: MINAMI et al. (1979), TAKADA and TODA (1973).

***Amiota variegata* FALLÉN, 1823**

General features of adults: BASDEN (1957b), DUDA (1927, 1934), FALLÉN (1823), HENDEL (1914), MÁCA (1977), MACQUART (1835), MEIGEN (1830), SÉGUY (1934a, 1934b), SHARP (1903), WAHLGREN (1927), ZETTERSTEDT (1847).

Figures: DUDA (1934), MÁCA (1977), PAPP (1973), SÉGUY (1934b).

Keys: DUDA (1924a, 1934), FONSECA (1965), LAŠTOVKA and MÁCA (1977), MÁCA (1977), SÉGUY (1934a, 1934b), WAHLGREN (1927), ZETTERSTEDT (1847).

Development: MÁCA (1977).

Biology: BEZZI (1891), COLLIN (1911), COLYER and HAMMOND (1951), DUDA (1934), KÜHLHORN (1978), MÁCA (1977), SÉGUY (1934a, 1934b), SHARP (1903), WACHTEL (1882), WAHLBERG (1839).

Distribution:

? ALBANIA: unpublished. — ? AUSTRIA: SCHNER (1864), STROBL (1894, 1910). — BULGARIA: MÁCA (1977). — CZECHOSLOVAKIA: CIZŽEK (1910), LAŠTOVKA and MÁCA (1977), MÁCA (1977), MARTINEK (1973). — ? FINLAND: FREY (1929), ZETTERSTEDT (1860). — ? FRANCE: SÉGUY (1934a, 1934b). — ? GERMAN DEMOCRATIC REPUBLIC: OLDENBERG (1914). — ? GERMAN FEDERAL REPUBLIC: KÜHLHORN (1978), MACQUART (1835), OLDENBERG (1914). — GREAT BRITAIN: ADAMS (1906), COLLIN (1911), FONSECA (1965), MÁCA (1977), SÉGUY (1934a, 1934b), SHARP (1903). — HUNGARY: ARADI (1959), MÁCA (1977), PAPP (1973), Soós (1943), THALHAMMER (1899). — ? ITALY: BEZZI (1891, 1892a). — ? PORTUGAL: ROCHA PITÉ (1975a), SÉGUY (1934a, 1934b, 1936). — ? ROMANIA: ARADI (1959), DUDA (1934), OLDENBERG (1914), THALHAMMER (1899). — ? SPAIN: SÉGUY (1934a, 1934b). — SWEDEN: FALLÉN (1823), MÁCA (1977), RINGDAHL (1949), WAHLGREN (1927), WAHLBERG (1839), ZETTERSTEDT (1838, 1847, 1855, 1860). — SWITZERLAND: unpublished. — ? USSR: DUDA (1934), PETROVA (1968), ŠTAKELBERG (1970), SYTSHEVSKAJA (1978). — ? YUGOSLAVIA: ARADI (1959), COB (1959), STROBL (1898a, 1900a, 1910), THALHAMMER (1899). — ? AZORES: SÉGUY (1936).

Comment:

Records of this species in various countries may refer to other species. This could be true especially of the Japanese and Korean area. We therefore do not quote from this area.

Cacoxenus* LOEW, 1858**Cacoxenus argyreator* FREY, 1932**

General features of adults: DUDA (1934), FREY (1932).

Figures: DUDA (1934).

Keys: DUDA (1934), FREY (1932), MCALPINE (1968).

Biology: FREY (1932), STORÅ (1957).

Distribution:

FINLAND: DUDA (1934), FREY (1932), HARDY and WHEELER (1960), LUMME et al. (1979), MCALPINE (1968), STORÅ (1957). — NORWAY: BASDEN and HARNDEN (1956), HARDY and WHEELER (1960). — SWEDEN: unpublished.

Cacoxenus exiguus DUDA, 1924

General features of adults: DUDA (1934), HENDEL (1933), MCALPINE (1968).

Figures: DUDA (1934), MCALPINE (1968), PAPP (1973).

Keys: DUDA (1924a, 1934), FONSECA (1965), FREY (1932), MCALPINE (1968), PAPP (1973), SÉGUY (1934a, 1934b).

Distribution:

GREAT BRITAIN: FONSECA (1965). — POLAND: DUDA (1934), HARDY and WHEELER (1960). — SWITZERLAND: BÄCHLI (1974c).

Cacoxenus indagator LOEW, 1858

Other name used: *C. obscura* KRÖBER (syn.).

General features of adults: DUDA (1934), ENDERLEIN (1927), HACKMAN (1969a), HARDY (1965), HARDY and WHEELER (1960), HENDEL (1933), KRÖBER (1912), LOEW (1858), MIK (1892, 1894), OSTEN-SÄCKEN (1892), SCHINER (1864), SÉGUY (1934a, 1934b).

Figures: DUDA (1934), HACKMAN (1969a), HARDY (1965), HARDY and WHEELER (1960), HENNIG (1952), DE MEIJERE (1944), PAPP (1973), SÉGUY (1934b).

Keys: DUDA (1924a, 1934), FONSECA (1965), FREY (1932), LAŠTOVKA and MÁČA (1977), MCALPINE (1968), PAPP (1973), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970).

Development: HENNIG (1952), DE MEIJERE (1944).

Biology: DUDA (1934), GIRAUD (1861), JULLIARD (1947, 1948), KARL (1936), KRÖBER (1910, 1912, 1935), LOEW (1858), DE MEIJERE (1944), OLDROYD (1965), RADDATZ (1873), SÉGUY (1933b, 1934a, 1934b, 1950, 1951, 1955), TSACAS and DESMIER DE CHENON (1976).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1934), MIK (1892), SÉGUY (1934a, 1934b), STROBL (1910). — CZECHOSLOVAKIA: LAŠTOVKA and MÁČA (1977). — FRANCE: GIRAUD (1861), SÉGUY (1934a, 1934b). — GERMAN DEMOCRATIC REPUBLIC: KARL (1936), RADDATZ (1873). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), KRÖBER (1910, 1912, 1935), OSTEN-SÄCKEN (1892), SCHINER (1864). — GREAT BRITAIN: AUDCENT (1950), FONSECA (1965), HARDY and WHEELER (1960). — HUNGARY: ARADI (1959), PAPP (1973), THALHAMMER (1899). — NETHERLANDS: DE MEIJERE (1944). — POLAND: HARDY and WHEELER (1960), KARL (1936), LOEW (1858). — ROMANIA: ARADI (1959). — SPAIN: HACKMAN (1969a), SÉGUY (1934a, 1934b). — SWITZERLAND: JULLIARD (1947, 1948). — YUGOSLAVIA: SÉGUY (1934a, 1934b), STROBL (1898a, 1900a).

Cacoxenus inquilinus HENDEL, 1933

General features of adults: HENDEL (1933), MCALPINE (1968), OKADA (1973c).

Key: PAPP (1973).

Distribution:

AUSTRIA: HENDEL (1933).

Cacoxenus kaszabi OKADA, 1973

General features of adults: OKADA (1973c).

Figures: OKADA (1973c).

Distribution:

CZECHOSLOVAKIA: unpublished. — MONGOLIA: OKADA (1973a).

Cacoxenus perspicax KNAB, 1914

Other name used: *C. punctatus* DUDA (syn.).

General features of adults: BRYAN (1938), DUDA (1926b, 1934), GUPTA (1970), HARDY (1965), HARDY and WHEELER (1960), HENDEL (1933), KNAB (1914), MCALPINE (1968), MALLOCH (1924a, 1924b), TSACAS and DESMIER DE CHENON (1976).

Figures: DUDA (1924a), GUPTA (1970), HARDY (1965).

Keys: BRYAN (1938), DUDA (1924), HARDY (1965).

Biology: BEZZI (1917), BRYAN (1938), HARDY (1965), KNAB (1914), MALLOCH (1924a), SÉGUY (1933b, 1951), STURTEVANT (1921), SWEZEY (1928, 1932).

Distribution:

EGYPT: unpublished.

Recorded mainly in Old World tropics.

Cacoxenus vlasovi (DUDA), 1934

General features of adults: DUDA (1934), MCALPINE (1968), OKADA (1973c), SÉGUY (1941).

Figures: DUDA (1934), OKADA (1973c).

Key: DUDA (1934).

Biology: DUDA (1934).

Distribution:

USSR: DUDA (1934), MCALPINE (1968). — MONGOLIA: OKADA (1973).

Chymomyza CZERNY, 1903*Chymomyza amoena* LOEW, 1862

General features of adults: HSU (1949), LOEW (1862), OKADA (1976), PATTERSON (1943), STURTEVANT (1921), THROCKMORTON (1962).

Figures: DUDA (1927), HSU (1949), OKADA (1976), PATTERSON (1943), THROCKMORTON (1962).

Keys: DUDA (1927), MALLOCH and MCATEE (1924), OKADA (1976), STURTEVANT (1916, 1921), WHEELER (1949b, 1952).

Development: DUDA (1934), PATTERSON (1943).

Biology: MALLOCH and MCATEE (1924), SABATH (1974), STURTEVANT (1916, 1921), TESKEY (1976), WHEELER (1952).

Distribution:

CZECHOSLOVAKIA: unpublished.

Recorded mainly in North America.

Chymomyza atrimana OKADA, 1956

General features of adults: OKADA (1956, 1976).

Figures: OKADA (1956).

Keys: OKADA (1956, 1976), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), OKADA (1956), TODA (1973a).

Distribution:

JAPAN: KANEKO and TOKUMITSU (1969), OKADA (1956), TODA (1973a), WAKAHAMA (1964), WAKAHAMA et al. (1963).

Chymomyza caudatula OLDENBERG, 1914

Other names used: *Ch. costata* ZETTERSTEDT (misident.), *Neotanygastrella* sp.

General features of adults: DUDA (1927, 1934), HACKMAN et al. (1970), OKADA (1954b, 1956, 1961a, 1976), OLDENBERG (1914), STURTEVANT (1916), WHEELER (1949b, 1952).

Figures: BEPPU et al. (1977), DUDA (1934), HACKMAN et al. (1970), OKADA (1956, 1968a), OLDENBERG (1914), PAPP (1973), ŠTAKELBERG (1970).

Keys: BEPPU et al. (1977), DUDA (1924a, 1927, 1934), HACKMAN et al. (1970), OKADA (1956, 1976), OLDENBERG (1914), PAPP (1973), SÉGUY (1934b), ŠTAKELBERG (1970), STURTEVANT (1916, 1921), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976), KANEKO and TOKUMITSU (1969), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KÜHLHORN (1978), LUMME et al. (1979), MINAMI et al. (1979), MOMMA (1957), OKADA (1956, 1968a), SCHMID (1968), TODA (1973a, 1977), WHEELER and THROCKMORTON (1960).

Distribution:

AUSTRIA: BASDEN (1961), STROBL (1894, 1901, 1910). — FINLAND: HACKMAN et al. (1970), LUMME et al. (1979). — GERMAN FEDERAL REPUBLIC: KÜHLHORN (1978). — ROMANIA: ARADI (1959), DUDA (1934), OLDENBERG (1914), PAPP (1973), ROHLFIEN and EWALD (1972), SOÓS (1945). — SWITZERLAND: BÄCHLI (1972c, 1973c), SCHMID (1968). — USSR: ŠTAKELBERG (1970). — JAPAN: BEPPU (1976, 1978), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1969), KIMURA (1976a, 1976b), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1957), OKADA (1956, 1968a, 1976), TAKADA (1968), TODA (1973a, 1977), WAKAHAMA (1964).

Recorded also in North America.

Chymomyza costata ZETTERSTEDT, 1838

General features of adults: COLLIN (1911), CZERNY (1903a), DUDA (1934), HACKMAN et al. (1970), OKADA (1956, 1976), OLDENBERG (1914), WAHLGREN (1927), ZETTERSTEDT (1838, 1847).

Figures: BEPPU et al. (1977), DUDA (1934), HACKMAN et al. (1970), LAŠTOVKA and MÁCA (1977), PAPP (1973).

Keys: BASDEN (1954b), BEPPU et al. (1977), CZERNY (1903a), DUDA (1924a, 1934), FONSECA (1965), HACKMAN et al. (1970), LAŠTOVKA and MÁCA (1977), OKADA (1956, 1976), OLDENBERG (1914), PAPP (1973), SÉGUY (1934b), ŠTAKELBERG (1970), WAHLGREN (1927), ZETTERSTEDT (1847).

Development: HACKMAN et al. (1970), LAKOVAARA et al. (1972b), OKADA (1956).

Biology: BASDEN (1954b), BASDEN and HARNDEN (1956), HACKMAN et al. (1970), LAKOVAARA et al. (1972b), LUMME et al. (1978, 1979), MINAMI et al. (1979), MORGE (1963), OLDENBERG (1922), RADDATZ (1873), STORÁ (1957), TODA (1977).

Distribution:

AUSTRIA: DUDA (1934), CZERNY (1903a), OLDENBERG (1914). — CZECHOSLOVAKIA: DUDA (1934), LAŠTOVKA and MÁCA (1977), OLDENBERG (1914), PAPP (1973), SOÓS (1945). — FINLAND: BASDEN (1956), HACKMAN (1971), HACKMAN et al. (1970), LAKOVAARA et al. (1972b), LUMME et al. (1978, 1979), OKADA (1976), STORÁ (1956, 1957), ZETTERSTEDT (1860). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1934), RADDATZ (1873). — GERMAN FEDERAL REPUBLIC: DUDA (1934), OLDENBERG (1914, 1922). — GREAT BRITAIN: BASDEN (1952, 1954b), COLLIN (1911), FONSECA (1965), OKADA (1976). — NETHERLANDS: DE MEIJERE (1916b, 1939b). — NORWAY: BASDEN and HARNDEN (1956), LAKOVAARA et al. (1972b), ZETTERSTEDT (1847). — POLAND: DUDA (1934), OLDENBERG (1914). — SWEDEN: LAKOVAARA et al. (1972b), RINGDAHL (1951), WAHLGREN (1927), ZETTERSTEDT (1838, 1847). — SWITZERLAND: BÄCHLI (1977), BURLA (1951), DUDA (1934), OLDENBERG (1914). — USSR: BASDEN (1956), HACKMAN (1957), ŠTAKELBERG (1930, 1970). — N. KOREA: OKADA (1974b, 1976). — JAPAN: MINAMI et al. (1979), TODA (1977).

Chymomyza distincta EGGER, 1862

Other names used: *Ch. oldenbergi* DUDA (syn.), *Ch. fuscimana* ZETTERSTEDT (misident.).

General features of adults: DUDA (1934), EGGER (1862), HACKMAN et al. (1970), OKADA (1976), OLDENBERG (1914).

Figures: BEPPU et al. (1977), DUDA (1934), HACKMAN et al. (1970), HENNIG (1958), OLDENBERG (1914), PAPP (1973).

Keys: BASDEN (1954b), BEPPU et al. (1977), DUDA (1924a, 1934), FONSECA (1965), HACKMAN et al. (1970), OKADA (1976), OLDENBERG (1914), PAPP (1973), SCHINER (1864), SÉGUY (1934b).

Biology: BASDEN (1954b), MINAMI et al. (1979), MORGE (1963).

Distribution:

AUSTRIA: EGGER (1862), FRAUSCHER (1898). — CZECHOSLOVAKIA: ARADI (1959), PAPP (1973), VIMMER (1913). — FINLAND: FREY (1929), HACKMAN et al. (1970). — ? FRANCE: KUNTZE (1913). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1934), OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: DUDA (1934), OLDENBERG (1914). — GREAT BRITAIN: BASDEN (1954b), COLLIN (1952), FONSECA (1965). — NORWAY: unpublished. — POLAND: DUDA (1934). — SWEDEN: unpublished. — SWITZERLAND: unpublished. — ? USSR: ŠTAKELBERG (1930). — ? YUGOSLAVIA: STROBL (1904). — JAPAN: MINAMI et al. (1979).

Comment:

This species was confused with *Ch. fuscimana* ZETTERSTEDT. Some records may refer to the latter species.

***Chymomyza fuscimana* ZETTERSTEDT, 1838**

Other names used: *Ch. albopunctata* BECKER (syn.), *Ch. distincta* EGGER (misident.), *Ch. nigrimana* MEIGEN (? syn.).
General features of adults: BECKER (1900), COLLIN (1911), CZERNY (1903a), DUDA (1934), HACKMAN et al. (1970), HENNIG (1958), OKADA (1956, 1961a, 1973a, 1976), OLDENBERG (1914), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1852).

Figures: BEPPU et al. (1977), DUDA (1924a, 1934), HACKMAN et al. (1970), HENNIG (1958), OKADA (1956), OLDENBERG (1914), PAPP (1973), STAKELBERG (1970).

Keys: BEPPU et al. (1977), CZERNY (1903a), DUDA (1924a, 1934), FONSECA (1965), HACKMAN et al. (1970), OKADA (1956, 1976), OLDENBERG (1914), PAPP (1973), SÉGUY (1934b), STAKELBERG (1970), TAKADA (1971), WAHLGREN (1927).

Biology: KANEKO et al. (1966), MINAMI et al. (1979), MOMMA (1957), OKADA (1956), OLDENBERG (1922), SCHMID (1968).

Distribution:

AUSTRIA: BASDEN (1961), CZERNY (1903a), DUDA (1934), OLDENBERG (1914), STROBL (1910). — CZECHOSLOVAKIA: ARADI (1959), PAPP (1973), Soós (1973). — DENMARK: unpublished. — FINLAND: HACKMAN et al. (1970), LUMME et al. (1979), STORA (1956). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1934), OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: DUDA (1934), OLDENBERG (1914, 1922). — GREAT BRITAIN: COLLIN (1911), FONSECA (1965). — ? HUNGARY: Soós (1945). — POLAND: BASDEN (1961), DUDA (1934), OLDENBERG (1914). — SWEDEN: OLDENBERG (1914), RINGDAHL (1949, 1951), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1850). — SWITZERLAND: BÄCHLI (1977), SCHMID (1968). — USSR: BECKER (1900), HACKMAN (1957), HACKMAN et al. (1970), STAKELBERG (1970). — JAPAN: KANEKO et al. (1966), MINAMI et al. (1979), MOMMA (1957), OKADA (1956, 1976), TAKADA (1968), WAKAHAMA (1964, 1966), WAKAHAMA et al. (1963).

Comment:

This species was confused with *Ch. distincta* EGGER. Some records may refer to the latter species.

***Chymomyza japonica* OKADA, 1956**

General features of adults: OKADA (1956, 1961a, 1976).

Figures: OKADA (1956).

Key: OKADA (1956, 1976).

Development: OKADA (1968a).

Biology: OKADA (1956).

Distribution:

JAPAN: OKADA (1956, 1968a, 1976).

***Chymomyza obscura* DE MEIJERE, 1911**

General features of adults: BURLA (1954a), DE MEIJERE (1911b), OKADA (1956, 1976).

Figures: DUDA (1924a), OKADA (1976).

Keys: DUDA (1924a), OKADA (1956, 1976).

Distribution:

?JAPAN: KIKKAWA and PENG (1938).

Recorded mainly in South Asia.

Comment:

The record of this species in Japan was later not confirmed.

***Chymomyza obscurioides* OKADA, 1976**

Other name used: *Ch. costata* ZETTERSTEDT (misident.).

General features of adults: OKADA (1956, 1976).

Figures: OKADA (1976).

Key: OKADA (1976).

Development: OKADA (1968a).

Distribution:

JAPAN: OKADA (1956, 1968a, 1976).

***Chymomyza procnemis* WILLISTON, 1896**

General features of adults: BRYAN (1938), DUDA (1927), HARDY (1965), KUROKAWA and HIHARA (1976), NATER (1950, 1953), OKADA (1976), PATTERSON (1943), STURTEVANT (1921), WHEELER (1949b), WILLISTON (1896).

Figures: HARDY (1965), NATER (1950, 1953), OKADA (1976), PATTERSON (1943).

Keys: BRYAN (1938), HARDY (1965), OKADA (1976), PATTERSON (1943), STURTEVANT (1916, 1921), WHEELER (1949b), WILLISTON (1896).

Development: PATTERSON (1943).

Biology: CARTER (1938), SAKIMURA and LINFORD (1940), WHEELER (1952).

Distribution:

JAPAN: OKADA (1976).

Recorded mainly in America and Hawaii.

Dettopsomyia* LAMB, 1914**Dettopsomyia nigrovittata* MALLOCH, 1924**

Other names used: *D. argentifrons* OKADA (syn.), *Styloptera* sp.

General features of adults: DE CASTRO (1953), HARDY (1965), MALLOCH (1924b), OKADA (1953a, 1955b, 1956, 1961a), TAKADA (1966a, 1976), WHEELER (1952).

Figures: HARDY (1965), OKADA (1956, 1968a), TAKADA (1966a).

Keys: HARDY (1965), OKADA (1956).

Development: OKADA (1956, 1968a).

Biology: HACKMAN (1958), OKADA (1956, 1962), WHEELER (1951, 1952).

Distribution:

MADEIRA: unpublished. — CANARY IS.: HACKMAN (1958), MONCLÚS (1976). — JAPAN: KAWANISHI and WATANABE (1977), OKADA (1956, 1962), WAKAHAMA (1962a, 1964).

Recorded mainly in America, Australia and on some Pacific Islands.

Dettopsomyia pictipes DE MEIJERE (1911)

Other name used: *D. pictipes* var. *sumatrana* DUDA.

General features of adults: DUDA (1926a), DE MEIJERE (1911b).

Figures: DUDA (1924a).

Keys: DUDA (1924a), DE MEIJERE (1911b).

Distribution:

JAPAN: OKADA (1977b).

Recorded mainly in South Asia, America, Australia and Hawaii.

Drosophila FALLÉN, 1823

Drosophila acuminata COLLIN, 1952

General features of adults: COLLIN (1952), HACKMAN (1959), LAŠTOVKA and MÁCA (1978), OKADA (1968d), OKADA and KUROKAWA (1957), PAPP (1971).

Figures: COLLIN (1952), LAŠTOVKA and MÁCA (1978), PAPP (1973).

Keys: FONSECA (1965), LAŠTOVKA and MÁCA (1978), PAPP (1973).

Biology: LAŠTOVKA and MÁCA (1978).

Distribution:

CZECHOSLOVAKIA: LAŠTOVKA and MÁCA (1978). — GREAT BRITAIN: COLLIN (1952), FONSECA (1965). — IRELAND: ROCHA PITÉ and TSACAS (1980).

Drosophila acutissima OKADA, 1956

Other name used: *Drosophila* sp. II like *grandis*.

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1956, 1961b).

Figures: OKADA (1956).

Keys: OKADA (1956, 1966a).

Biology: OKADA (1954d, 1956, 1962).

Distribution:

JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), OKADA (1954d, 1956, 1962, 1966b).

Recorded also in Nepal.

Drosophila afer TAN, HSU and SHENG, 1949

General features of adults: TAN et al. (1949).

Distribution:

CHINA: TAN et al. (1949).

Drosophila alboralis MOMMA and TAKADA, 1954

Other name used: *Drosophila (Hirtodrosophila)* sp. II.

General features of adults: KIM (1962), KUROKAWA and HIHARA (1976), MOMMA and TAKADA (1954), OKADA (1956).

Figures: KIM (1962), MOMMA and TAKADA (1954), OKADA (1968a).

Keys: BEPPU et al. (1977), KANG and LEE (1964), OKADA (1956, 1967), TAKADA (1971).

Development: OKADA (1963a, 1968a).

Biology: BEPPU (1976), KANEKO and TOKUMITSU (1969), KIMURA (1976a, 1976b, 1980a, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1965b), MOMMA and TAKADA (1954), OKADA (1954d, 1968a), SUZUKI (1955), TAKADA (1957), TODA (1977), WAKAHAMA (1957a, 1962b, 1964).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), CHUNG and RHO (1959), KANG and LEE (1964), KANG et al. (1959), LEE (1966b), OKADA (1967). — JAPAN: BEPPU (1976), BEPPU and TODA (1976), KANEKO (1960), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KAWANISHI et al. (1975), KIMURA (1976a, 1976b, 1980a, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1954, 1957, 1965a, 1965b), MOMMA and TAKADA (1954), OKADA (1954d, 1956, 1967, 1968a), SUZUKI (1955), TAKADA (1957, 1960, 1968), TAKADA and OKADA (1960), TAKADA et al. (1953), TODA (1977), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1962a, 1962b, 1962c, 1964, 1966).

Drosophila alpina BURLA, 1948

Other name used: *Drosophila* sp. like *alpina*.

General features of adults: BURLA (1948, 1951a), FREIRE-MAIA (1949), NATER (1953), OKADA (1953b, 1956, 1961b).

Figures: BEPPU et al. (1977), BURLA (1948, 1951a), HACKMAN (1954), OKADA (1956, 1968a), TAKADA et al. (1979).

Keys: BEPPU et al. (1977), BURLA (1951a), HACKMAN (1954), OKADA (1956).

Development: BURLA (1951a), OKADA (1956, 1968a).

Biology: BÄCHLI (1977, 1979), BURLA (1949), KANEKO and TOKUMITSU (1969), LUMME et al. (1978, 1979), OKADA (1956), STORÅ (1957).

Distribution:

FINLAND: HACKMAN (1954, 1971), LAKOVAARA et al. (1972a, 1972c), LUMME et al. (1978, 1979), STORÅ (1957). — NORWAY: ROCHA PITÉ and TSACAS (1980). — SWEDEN: LAKOVAARA et al. (1972a, 1972c). — SWITZERLAND: BÄCHLI (1973a, 1973c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1951a), NATER (1953). — MONGOLIA: HACKMAN (1968b). — N. KOREA: OKADA (1974b). — JAPAN: KANEKO and TOKUMITSU (1969), MORIWAKI et al. (1954), OKADA (1956, 1968a).

Drosophila ambigua POMINI, 1940

General features of adults: BURLA (1951a), CAIN et al. (1952), FREIRE-MAIA (1949), LAKOVAARA and LANKINEN (1974), MONCLÚS (1964), MORIWAKI et al. (1952), NATER (1953), OKADA (1953b, 1961b), POMINI (1940).

Figures: BURLA (1951a), DYSON-HUDSON (1954), LAKOVAARA and LANKINEN (1974), LAŠTOVKA and MÁCA (1977), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SHORROCKS (1972), THROCKMORTON (1962).

Keys: BASDEN (1954b), BURLA (1951a), DYSON-HUDSON (1954), FONSECA (1965), FRYDENBERG (1956a), LAŠTOVKA and MÁCA (1977), MONCLÚS (1964), OKADA (1956), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SHORROCKS (1972).

Development: BURLA (1951a).

Biology: BÄCHLI (1979), BASDEN (1953, 1954b, 1957a), BEGON (1975), BURLA (1961), FRYDENBERG (1956a), KÖNIG (1965), KÜHLHORN (1978), LEVER and SOBELS (1951), MAINX et al. (1953), SCHMID (1968), SHORROCKS (1974, 1975), SOBELS et al. (1954), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: BUZZATI-TRAVERSO and SCOSSIROLI (1952), MAINX et al. (1953). — CZECHOSLOVAKIA: BASDEN (1961), LAŠTOVKA and MÁCA (1977), ZUSKA and LAŠTOVKA (1969). — DENMARK: FRYDENBERG (1956a). — FINLAND: HACKMAN (1971), LAKOVAARA et al. (1972a, 1972c). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: unpublished. — GERMAN FEDERAL REPUBLIC: KÖNIG (1965), KÜHLHORN (1978). — GREAT BRITAIN: BASDEN (1952, 1953, 1954b, 1957a), BEATTY and SIDHU (1969), BEGON (1975), CAIN et al. (1952), DYSON-HUDSON (1954), FONSECA (1965), KOSKE (1953), MAINX et al. (1953), POMINI (1940), SHORROCKS (1969, 1970, 1974, 1975, 1977), THROCKMORTON (1962). — GREECE: ROCHA PITÉ and TSACAS (1980). — HUNGARY: PAPP (1973). — IRELAND: BASDEN (1952). — ITALY: BUZZATI-TRAVERSO and SCOSSIROLI (1952), KOSKE (1953), MAINX et al. (1953), NIGRO (1979). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1979). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: unpublished. — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1951a, 1961), BUZZATI-TRAVERSO and SCOSSIROLI (1952), KOSKE (1953), MAINX et al. (1953), NATER (1953), SCHMID (1968). — TURKEY: unpublished. — YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1979). — CANARY IS.: unpublished. — MOROCCO: unpublished. — TUNISIA: unpublished. — IRAN: unpublished.

Drosophila ananassae DOLESCHALL, 1858

Other names used: *D. imparata* WALKER (syn.), *D. similis* LAMB (syn.), *D. caribea* STURTEVANT, 1916 (syn.), *D. errans* MALLOCH, 1933 (syn.).

General features of adults: BOCK (1976), BOCK and WHEELER (1972), BOHART and GRESSITT (1951), BRNCIC (1957), BRUNETTI (1923), CURRAN (1936), DOLESCHALL (1858), DUDA (1926a, 1927, 1931), FUTCH (1966), HARDY (1965), HSU (1949), KIKKAWA and PENG (1938), KUROKAWA and HIHARA (1976), LAMB (1914), LIN et al. (1973), MALLOCH (1933), MALOGOLOWKN (1948), MATHER (1955), DE MEIJERE (1908), MORIWAKI and OKADA (1952), NATER (1953), OKADA (1953b, 1954c, 1954d, 1956, 1959, 1961b), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), PATTERSON (1943), PENG (1937), STURTEVANT (1916, 1921), VAIDYA and GODBOLE (1971), WHEELER and TAKADA (1964).

Figures: BOHART and GRESSITT (1951), COVA GARCÍA and SUÁREZ (1962), DUDA (1927), HARDY (1965), HSU (1949), KIKKAWA and PENG (1938), LAMB (1914), MALOGOLOWKN (1948), MONCLÚS (1964), NATER (1953), OKADA (1954c, 1956, 1968a), PATTERSON (1943), PENG (1937), THROCKMORTON (1962), VAIDYA and GODBOLE (1971), WHEELER and TAKADA (1964).

Keys: BASDEN (1954b), BOCK (1976), BOHART and GRESSITT (1951), BRNCIC (1957), BURLA (1954a), DUDA (1924a, 1925, 1926a, 1927, 1940), FONSECA (1965), GUPTA and RAY-CHAUDHURI (1970), HARDY (1965), HARRISON (1954), KIKKAWA and PENG (1938), MALLOCH (1934b, 1934c), DE MEIJERE (1908), MONCLÚS (1964), OKADA (1956), PATTERSON (1943), PATTERSON and MAINLAND (1944), PAVAN and DA CUNHA (1947), PENG (1937), STURTEVANT (1921, 1942), WHEELER and TAKADA (1964).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a), PARSHAD and PAIKA (1964).

Biology: BASDEN (1954b), BOCK (1977b), BOHART and GRESSITT (1951), BURLA (1954a), BURUGA and OLEMBIO (1971), CARSON (1965, 1971), COVA GARCÍA and SUÁREZ (1962), DAVID (1971), DOBZHANSKY and PAVAN (1950), DOLESCHALL (1858), DUDA (1926a), HEED (1956, 1957), KIKKAWA and PENG (1938), LACHAISE (1971, 1974a, 1974b, 1975), MARTINEZ et al. (1965), OKADA (1956), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), PATTERSON (1942), PIPKIN (1965), PIPKIN et al. (1966), STURTEVANT (1919b, 1921).

Distribution:

GREAT BRITAIN: BASDEN (1954b). — SPAIN: BASDEN (1954b), MONCLÚS (1964). — MADEIRA: MONCLÚS (1976). — CANARY IS.: BASDEN (1954b). — CHINA: HSU (1949), PENG (1937), TAN et al. (1949). — JAPAN: KIKKAWA and PENG (1938), MORIWAKI (1934, 1935, 1958), OKADA (1954d, 1956).

Recorded as pantropical species.

Drosophila andalusiaca STROBL, 1906

Other names used: *D. forcipata* COLLIN (syn.), *D. fenestrarum* FALLÉN (misident.).

General features of adults: BASDEN (1957a, 1961), BEARDMORE (1967), COLLIN (1952), HACKMAN (1955), LAŠTOVKA and MÁCA (1978), OKADA and KUROKAWA (1957), PAPP (1971), STROBL (1906).

Figures: BASDEN (1961), COLLIN (1952), HACKMAN (1955), LAŠTOVKA and MÁCA (1978), PAPP (1973).

Keys: BASDEN (1954b), FONSECA (1965), FRYDENBERG (1956a), LAŠTOVKA and MÁCA (1978), PAPP (1973), ROCHA PITÉ (1975a), SHORROCKS (1972).

Development: LAŠTOVKA and MÁCA (1978).

Biology: BASDEN (1954b), BEARDMORE (1967), COE (1959), HERTING (1955), LAŠTOVKA and MÁCA (1978), NASWATY (1959), PAPP (1976), ROCHA PITÉ (1979).

Distribution:

AUSTRIA: THALER (1977). — BELGIUM: unpublished. — CYPRUS: HACKMAN (1960). — CZECHOSLOVAKIA: LAŠTOVKA and MÁČA (1978). — DENMARK: FRYDENBERG (1956a). — FRANCE: ROCHA PITÉ and TSACAS (1979). — GERMANY: BASDEN (1952, 1954b), BEARDMORE (1967), COLLIN (1952), FONSECA (1965), SHORROCKS (1977), SMITH (1960). — GREECE: DIS 37: 135–136. — HUNGARY: LAŠTOVKA and MÁČA (1978), PAPP (1973, 1978). — IRELAND: BEARDMORE (1967). — NETHERLANDS: BEARDMORE (1967), HACKMAN (1960). — PORTUGAL: ROCHA PITÉ (1975a, 1975b, 1979). — ROMANIA: PAPP (1973). — SPAIN: BASDEN (1961), HACKMAN (1969a), STROBL (1906). — SWEDEN: BEARDMORE (1967). — SWITZERLAND: BÄCHLI (1974b). — YUGOSLAVIA: BEARDMORE (1967), COE (1959), PAPP (1973). — AZORES: FREY (1945), HACKMAN (1960). — MADEIRA: FREY (1949). — CANARY IS.: FREY (1936). — MOROCCO: HACKMAN (1960). — ISRAEL: BASDEN (1966), BEARDMORE (1967). — SYRIA: LAŠTOVKA and MÁČA (1978).

***Drosophila angularis* OKADA, 1956**

Other names used: *D. transversa* FALLÉN (misident.), *D. transversa* type B.

General features of adults: CHUNG and RHO (1959), KIKKAWA and PENG (1938), KIM (1962), OKADA (1953b, 1956, 1959, 1961b, 1963a).

Figures: KIKKAWA and PENG (1938), KIM (1962), OKADA (1956, 1968a).

Keys: KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: LEE (1962), OKADA (1956, 1962, 1968a), SAITO et al. (1962), WAKAHAMA (1961, 1962b, 1962c).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1959, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959), KIKKAWA and PENG (1938), KIM (1962, 1963), LEE (1962, 1964a, 1966b), TAKADA and LEE (1958). — JAPAN: KAWANISHI (1978), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), OKADA (1956, 1959, 1962, 1966b, 1968a), SAITO et al. (1962), TOKUMITSU et al. (1967), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964, 1966).

***Drosophila annulipes* DUDA, 1924**

Other name used: *D. virgata* TAN, HSU and SHENG (syn.).

General features of adults: DUDA (1924b, 1926a), KIM (1963), KUROKAWA and HIHARA (1976), OKADA (1953, 1955a, 1956, 1961b, 1966a), TAN et al. (1949), WHEELER and TAKADA (1964).

Figures: DUDA (1924a, 1926a), KIM (1963), OKADA (1955a, 1956, 1968a).

Keys: DUDA (1924a, 1926a), OKADA (1956, 1966a).

Development: OKADA (1963a, 1968a).

Biology: NOZAWA (1956), OKADA (1956, 1962), TODA (1976), WAKAHAMA (1961, 1962b, 1964).

Distribution:

S. KOREA: KIM (1963), LEE (1966b). — JAPAN: KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), NOZAWA (1956), OKADA (1955a, 1956, 1962, 1966b, 1968a), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964, 1966). Recorded also in South Asia and on the Bonin Islands.

***Drosophila asozana* OKADA, 1956**

Other name used: *Drosophila* sp. like *histrio*.

General features of adults: OKADA (1956).

Figures: OKADA (1956).

Keys: OKADA (1956, 1967).

Development: OKADA (1968a).

Biology: OKADA (1956).

Distribution:

JAPAN: OKADA (1956, 1967, 1968a).

***Drosophila auraria* PENG, 1937**

General features of adults: BOCK and WHEELER (1972), BURLA (1954a, 1954b), DE CASTRO (1953), FREIRE-MAIA (1949), HSU (1949), KIKKAWA and PENG (1938), KUROKAWA (1956, 1962, 1967b), KUROKAWA and HIHARA (1976), LEE (1964b), MATHER (1955), OKADA (1953b, 1954c, 1954d, 1956, 1959, 1961b), PENG (1937), TAKADA (1952).

Figures: BOCK and WHEELER (1972), BURLA (1954a, 1954b), HSU (1949), KIKKAWA and PENG (1938), OKADA (1954c, 1956, 1968a), PENG (1937), THROCKMORTON (1962).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), OKADA (1956), PENG (1937), TAKADA (1971).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), ISHIHARA (1955a, 1955b), IWAO et al. (1980), KANEKO (1960, 1968), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968), KATŌ (1954d), KAWANISHI and WATANABE (1977), KIKKAWA and PENG (1938), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI (1979), MINAMI et al. (1979), MOMMA (1964, 1965b), NOZAWA (1956), OKADA (1954, 1956, 1962), SAITO et al. (1962), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958), TAKADA and TOYOFUKU (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1956b, 1957a, 1957b, 1961, 1962b), WATABE (1979).

Distribution:

CHINA: BURLA (1954b), HSU (1949), KIKKAWA and PENG (1938), PENG (1937), TAN et al. (1949), THROCKMORTON (1962). — N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958, 1959, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959, 1960, 1964a), KUROKAWA (1962, 1967a), LEE (1962, 1964b, 1964c, 1965, 1966b), OKADA (1956), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), BURLA (1954b), ISHIHARA (1955a, 1955b), IWAO et al. (1980), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KATŌ (1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), KUROKAWA (1956, 1958, 1959, 1960, 1962, 1967a, 1967b), MINAMI (1979), MINAMI and KIMURA (1980), MINAMI et al. (1979),

MOMMA (1957, 1964, 1965a, 1965b), NOZAWA (1956), OKADA (1954c, 1954d, 1956, 1959, 1962, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960), SUZUKI (1955), TAKADA (1952, 1954, 1957, 1958, 1960), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU (1958a, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1956b, 1957a, 1957b, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977), WATANABE and KAWANISHI (1976).
Recorded also in India.

Comment:

Some records may refer to the sibling species *D. biauraria* BOCK and WHEELER or *D. triauraria* BOCK and WHEELER.

Drosophila biauraria BOCK and WHEELER, 1972

Other name used: *D. auraria* race B.

General features of adults: BOCK and WHEELER (1972), KUROKAWA (1956, 1967), OKADA (1953b).

Figures: BEPPU et al. (1977), BOCK and WHEELER (1972), OKADA (1953b).

Keys: BEPPU et al. (1977), TAKADA (1971).

Biology: BEPPU (1976), BEPPU and TODA (1976), IWAO et al. (1980), KANEKO (1968), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), TAKADA (1954, 1957, 1958, 1960), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1966), WATABE (1979).

Distribution:

S. KOREA: CHUNG (1958, 1959, 1960a), CHUNG and RHO (1959, 1960), KUROKAWA (1967a), LEE (1964c, 1965, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), KANEKO (1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), KUROKAWA (1956, 1959, 1960, 1967a, 1967b), MINAMI (1979), OKADA (1953b, 1966b), SHIMA (1960), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TAKADA et al. (1953), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977).

Drosophila bifasciata POMINI, 1940

Other names used: *D. bilineata* POMINI (syn.), *D. obscura* FALLÉN (misident.).

General features of adults: BASDEN (1954b, 1957b), BASDEN and HARNDEN (1956), BURLA (1951a), CAIN et al. (1952), FREIRE-MAIA (1949), FRYDENBERG (1956a), HSU (1949), KIM (1962), KUROKAWA and HIHARA (1976), LAKOVAARA and LANKINEN (1974), MONCLÚS (1964), MORIWAKI et al. (1952, 1967), NATER (1953), OKADA (1953b, 1954c, 1956, 1961b), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), POMINI (1940), TAKADA and LEE (1958).

Figures: BEPPU et al. (1977), BURLA (1951a), CAIN et al. (1952), FROLOWA and ASTAUROW (1929), HSU (1949), KIM (1962), LAKOVAARA and LANKINEN (1974), OKADA (1956, 1968a), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), ŠTAKELBERG (1970), TAKADA et al. (1979).

Keys: BEPPU et al. (1977), BURLA (1951a), FONSECA (1965), GUPTA and RAY-CHAUDHURI (1970), LEE (1964c), MONCLÚS (1964), OKADA (1956), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), ŠTAKELBERG (1970), TAKADA (1971).

Development: BURLA (1951a), OKADA (1963a, 1968a), PARSHAD and PAIKA (1964), WATABE (1979).

Biology: BASDEN and HARNDEN (1956), BEPPU (1976), BEPPU and TODA (1976), HADORN et al. (1952), ISHIHARA (1955a, 1955b), KANEKO (1960), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LAKOVAARA et al. (1972b), LUMME et al. (1978, 1979), MAGNI (1959), MINAMI et al. (1979), MOMMA (1965b), MORIWAKI et al. (1952), OKADA (1954d, 1956, 1962), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), SCHMID (1968), SHIMA (1960), TAKADA (1954, 1957), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1956b, 1957a, 1962b, 1964), WATABE (1979), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: MAINX et al. (1953). — CZECHOSLOVAKIA: ZUSKA and LAŠTOVKA (1969). — FINLAND: HACKMAN (1971), LAKOVAARA et al. (1972a, 1972b, 1972c, 1976a), LUMME et al. (1978, 1979), SAURA (1974). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN FEDERAL REPUBLIC: unpublished. — HUNGARY: PAPP (1973). — ITALY: BUZZATI-TRAVERSO (1942a), IKEDA (1970), LAKOVAARA et al. (1972c), MAGNI (1952, 1953, 1959), MAINX et al. (1953), MORIWAKI and KITAGAWA (1957), POMINI (1940), SAURA (1974), YAMAGUCHI (1973). — NETHERLANDS: LEVER and SOBELS (1951). — NORWAY: BASDEN and HARNDEN (1956), LAKOVAARA et al. (1972b), SAURA (1974). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1979). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: LAKOVAARA et al. (1972a, 1972b, 1972c), SAURA (1974). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1975b, 1979), BURLA (1948, 1951a), HSU (1949), LAKOVAARA et al. (1972c), MORIWAKI and KITAGAWA (1957), NATER (1953), SAURA (1974), SCHMID (1968), YAMAGUCHI (1973). — USSR: BUZZATI-TRAVERSO and SCOSSIROLI (1955), DUBININ et al. (1937b), FROLOWA (1926), FROLOWA and ASTAUROW (1929), HACKMAN (1957), ŠTAKELBERG (1970). — YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1979). — N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959), KIM (1962), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), IKEDA (1970), IKEDA and MORIWAKI (1968), ISHIHARA (1955a, 1955b), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LAKOVAARA et al. (1972a, 1972c), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), MORIWAKI and KITAGAWA (1955, 1957), MORIWAKI et al. (1952, 1953, 1954, 1967), OKADA (1954d, 1956, 1962, 1966b, 1968a), SAURA (1974), SHIMA (1960), TAKADA (1964, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU (1957, 1958a, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1956b, 1957a, 1962a, 1962b, 1962c, 1964), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977), YAMAGUCHI (1973), YAMAGUCHI and MORIWAKI (1971).
Recorded also in India.

Comment:

Some Japanese records may refer to *D. imaii* MORIWAKI, KITAGAWA and OKADA.

Drosophila bizonata KIKKAWA and PENG, 1938

General features of adults: HARDY (1965), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), OKADA (1953a, 1954d, 1955a, 1956, 1959, 1961b, 1966a), TAN et al. (1949).

Figures: HARDY (1965), KIKKAWA and PENG (1938), KIM (1962), OKADA (1955a, 1956, 1968a).

Keys: BEPPU et al. (1977), HARDY (1965), KIKKAWA and PENG (1938), OKADA (1956).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: KATŌ (1954), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), LEE (1962), NOZAWA (1956), OKADA (1954d, 1956, 1962), SAITO et al. (1962), WAKAHAMA (1961, 1962b, 1962c, 1964).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958, 1960a), CHUNG and RHO (1960), KANG et al. (1958, 1959, 1964a), KIM (1962, 1963), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: KATŌ (1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), MOMMA (1957), NOZAWA (1956), OKADA (1954d, 1955a, 1956, 1959, 1962, 1966b, 1968a), SAITO et al. (1962), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963).

Recorded also in Hawaii and on the Ryukyu Islands.

Drosophila brachynephros OKADA, 1956

Other names used: *D. transversa* FALLÉN (misident.), *D. transversa* type A, *D. transversa* type I.

General features of adults: CHUNG and RHO (1959), KUROKAWA and HIHARA (1976), KIM (1962), LEE (1964c), OKADA (1953b, 1955a, 1955b, 1956, 1961b), PARSHAD and DUGGAL (1966).

Figures: BEPPU et al. (1977), KIM (1962), OKADA (1955b, 1956, 1968a), WAKAHAMA (1956a).

Keys: BEPPU et al. (1977), GUPTA and RAY-CHAUDHURI (1970), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), KANEKO (1960), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI et al. (1979), MOMMA (1965b), OKADA (1954d, 1956), PARSHAD and DUGGAL (1966), SAITO et al. (1962), TAKADA (1958), TAKADA and LEE (1958), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1962b, 1964), WATABE (1979).

Distribution:

S. KOREA: CHUNG (1958), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959), KIM (1962, 1963), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), KANEKO (1960, 1968), KANEKO, and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954d, 1955a, 1956, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960, 1967), TAKADA (1958, 1968), TAKADA and OKADA (1960), TAKADA et al. (1953), TODA (1973a, 1973b, 1973c, 1974, 1977), TOKUMITSU et al. (1967), TOYOFUKU (1958a, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977).

Recorded also in India.

Drosophila brevicornis DUDA, 1935

General features of adults: DUDA (1935).

Key: DUDA (1935).

Distribution:

USSR: DUDA (1935).

Drosophila busckii COQUILLETT, 1901

Other names used: *D. rubrostriata* BECKER (syn.), *D. plurilineata* VILLENEUVE (syn.).

General features of adults: BECKER (1908b), BOCK (1976), BRNCIC (1957), BURLA (1951a), DE CASTRO (1953), COQUILLETT (1901), DUDA (1924c, 1925, 1935), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), LEMCHE (1949), MALLOCH (1924b), NATER (1950, 1953), NISWONGER (1911), OKADA (1953a, 1954b, 1956, 1959, 1961b, 1963a, 1963b), PARSHAD and DUGGAL (1966), PATTERSON (1943), PATTERSON and STONE (1952), PENG (1937), SÉGUY (1934a, 1934b), STURTEVANT (1921), TSACAS and BOCCQUET (1976), VILLENEUVE (1911), WARREN (1920).

Figures: BEPPU et al. (1977), DUDA (1924a, 1924c, 1935), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KAMBYSELLIS (1968), KIKKAWA and PENG (1938), KIM (1962), LEMCHE (1949), NATER (1950, 1953), NISWONGER (1911), OKADA (1955b, 1956, 1963a, 1963b, 1968a), PATTERSON (1943), PATTERSON and STONE (1952), SHORROCKS (1972), STURTEVANT (1921), THROCKMORTON (1962).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1976), BRNCIC (1957), BURLA (1951a), DUDA (1924a, 1924c, 1925, 1926a, 1927, 1935, 1940), FONSECA (1965), FRYDENBERG (1956a), GUPTA (1974a), GUPTA and RAY-CHAUDHURI (1970), HACKMAN (1954), HARDY (1965), HARRISON (1952, 1959), KIKKAWA and PENG (1938), LAŠTOVKA and MÁČA (1977), LEE (1964c, 1966b), MALLOCH (1923a, 1927, 1934a), MALLOCH and MCATEE (1924), MONCLÚS (1964, 1976), OKADA (1956), PAPP (1973), PATTERSON (1943), PATTERSON and MAINLAND (1944), PAVAN and DA CUNHA (1947), PENG (1937), ROCHA PITÉ (1975a), SÉGUY (1934a, 1934b), SHORROCKS (1972), ŠTAKELBERG (1970), STURTEVANT (1918, 1921), TAKADA (1971).

Development: BURLA (1951a), BURUGA and OLEMBO (1971), COTTIER (1933), DUDA (1934, 1935), HENNIG (1952), KAMBYSELLIS (1968), KIKKAWA and PENG (1938), LEMCHE (1949), MAYER (1935), NISWONGER (1911), OKADA (1968a), PATTERSON (1943), SÉGUY (1934a, 1934b, 1951).

Biology: ATKINSON and SHORROCKS (1977), BASDEN (1952, 1954b, 1957a), BEPPU (1976), BEPPU and TODA (1976), BICKLEY (1956), BOCK (1976), BONNAMOUR (1921, 1926), BURLA (1949, 1951a), BURLA and BÄCHLI (1968), BURUGA (1976), CANZANELLI (1941), CARSON (1965, 1971), COLLINS (1956), COTTIER (1933), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DUDA (1935, 1940), EISFELDER (1957), FRYDENBERG (1956a), GUYER et al. (1956), HACHIYA (1954), HACKMAN and MEINANDER (1979), HEED (1968), HENNIG (1950, 1953), HERTING (1955), HOWARD (1900), HUNTER et al. (1973), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KATŌ (1954), KATŌ and HORI (1952), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA and TODA (1976), KIMURA et al. (1977), KÖNIG (1965), KÜHLHORN (1964, 1968, 1978, 1979), LAURENCE (1953), LEE (1962), LEMCHE (1949), LEVER and SOBELS (1951), LINDNER (1928), LUMME et al. (1979), MCCOY (1962), MCFADDEN (1914), MAINX (1949), MALLOCH and MCATEE (1924), MATHER (1956), MAYER (1935), DE MEIJERE (1916a, 1935, 1946), MERRILL and HUTSON (1953), MILES (1950), MINAMI et al. (1979), NASWATY (1959), NOZAWA (1956), OKADA (1956, 1962), OKADA and SASAKAWA (1956), OLDROYD (1965), PAPP (1979), PARSHAD and DUGGAL (1966), PATTERSON (1942), PATTERSON and STONE (1952), PETERSEN (1960), PIPKIN (1952), PIPKIN et al. (1966), SAITO et al. (1962), SCHATZMANN (1977), SCHULZE (1912), SCHUMANN (1963), SÉGUY (1933b, 1934a, 1934b, 1950, 1951), SHAW (1969), SHORROCKS (1974, 1975, 1977, 1979), SHORROCKS and WOOD (1973), SOBELS et al. (1954), STURTEVANT (1919b), TAKADA (1957, 1958), TAKADA and TOYOFUKU (1960), TESCHNER (1961), TODA (1973a, 1974, 1977), WAKAHAMA (1957a, 1961, 1962b, 1964), WATABE (1979), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: ROCHA PITÉ and TSACAS (1980). — BELGIUM: unpublished. — CZECHOSLOVAKIA: DOSKOČIL (1962), LAŠTOVKA and MÁČA (1977), MÁČA (1972b), MARTINEK (1974b), ŽUSKA and LAŠTOVKA (1969). — DENMARK: BASDEN (1956), FRYDENBERG (1956), LEMCHE (1949). — FINLAND: HACKMAN (1954, 1971), HACKMAN and MEINANDER (1979), LUMME et al. (1978, 1979), SUOMALAINEN (1937). — FRANCE: BONNAMOUR (1921, 1926), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979), KOHLFIEN and EWALD (1972), SÉGUY (1934a, 1934b), VILLENEUVE (1911). — GERMAN DEMOCRATIC REPUBLIC: HENNIG (1950), SCHUMANN (1963), SÉGUY (1933b), TIMOFÉEFF-RESSOVSKY (1941a). — GERMAN FEDERAL REPUBLIC: EISELDER (1957), HERTING (1955), KÖNIG (1965), KÜHLHORN (1964, 1968, 1978, 1979), LINDNER (1928), NASWATY (1959), KRÖBER (1935). — GREAT BRITAIN: ATKINSON and SHORROCKS (1977), AUDCENT (1950), BASDEN (1952, 1954b, 1957a), BUXTON (1960), FONSECA (1965), HUNTER et al. (1973), KRIVSHENKO (1952), LAURENCE (1953), MILES (1950), SHAW (1969), SHORROCKS (1969, 1972, 1974, 1975, 1977), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SMITH (1959, 1960). — GREECE: ROCHA PITÉ and TSACAS (1980). — HUNGARY: ARADI (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973, 1975), SOÓS (1943, 1945). — IRELAND: ROCHA PITÉ and TSACAS (1980), SHORROCKS (1972). — ITALY: KRIVSHENKO (1952), NIGRO (1979), ZANGHERI (1969). — NETHERLANDS: LEVER and SOBELS (1951), DE MEIJERE (1935, 1946), SOBELS et al. (1954). — NORWAY: BASDEN (1956). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977b, 1979). — SPAIN: HADORN et al. (1952), MONCLÚS (1964), ORTIZ (1968). — SWEDEN: BASDEN (1956), RINGDAHL (1949). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1974a, 1974b, 1975a, 1975b), BURLA (1948, 1949, 1951a), BURLA and BÄCHLI (1968), HSU (1949), NATER (1953), SCHATZMANN (1977). — TURKEY: unpublished. — USSR: KRIVSHENKO (1963), PAPP (1979), ŠTAKELBERG (1970). — YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1978, 1979), KEKIĆ et al. (1980). — AZORES: FREY (1945). — MADEIRA: FREY (1949). — CANARY IS.: BECKER (1908b), FREY (1936), MONCLÚS (1976). — MOROCCO: PREVOSTI (1974), SÉGUY (1933b). — TUNISIA: unpublished. — EGYPT: MOURAD and MALLAH (1960), TANTAWY et al. (1970). — ISRAEL: unpublished. — LEBANON: PIPKIN (1952). — CHINA: HSU (1949), PENG (1937), TAN et al. (1949). — N. KOREA: KIKKAWA and PENG (1938), OKADA (1974b). — S. KOREA: CHUNG (1958, 1960a), KANG et al. (1958, 1959), KIKKAWA and PENG (1938), KIM (1962), LEE (1962, 1964c, 1966b), OKADA (1956), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976), BEPPU and TODA (1976), HACHIYA (1954), KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KATŌ (1954), KATŌ and HORI (1952, 1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), KRIVSHENKO (1952), MINAMI (1979), MINAMI et al. (1979), MOMMA (1954, 1957, 1965a), NOZAWA (1956), OKADA (1956, 1959, 1962, 1968a), OKADA and SASAKAWA (1956), SAITO et al. (1962), SHIMA (1960), TAKADA (1957, 1958, 1968), TAKADA and OKADA (1960), TODA (1973a, 1974, 1977), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WATABE (1979). Recorded as virtually cosmopolitan species.

***Drosophila buzzatii* PATTERSON and WHEELER, 1942**

Other names used: *D. tigrina* BUZZATI-TRAVERSO (syn.), *D. versicolor* MATHER (syn.).

General features of adults: BREUER and ROCHA (1971), BURLA (1951a), BUZZATI-TRAVERSO (1943), HACKMAN (1969a), HSU (1949), MATHER (1955), NATER (1953), PATTERSON and WHEELER (1942), WASSERMAN (1962c).

Figures: BREUER and ROCHA (1971), BUZZATI-TRAVERSO (1943), HSU (1949), MATHER (1955), NATER (1953), THROCKMORTON (1962), WASSERMAN (1962c).

Keys: BOCK (1976), BURLA (1951a), MATHER (1955), MONCLÚS (1964, 1976), PAVAN and DA CUNHA (1947), ROCHA PITÉ (1975a).

Biology: CARSON (1965, 1971), CARSON and WASSERMAN (1965), MATHER (1955, 1956), ORTIZ (1968), PIPKIN (1952), ROCHA PITÉ (1979).

Distribution:

ITALY: BUZZATI-TRAVERSO (1943), CARSON and WASSERMAN (1965), PATTERSON (1942), SPERLICH (1961), WASSERMAN (1954), WHARTON (1942). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1979). — SPAIN: HACKMAN (1969a), MONCLÚS (1964), ORTIZ (1968). — YUGOSLAVIA: unpublished. — MADEIRA: unpublished. — CANARY IS.: MONCLÚS (1976). — MOROCCO: PREVOSTI (1974). — EGYPT: MOURAD and MALLAH (1960). — ISRAEL: CARSON (1965), CARSON and WASSERMAN (1965). — LEBANON: JOHNSON et al. (1966), PIPKIN (1952), THROCKMORTON (1962), WASSERMAN (1954, 1962c).

Recorded mainly in America and Australia.

***Drosophila calidata* TAKADA, TODA and BEPPU, 1979**

Other name used: *Drosophila* sp. 5.

General features of adults: TAKADA et al. (1979).

Figures: BEPPU et al. (1977), TAKADA et al. (1979).

Key: BEPPU et al. (1977).

Distribution:

JAPAN: TAKADA et al. (1979).

***Drosophila cameraria* HALIDAY, 1833**

Other names used: *D. unistriata* STROBL (syn.), *D. latestriata* BECKER (syn.), *D. fungicola* VILLENEUVE (syn.), *D. pallida* ZETTERSTEDT (misident.).

General features of adults: BASDEN (1961), BECKER (1908b), BURLA (1951a), BURLA and GLOOR (1952), CURTIS (1833), DUDA (1921, 1924c, 1927, 1935), FRYDENBERG (1956a), HACKMAN (1955), HALIDAY (1833), NATER (1953), OKADA (1956), SÉGUY (1934b), STROBL (1898a, 1900a, 1906), VILLENEUVE (1921).

Figures: CURTIS (1833), DUDA (1924a, 1935), NATER (1953), PAPP (1973).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), MONCLÚS (1964, 1976), PAPP (1973), SÉGUY (1934a, 1934b), SHORROCKS (1972), ŠTAKELBERG (1970).

Biology: BASDEN (1952, 1954b), BONNAMOUR (1926), BURLA (1951a), BURLA and BÄCHLI (1968), BUXTON (1960), CANZANELLI (1941), CHARLESWORTH and SHORROCKS (1980), COE (1959), CURTIS (1833), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), FALCOZ (1924), HADORN et al. (1952), HALIDAY (1833), HERTING (1955), KÖNIG (1965), LEVER and SOBELS (1951), LINDBERG (1962), DE MEIJERE (1928), ORTIZ (1968), ROCHA PITÉ (1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), SCHMID (1968), SÉGUY (1934a, 1934b, 1950), SHORROCKS (1973, 1975), SHORROCKS and CHARLESWORTH (1980), SHORROCKS et al. (1979), SOBELS et al. (1954), VILLENEUVE (1921).

Distribution:

ALBANIA: DUDA (1924c, 1935). — AUSTRIA: DUDA (1924c, 1935). — BULGARIA: unpublished. — CZECHOSLOVAKIA: unpublished. — FINLAND: HACKMAN (1971), LUMME et al. (1978). — FRANCE: BONNAMOUR (1926), DUDA (1924c, 1935), FAICOZ (1924), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b), VILLENEUVE (1921). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÖNIG (1965). — GREAT BRITAIN: BASDEN (1952, 1953, 1954b), BASDEN and GOODEY (1955), BUXTON (1960), CHARLESWORTH and SHORROCKS (1980), CURTIS (1833), FONSECA (1965), HALIDAY (1833), HENDERSON (1911), SHORROCKS (1975, 1977), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979). — GREECE: DIS 37: 95. — HUNGARY: DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973), SOÓS (1945). — IRELAND: DIS 27: 81. — ITALY: DUDA (1935), NIGRO (1979), ZANGHERI (1950, 1969). — NETHERLANDS: LEVER and SOBELS (1951), DE MEIJERE (1928), SOBELS et al. (1954). — POLAND: DUDA (1935). — PORTUGAL: HADORN et al. (1952), LINDBERG (1962), ROCHA PITÉ (1972, 1975a, 1975b, 1977b, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978). — ROMANIA: ARADI (1959), SOÓS (1945). — SPAIN: BURLA and GLOOR (1952), DUDA (1935), HADORN et al. (1952), MONCLÚS (1964), ORTIZ (1968). — SWEDEN: DUDA (1935). — SWITZERLAND: BÄCHLI (1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977), BURLA (1951a), BURLA and BÄCHLI (1968), NATER (1953), SCHMID (1968). — TURKEY: unpublished. — USSR: HACKMAN (1957), STAKELBERG (1970). — YUGOSLAVIA: ARADI (1959), BASDEN (1961), COE (1959), DUDA (1924c, 1935), SOÓS (1945), STROBL (1898a, 1900a). — AZORES: unpublished. — MADEIRA: FREY (1949). — CANARY IS.: BECKER (1908b), DUDA (1924c, 1935), FREY (1936), MONCLÚS (1976). — TUNISIA: unpublished. — IRAN: unpublished.

***Drosophila cheda* TAN, HSU and SHENG, 1949**

General features of adults: HSU (1949), KANEKO et al. (1964), KANG and LEE (1961), KIM (1962), OKADA (1956, 1961b), TAN et al. (1949).

Figures: HSU (1949), KIM (1962), OKADA (1968a).

Key: LEE (1964c).

Development: OKADA (1963a, 1968a).

Distribution:

CHINA: HSU (1949), TAN et al. (1949). — S. KOREA: CHUNG (1958), KIM (1962), LEE (1962, 1964c, 1966b), OKADA (1968a), TAKADA and LEE (1958).

***Drosophila cilitarsis* HERING, 1940**

General features of adults: HERING (1940).

Figures: MORGE (1976b).

Distribution:

CHINA: HERING (1940), ROHLFEN and EWALD (1972).

***Drosophila clarofinis* LEE, 1959**

General features of adults: BOCK and WHEELER (1972), LEE (1959, 1964a), TAKADA et al. (1979).

Figures: LEE (1959, 1964a), TAKADA et al. (1979).

Keys: BEPPU et al. (1977), LEE (1964a).

Biology: LEE (1959, 1962).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: LEE (1959, 1962, 1964a, 1966b). — JAPAN: KAWANISHI et al. (1975), TAKADA et al. (1979).

***Drosophila collinella* OKADA, 1968**

Other names used: *Scaptomyza apicalis* HARDY (misident.), *Scaptomyza* sp. II, *Drosophila* (*Lordiphosa*) sp., *Drosophila* sp. of *fenestrarum* group.

General features of adults: KIM (1962), OKADA (1956, 1968d).

Figures: KIM (1962), OKADA (1956, 1968a).

Keys: BEPPU et al. (1977), OKADA (1956), TAKADA (1971).

Development: OKADA (1968a).

Biology: KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1956), OKADA and SASAKAWA (1956), SUZUKI (1955), TAKADA (1958), WAKAHAMA (1957a, 1964).

Distribution:

S. KOREA: CHUNG (1958), KANG et al. (1958, 1959), KIM (1962), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: KANEKO and SHIMA (1962), KAWANISHI et al. (1975), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LAŠTOVKA and MÁČA (1978), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1956, 1968a, 1968d), SUZUKI (1955), TAKADA (1958, 1968), TAKADA and OKADA (1960), WAKAHAMA (1957a, 1964, 1966), WAKAHAMA et al. (1963).

***Drosophila confusa* STAEGER, 1844**

Other names used: *D. vibrissina* DUDA (syn.), *D. grischuna* BURLA (syn.), *D. histrioides* OKADA and KUROKAWA (syn.), *Drosophila* sp. like *histrio*, *Drosophila* (*Hirtodrosophila*) sp.

General features of adults: BASDEN (1961), BURLA (1951c), DUDA (1924c, 1935), FRYDENBERG (1956b), HACKMAN (1969c), KUROKAWA and HIHARA (1976), NATER (1953), NEUHAUS (1886), OKADA (1956, 1961b), OKADA and KUROKAWA (1957), SÉGUY (1934a, 1934b), STURTEVANT (1921), TAKADA (1960), ZETTERSTEDT (1847).

Figures: BEPPU et al. (1977), BURLA (1951c), DUDA (1924c, 1935), FRYDENBERG (1956b), NATER (1953), OKADA (1956, 1968a), OKADA and KUROKAWA (1957), SÉGUY (1934b), TAKADA (1960), THROCKMORTON (1962).

Keys: BEPPU et al. (1977), DUDA (1924a, 1924c, 1935), FONSECA (1965), FRYDENBERG (1956a), KANG and LEE (1964), LAŠTOVKA and MÁČA (1977), LEE (1964c), MONCLÚS (1964), OKADA (1967), PAPP (1973), SCHNER (1864), SHORROCKS (1972), SÉGUY (1934a, 1934b), TAKADA (1971).

Development: OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), BONNAMOUR (1926), BUXTON (1960), CANZANELLI (1941), CHARLESWORTH and SHORROCKS (1980), COE (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), FALCOZ (1921), FRYDENBERG (1956a), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KIMURA (1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MÁCA (1978), MINAMI et al. (1979), MOMMA (1965b), OKADA (1956), SCHULZE (1912), SÉGUÉ (1934a, 1934b, 1950), SHIMA (1960), SHORROCKS (1975), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SUZUKI (1955), TAKADA (1958, 1960), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1962b, 1964), WATABE (1979).

Distribution:

AUSTRIA: STROBL (1880, 1894), WACHTL (1882). — CZECHOSLOVAKIA: ARADI (1959), BRANCSIK (1910), CZIŽEK (1910), DUDA (1935), LAŠTOVKA and MÁCA (1977), MÁCA (1978), ROHLFEN and EWALD (1972), SOÓS (1945), VIMMER (1913). — DENMARK: FRYDENBERG (1956a, 1956b), STAEGER (1844), ZETTERSTEDT (1847). — FRANCE: BONNAMOUR (1926), FALCOZ (1921), HADORN et al. (1952), KUNTZE (1913), ROCHA PITÉ and TSACAS (1979), SÉGUÉ (1934a, 1934b). — ?GERMAN DEMOCRATIC REPUBLIC: NEUHAUS (1886), RADDATZ (1873). — GERMAN FEDERAL REPUBLIC: unpublished. — GREAT BRITAIN: BUXTON (1960), CHARLESWORTH and SHORROCKS (1980), FONSECA (1965), FRYDENBERG (1956b), SHORROCKS (1975, 1977), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SMITH (1960), YERBURY (1913). — HUNGARY: DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973). — ? ITALY: BEZZI (1892b), CANZANELLI (1941), PALM (1869), ZANGHERI (1950, 1969). — ? NETHERLANDS: DE MEIJERE (1916b, 1920). — ROMANIA: ARADI (1959), DUDA (1924c, 1935), ROHLFEN and EWALD (1972), SOÓS (1945). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: ZETTERSTEDT (1847, 1849). — SWITZERLAND: BÄCHLI (1973a, 1973c, 1975b, 1979), BURLA (1951c), NATER (1953). — ? USSR: BALKASCHINA and ROMASCHOFF (1935), BOBEK (1897), FROLOWA (1926). — YUGOSLAVIA: BASDEN (1961), COE (1959), STROBL (1898a, 1900a). — N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), CHUNG and RHO (1959, 1960), KANG and LEE (1964), KANG et al. (1959, 1964a), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958), OKADA (1967). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1956, 1967, 1968a), OKADA and KUROKAWA (1957), SHIMA (1960), SUZUKI (1955), TAKADA (1958, 1960, 1968), TAKADA and OKADA (1960), TAKADA et al. (1953), THROCKMORTON (1962), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU (1958a, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977).

Comment:

Some records may refer to *D. funebris* FABRICIUS.

Drosophila coracina KIKKAWA and PENG, 1938

Other name used: *Drosophila* sp. of *melanica* group.

General features of adults: BUZZATI-TRAVERSO (1943), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), MATHER (1955), OKADA (1953b, 1956, 1959, 1961b, 1966a).

Figures: BEPPU et al. (1977), KIKKAWA and PENG (1938), KIM (1962), OKADA (1955b, 1956, 1968a).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1968), KANEKO and TOKUMITSU (1963, 1969), KATŌ (1954), KIKKAWA and PENG (1938), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI et al. (1979), MOMMA (1965b), NOZAWA (1956), OKADA (1954d, 1956, 1962, 1968a), SUZUKI (1955), TAKADA (1954, 1957, 1958), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1957a, 1962b, 1964).

Distribution:

CHINA: TAN et al. (1949). — S. KOREA: CHUNG (1958, 1959, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959, 1964a), KIM (1962, 1963), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1968, 1969), KATŌ (1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), NOZAWA (1956), OKADA (1954d, 1956, 1959, 1962, 1966, 1968a), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU (1958a, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963). Recorded also on the Ryukyu Islands and in South Asia.

Drosophila curviceps OKADA and KUROKAWA, 1957

Other names used: *Drosophila* sp. of *immigrans* group, *D. carviceps* (lapsus).

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1953b, 1955a, 1956, 1959, 1961b), OKADA and KUROKAWA (1957), PARSHAD and DUGGAL (1966).

Figures: OKADA (1955a, 1956, 1968a), OKADA and KUROKAWA (1957), PARSHAD and DUGGAL (1966).

Keys: BEPPU et al. (1977), GUPTA and RAY-CHAUDHURI (1970), OKADA (1956).

Development: OKADA (1963a, 1968a).

Biology: KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), OKADA (1954d, 1955a, 1962), OKADA and KUROKAWA (1957), PARSHAD and DUGGAL (1966).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), OKADA (1954d, 1959, 1962, 1966b, 1968a), OKADA and KUROKAWA (1957), SAITO et al. (1962), WAKAHAMA (1962a, 1964, 1966). Recorded also in India.

Drosophila daruma OKADA, 1956

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1956, 1961b).

Figures: BEPPU et al. (1977), OKADA (1956, 1968a).

Keys: BEPPU et al. (1977), OKADA (1956).

21 Beitr. Ent. 32, H. 2

Development: OKADA (1968a).

Biology: OKADA (1968a, 1971e).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: KAWANISHI and WATANABE (1977), MOMMA (1965a), OKADA (1956, 1968a), WAKAHAMA (1962a, 1964).

Recorded also in Southeast Asia and on the Ryukyu and Bonin Islands.

Drosophila deflexa DUDA, 1924

Other name used: *D. guyenoti* BURLA (syn.).

General features of adults: BASDEN (1952, 1954b), BURLA (1948, 1951a), DUDA (1924c, 1935), HERTING (1953), HSU (1949), NATER (1953).

Figures: BURLA (1948, 1951a), DUDA (1924a, 1924c, 1935), HSU (1949), LAŠTOVKA and MÁCA (1977), NATER (1953), PAPP (1973), ROCHA PITÉ (1975a), SHORROCKS (1972).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), FRYDENBERG (1956a), LAŠTOVKA and MÁCA (1977), MONCLÚS (1964), PAPP (1973), ROCHA PITÉ (1975a), SHORROCKS (1972).

Development: BASDEN (1954a), BURLA (1951a).

Biology: BASDEN (1952, 1954b), BEGON et al. (1975), BURLA (1949, 1951a), DUDA (1935), FRYDENBERG (1956a), HADORN et al. (1952), HERTING (1955), SCHMID (1968), SHORROCKS (1975), SOBELS et al. (1954).

Distribution:

CZECHOSLOVAKIA: ARADI (1959), LAŠTOVKA and MÁCA (1977), Soós (1945). — DENMARK: FRYDENBERG (1956a). — FINLAND: HACKMAN (1971), LUMME et al. (1978). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1935). — GERMAN FEDERAL REPUBLIC: DUDA (1935), HERTING (1955). — GREAT BRITAIN: BASDEN (1952, 1954a, 1954b), BEGON et al. (1975), COLLIN (1911, 1952), FONSECA (1965), SHORROCKS (1975, 1977). — HUNGARY: ARADI (1959), DUDA (1935), PAPP (1973), Soós (1945). — IRELAND: BASDEN (1952). — ITALY: NIGRO (1979). — NETHERLANDS: DUDA (1935), LEVER and SOBELS (1951), DE MEIJERE (1935), SOBELS et al. (1954). — POLAND: DUDA (1924c, 1935). — PORTUGAL: ROCHA PITÉ (1972, 1975a, 1979). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: ROCHA PITÉ and TSACAS (1980). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1975a, 1975b), BURLA (1948, 1949, 1951a, 1961), HERTING (1953), HSU (1949), NATER (1953), SCHMID (1968). — ? TURKEY: unpublished. — YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1978, 1979).

Drosophila denticeps OKADA and SASAKAWA, 1956

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1956, 1961b), OKADA and SASAKAWA (1956).

Figures: OKADA (1956), OKADA and SASAKAWA (1956).

Keys: OKADA (1956, 1967, 1971d).

Development: OKADA (1968a).

Biology: OKADA (1956), OKADA and SASAKAWA (1956).

Distribution:

JAPAN: KAWANISHI et al. (1975), OKADA (1956, 1968a, 1971d), OKADA and SASAKAWA (1956).

Drosophila elliptosa OKADA, 1974

Other name used: *D. elliptica* OKADA (syn.).

General features of adults: OKADA (1973b).

Figures: OKADA (1973b).

Distribution:

JAPAN: OKADA (1973b).

Drosophila eniwaie TAKADA, BEPPU and TODA, 1979

Other name used: *Drosophila* sp. 2.

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Key: BEPPU et al. (1977).

Distribution:

JAPAN: TAKADA et al. (1979).

Drosophila eskoii LAKOVAARA and LANKINEN, 1974

General features of adults: LAKOVAARA and LANKINEN (1974).

Figures: LAKOVAARA and LANKINEN (1974).

Biology: LUMME et al. (1978, 1979).

Distribution:

FINLAND: LAKOVAARA and LANKINEN (1974), LUMME et al. (1978, 1979). — NORWAY: LAKOVAARA and LANKINEN (1974). — SWEDEN: LAKOVAARA and LANKINEN (1974).

Drosophila ezoana TAKADA and OKADA, 1957

Other names used: *D. unimaculata* STROBL (misident.), *D. lakovaarai*.

General features of adults: KUROKAWA (1972), KUROKAWA and HIHARA (1976), TAKADA and OKADA (1958), WATABE and HIGUCHI (1979).

Figures: BEPPU et al. (1977), KUROKAWA (1972), OKADA (1968a), TAKADA and OKADA (1958), THROCKMORTON (1962), WATABE and HIGUCHI (1979).

Keys: BEPPU et al. (1977), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976, 1979, 1980), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KIMURA and TODA (1976), KIMURA et al. (1977), LUMME et al. (1978, 1979), MINAMI et al. (1979), TAKADA (1957, 1958), TAKADA and OKADA (1958), TAKADA and TOYOFUKU (1960), TODA (1973a, 1974), WAKAHAMA (1964).

Distribution:

FINLAND: LAKOVAARA and HACKMAN (1973), LAKOVAARA and HOIKKALA (1979), LUMME et al. (1978, 1979). — NORWAY: ROCHA PITÉ and TSACAS (1980). — SWEDEN: ROCHA PITÉ and TSACAS (1980). — JAPAN: BEPPU (1976, 1978, 1979, 1980), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), KUROKAWA (1972), LAKOVAARA and HOIKKALA (1979), MINAMI (1979), MINAMI et al. (1979), MOMMA (1965a), OKADA (1968a), STONE et al. (1960), TAKADA (1957, 1958, 1960, 1968), TAKADA and OKADA (1958), TAKADA and TOYOFUKU (1960), THROCKMORTON (1962), TODA (1973a, 1974), WAKAHAMA (1964), WAKAHAMA et al. (1963), WATABE and BEPPU (1977), WATABE and HIGUCHI (1979).

Drosophila fascipennis OKADA, 1967

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Biology: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

Recorded also in Taiwan.

Drosophila fenestrarum FALLÉN, 1823

Other names used: *D. virginea* MEIGEN (syn.), *D. fenestrarum* var. *hirsuta* DUDA.

General features of adults: BIGOT (1881), BURLA (1951a), COLLIN (1952), DUDA (1921, 1924c, 1926a, 1927, 1935), FALLÉN (1823), HACKMAN (1955), HALIDAY (1833), HENNIG (1958), LAŠTOVKA and MÁČA (1978), LEE (1959), MACQUART (1835), MEIGEN (1830), MONOLÚS (1964), NEUHAUS (1886), OKADA and KUROKAWA (1957), OLDENBERG (1914), PAPP (1971), SÉGUY (1934b), STAEGER (1844), STURTEVANT (1916), WAHLGREN (1927), WALKER (1853), ZETTERSTEDT (1838, 1847).

Figures: COLLIN (1952), DUDA (1924a, 1924c, 1926a, 1935), HACKMAN (1954), LAŠTOVKA and MÁČA (1977, 1978), MORGE (1976a, 1976c), PAPP (1973), SÉGUY (1934b).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1926a, 1935), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), LAŠTOVKA and MÁČA (1978), PAPP (1973), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a), SCHINER (1864), SÉGUY (1934a, 1934b), SHORROCKS (1972), ŠTAKELBERG (1970), WAHLGREN (1927).

Development: HENNIG (1952), MAYER (1935), UNWIN (1907).

Biology: BASDEN (1954b, 1956), COLYER and HAMMOND (1951), FRYDENBERG (1956a), HERTING (1955), LAŠTOVKA and MÁČA (1978), MAYER (1935), NASWATY (1959), PAPP (1976), SCHATZMANN (1977), SCHMID (1968), SÉGUY (1934b), SOBELS et al. (1954).

Distribution:

AUSTRIA: ARADI (1959), BASDEN (1961), DUDA (1924c), STROBL (1880, 1894), THALER (1977), TIEF (1888). — CYPRUS: unpublished. — CZECHOSLOVAKIA: ARADI (1959), DALLA TORRE (1878), DOSKOČIL (1962), MARTINEK (1973, 1974a), LAŠTOVKA and MÁČA (1977, 1978), VIMMER (1913). — DENMARK: FRYDENBERG (1956a), STAEGER (1844), ZETTERSTEDT (1847). — FINLAND: HACKMAN (1954), LUMME et al. (1978), ZETTERSTEDT (1860). — FRANCE: KUNTZE (1913), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: KARL (1936), KRAMER (1917), LAŠTOVKA and MÁČA (1978), NEUHAUS (1886), RADATZ (1873). — GERMAN FEDERAL REPUBLIC: BASDEN (1961), BEUTHIN (1887), HERTING (1955), KRÖBER (1910, 1935), NASWATY (1959), ZETTERSTEDT (1847). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1954b), COLLIN (1952), FONSECA (1965), HENDERSON (1911), RICHARDS and HERFORD (1930), SHORROCKS (1969), WALKER (1849, 1853), YERBURY (1913). — HUNGARY: ARADI (1959), PAPP (1973, 1976), Soós (1943), THALHAMMER (1899). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ? ITALY: BEZZI (1892b), POKORNY (1887), ZANGHERI (1950, 1969). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — NORWAY: BASDEN (1956). — ? POLAND: BOBEK (1890), KARL (1936), STROBL (1901). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a). — ROMANIA: ARADI (1959), THALHAMMER (1899, 1901). — SWEDEN: FALLÉN (1823), LAŠTOVKA and MÁČA (1978), RINGDAHL (1941), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1855). — SWITZERLAND: BÄCHLI (1973a), BURLA (1948, 1951a), SCHATZMANN (1977), SCHMID (1968). — USSR: EVERSMAAN (1834), HACKMAN (1954, 1957), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: ARADI (1959), KEKIC and MARINKOVIĆ (1978), STROBL (1898a, 1900a).

Recorded also in Sumatra.

Comment:

This species was often confused with *D. melanogaster* MEIGEN and other species. The subspecies *hirsuta* DUDA is probably a separate species.

Drosophila ficusphila KIKKAWA and PENG, 1938

General features of adults: BOCK and WHEELER (1972), FREIRE-MAIA (1949), KIKKAWA and PENG (1938), KUROKAWA and HIHARA (1976), MATHER (1955), OKADA (1953b, 1954c, 1954d, 1956, 1959, 1961b).

Figures: BOCK and WHEELER (1972), KIKKAWA and PENG (1938), OKADA (1954c, 1956, 1964, 1968a).

Keys: KIKKAWA and PENG (1938), LEE (1964a), OKADA (1956).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: KIKKAWA and PENG (1938), OKADA (1956, 1962), WAKAHAMA (1962b, 1964).

Distribution:

S. KOREA: LEE (1964a, 1966b), TAKADA and LEE (1958). — JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), KIKKAWA and PENG (1938), OKADA (1954c, 1954d, 1956, 1959, 1962, 1966b, 1968a), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966).

Recorded also in South Asia and Australia.

***Drosophila flavofasciata* TAKADA, BEPPU and TODA, 1979**

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Drosophila funebris* FABRICIUS, 1787**Other names used: *D. clarkii* HUTTON (syn.), *Leucophenga atkinsoni* MILLER (syn.), *D. dudai* MALLOCH (syn.), *D. confusa* STAEGER (misident.).

General features of adults: BOCK (1976), BRNCIC (1957), BURLA (1951a), DUDA (1924c, 1935), HEEGER (1858), HARDY (1965), HARRISON (1952, 1959), HSE (1949), KIKKAWA and PENG (1938), LEMCHE (1949), MALLOCH (1934a), MATSUMURA (1931), MEIGEN (1830), MILLER (1921), NATER (1953), NEUHAUS (1886), OKADA (1953b, 1955a, 1956, 1961b), OLDENBERG (1914), PATTERSON (1943), PERTTUNEN (1955), SÉGUY (1934a, 1934b), SMART (1943), STAEGER (1844), STALKER and SPENCER (1939), STROBL (1893b, 1910), STURTEVANT (1921), TAKADA (1966b), VILLENUEVE (1921), WAHLGREN (1927), WALKER (1853), ZETTERSTEDT (1838, 1847).

Figures: BASDEN (1961), BEPPU et al. (1977), DUDA (1924a, 1924c, 1935), HEEGER (1858), HARDY (1965), HARRISON (1952, 1959), HSE (1949), KIKKAWA and PENG (1938), LEMCHE (1949), MALLOCH (1934a), MALOGOLOVKIN (1953), MATSUMURA (1931), MILLER (1921), MORGE (1976a), NATER (1953), OKADA (1955a, 1956, 1968a), PAPP (1973), PATTERSON (1943), PATTERSON and STONE (1952), ROCHA PITÉ (1975a), SÉGUY (1934b), SHORROCKS (1972), SMART (1943), STAKELBERG (1970), STALKER and SPENCER (1939), STURTEVANT (1921), THROCKMORTON (1962), UNWIN (1907), WAHLGREN (1927).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1976), BRNCIC (1957), BURLA (1951a), DUDA (1924a, 1924c, 1927, 1935, 1940), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), HARDY (1965), HARRISON (1952, 1959), KIKKAWA and PENG (1938), LAŠTOVKA and MÁCA (1977), MALLOCH (1934a), MALLOCH and MCATTEE (1924), MONCLUS (1964, 1976), OKADA (1956), PAPP (1973), PATTERSON (1943), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a), SCHNER (1864), SÉGUY (1934a, 1934b), SHORROCKS (1972), STAKELBERG (1970), STURTEVANT (1918, 1921), TAKADA (1971), WAHLGREN (1927), ZETTERSTEDT (1847).

Development: DUDA (1934), HEEGER (1858), HENNIG (1952), KAMBYSELLIS (1968), KIKKAWA and PENG (1938), LEMCHE (1949), MAYER (1935), DE MEIJERE (1916a), OKADA (1963a, 1968a), STURTEVANT (1921), UNWIN (1907).

Biology: ARADI and MIHALYI (1971), ATKINSON and SHORROCKS (1977), BASDEN (1953, 1954b, 1957a), BASDEN and HARNDEN (1956), BICKLEY (1956), BRAUER (1883), BRNCIC and DOBZHANSKY (1957), BURLA (1949, 1951a), BURLA and BÄCHLI (1968), BUXTON (1924, 1960), CANZANELLI (1939, 1941), CARSON (1965), COLYER and HAMMOND (1951), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DOBZHANSKY (1965), DUDA (1935, 1940), FRYDENBERG (1956a), GORDON (1942), HACKMAN and MEINANDER (1979), HEEGER (1858), HENNIG (1952, 1953), HERTING (1955), HOWARD (1900), HUNTER et al. (1973), ISHIHARA (1955a), KANEKO (1960), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KIKKAWA and PENG (1938), KIMURA et al. (1977), KÖNIG (1965), KRAMER (1917), KÜHLHORN (1964, 1968, 1978, 1979), LEOLEROQ (1946a, 1946b, 1955), LEMCHE (1949), LESNE (1923), LEVER and SOBELS (1951), LINDROTH et al. (1973), LUMME et al. (1979), MÁCA (1975), MAINX (1949), DE MEIJERE (1935, 1946), MILLER (1921), MINAMI et al. (1979), MOMMA (1965b), NASWATY (1959), NEUHAUS (1886), OKADA (1954d, 1956), OLDROYD (1965), PAPP (1976, 1979), PATTERSON (1942), PAVAN et al. (1950), PIPKIN (1952), RICHARDS and HERFORD (1930), ROCHA PITÉ (1972, 1979), SCHMID (1968), SCHOLTZ (1849, 1850), SCHULZE (1912), SCHUMANN (1963), SÉGUY (1934a, 1934b, 1950, 1951), SHORROCKS (1972, 1974, 1975, 1977), SHORROCKS and WOOD (1973), SOBELS et al. (1954), STALKER and SPENCER (1939), STORA (1957), STURTEVANT (1919b, 1921), SUZUKI (1955), TAKADA (1954, 1957, 1958), TAKADA and TOYOFUKU (1960), TESCHNER (1959, 1962), TIMOFÉEFF-RESSOVSKY (1927, 1935), TIMOFÉEFF-RESSOVSKY and TIMOFÉEFF-RESSOVSKY (1941a, 1941b, 1941c), UNWIN (1907), WAKAHAMA (1956b, 1957a, 1964), WEBSTER (1900), WHEELER and THROCKMORTON (1960), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: BASDEN (1961), PALM (1869), STROBL (1880, 1894, 1901), TIEF (1888). — BELGIUM: LECLERCQ (1946a, 1946b, 1955). — BULGARIA: CZERNY (1930). — CZECHOSLOVAKIA: ARADI (1959), CZIŽEK (1906), DALLA TORRE (1878), FRITSCH (1963), LAŠTOVKA and MÁCA (1977), MÁCA (1972a, 1975), MARTINEK (1973), STROBL (1901), VIMMER (1913), ZUSKA and LAŠTOVKA (1969). — DENMARK: FABRICIUS (1787), FRYDENBERG (1956a), LEMCHE (1949), TIMOFÉEFF-RESSOVSKY (1935), ZETTERSTEDT (1847). — FINLAND: BASDEN (1956), FREY (1950), HACKMAN (1954, 1971), HACKMAN and MEINANDER (1979), LUMME et al. (1978, 1979), STORÅ (1956, 1957), ZETTERSTEDT (1860). — FRANCE: HADORN et al. (1952), LESNE (1923), ROCHA PITÉ and TSACAS (1979), TIMOFÉEFF-RESSOVSKY (1935). — GERMAN DEMOCRATIC REPUBLIC: BASDEN (1961), BUZZATI et al. (1938), KRAMER (1917), NEUHAUS (1886), RADDATZ (1873), SCHUMANN (1963), TIMOFÉEFF-RESSOVSKY (1935), TIMOFÉEFF-RESSOVSKY and TIMOFÉEFF-RESSOVSKY (1941a, 1941b, 1941c). — GERMAN FEDERAL REPUBLIC: BRUTHIN (1887), DAHL (1896), FISCHER (1936), HERTING (1955), KÖNIG (1965), KRÖBER (1910, 1935), KÜHLHORN (1964, 1968, 1978, 1979), NASWATY (1959), TESCHNER (1959, 1962). — GREAT BRITAIN: ATKINSON and SHORROCKS (1977), AUDCOTT (1950), BASDEN (1952, 1953, 1954b, 1957a), BASDEN and GOODEY (1955), BEATTY and SIDHU (1969), BUXTON (1960), CARTER (1914), FONSECA (1965), GORDON (1942), HALIDAY (1833), HUNTER et al. (1973), PERJE (1954), RICHARDS and HERFORD (1930), SHORROCKS (1969, 1972, 1974, 1975, 1977), SMITH (1959, 1960), STURTEVANT (1921), TIMOFÉEFF-RESSOVSKY (1935), WALKER (1853). — GREECE: ROCHA PITÉ and TSACAS (1980). — HUNGARY: ARADI (1959), ARADI and MIHALYI (1971), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973, 1975, 1976), SOÓS (1943), THALHAMMER (1899). — ICELAND: LINDROTH et al. (1973), NIELSEN et al. (1954). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: BEZZI (1891, 1892a, 1892b), BEZZI and DE STEFANI-PEREZ (1897), BUZZATI-TRAVERSO (1942a), CANZANELLI (1941), LLOYD (1895), PALM (1869), PERJE (1954), TIMOFÉEFF-RESSOVSKY (1935), ZANGHERI (1950, 1969). — NETHERLANDS: LEVER and SOBELS (1951), DE MEIJERE (1935, 1946), SOBELS et al. (1954), STURTEVANT (1921). — NORWAY: BASDEN (1956), BASDEN and HARNDEN (1956), HACKMAN (1968a), STURTEVANT (1921), TIMOFÉEFF-RESSOVSKY (1935), ZETTERSTEDT (1847). — POLAND: BOBEK (1890), KARL (1936), KRAMER (1917). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977b, 1979), TIMOFÉEFF-RESSOVSKY (1935). — ROMANIA: ARADI (1959), SACK (1904), STROBL (1897), THALHAMMER (1899, 1901). — SPAIN: CZERNY and STROBL (1909), HACKMAN (1969a), HADORN et al. (1952), MONCLUS (1964), ORTIZ (1968), STURTEVANT (1921), TIMOFÉEFF-RESSOVSKY (1935). — SWEDEN: FALLÉN (1823), PERJE (1954), RINGDAHL (1941, 1951), TIMOFÉEFF-RESSOVSKY (1935), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1855). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1949, 1951a, 1961), BURLA and BÄCHLI (1968), NATER (1953), PAVAN et al. (1950), SCHMID (1968). — TURKEY: TIMOFÉEFF-RESSOVSKY (1935). — USSR: BASDEN (1956), BORISOV (1973a, 1973b), DOBZHANSKY (1965), DUBININ (1946), DUBININ and ROMASCHOFF (1932), DUBININ and TINIAKOV (1945, 1946a, 1946b, 1947), DUBININ et al. (1937b), DUDA (1935), EVERSMAAN (1834), FROLOWA (1926), HACKMAN (1957), KIKKAWA and PENG (1938), PAPP (1979), PETROVA (1968), STAKELBERG (1970), SYTSHEVSKAJA (1978), TIMOFÉEFF-RESSOVSKY (1927, 1933, 1935), VESELEKIN

(1966). — YUGOSLAVIA: ARADI (1959), COE (1959), KEKIĆ and MARINKOVIĆ (1978, 1979), STROBL (1898a, 1900a, 1904). — AZORES: FREY (1945), HACKMAN (1960), SÉGUY (1936). — MADEIRA: unpublished. — CANARY IS.: BECKER (1908b), MONCLÚS (1976). — MOROCCO: PREVOSTI (1974). — LIBYA: TIMOFÉEFF-RESSOVSKY (1935). — EGYPT: TANTAWY and MALLAH (1961), TIMOFÉEFF-RESSOVSKY (1935). — ISRAEL: BUXTON (1924). — LEBANON: JOHNSON et al. (1966), PIPKIN (1952). — IRAN: unpublished. — MONGOLIA: HACKMAN (1968b), OKADA (1973c). — N. KOREA: OKADA (1974b). — JAPAN: ISHIHARA (1955a), KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966, 1969), KIKKAWA and PENG (1938), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954d, 1955a, 1956, 1968a, 1968d), PERJE (1954), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TOYOFUKU (1957, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1964), WAKAHAMA et al. (1963).
Recorded as virtually cosmopolitan species, but absent in the Oriental region.

Drosophila grandis KIKKAWA and PENG, 1938

General features of adults: KIKKAWA and PENG (1938), OKADA (1953a, 1956, 1961b).

Figures: KIKKAWA and PENG (1938), OKADA (1956, 1968a).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LIN and TSENG (1971), OKADA (1956).

Development: OKADA (1968a).

Biology: KIKKAWA and PENG (1938), OKADA (1956), WAKAHAMA (1962b, 1964).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: KIKKAWA and PENG (1938), OKADA (1956, 1968a), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966).

Recorded also in India.

Drosophila guanche MONCLÚS, 1976

General features of adults: MONCLÚS (1976).

Figures: MONCLÚS (1976).

Key: MONCLÚS (1976).

Biology: MONCLÚS (1976).

Distribution:

CANARY IS.: MONCLÚS (1976).

Drosophila helvetica BURLA, 1948

Other name used: *Drosophila* sp. like *helvetica*.

General features of adults: BURLA (1948, 1951a), CAIN et al. (1952), COLLIN (1952), FREIRE-MAIA (1949), HSU (1949), NATER (1953), OKADA (1956, 1961b), PARSHAD and DUGGAL (1966).

Figures: BEPPU et al. (1977), BURLA (1948, 1951a), DYSON-HUDSON (1954), HSU (1949), MONCLÚS (1964), OKADA (1956, 1968a), PAPP (1973), SHORROCKS (1972), TAKADA et al. (1979).

Keys: BEPPU et al. (1977), BURLA (1951a), DYSON-HUDSON (1954), FONSECA (1965), GUPTA and RAY-CHAUDHURI (1970), MONCLÚS (1964), OKADA (1956), PAPP (1973), SHORROCKS (1972), TAKADA (1971).

Development: BURLA (1951a), OKADA (1963a, 1968a).

Biology: BURLA (1949, 1951a, 1961), BUZZATI-TRAVERSO and SCOSSIROLI (1955), COLLIN (1952), HADORN et al. (1952), HERTING (1955), KANEKO and TOKUMITSU (1969), KÖNIG (1965), OKADA (1956), PARSHAD and DUGGAL (1966), SCHMID (1968), SOBELS et al. (1954), TAKADA (1957), TODA (1973a, 1977).

Distribution:

AUSTRIA: BASDEN (1961). — CZECHOSLOVAKIA: unpublished. — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÖNIG (1965). — GREAT BRITAIN: COLLIN (1952), DYSON-HUDSON (1954), FONSECA (1965), SHORROCKS (1969, 1977). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: NIGRO (1979), OKADA (1968a). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — SPAIN: MONCLÚS (1964). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1974b, 1974c, 1975a, 1975b), BURLA (1948, 1949, 1951a, 1951b, 1961), HSU (1949), LAKOVAARA et al. (1972c), NATER (1953), SCHMID (1968). — TURKEY: unpublished. — YUGOSLAVIA: unpublished. — IRAN: unpublished. — S. KOREA: KANG et al. (1959), LEE (1966b), PAIK (1958). — JAPAN: KANEKO and TOKUMITSU (1969), KANEKO et al. (1969), MOMMA (1965a), OKADA (1956), TAKADA (1957, 1958, 1968), TODA (1973a, 1977), WAKAHAMA (1964).
Recorded also in India.

Drosophila hexasticha PAPP, 1971

Other name used: *D. acuminata* COLLIN (misident.).

General features of adults: HACKMAN (1954, 1957), LAŠTOVKA and MÁCA (1978), PAPP (1971, 1976).

Figures: HACKMAN (1954), LAŠTOVKA and MÁCA (1978), PAPP (1973).

Keys: HACKMAN (1954), LAŠTOVKA and MÁCA (1978), PAPP (1971, 1973), ŠTAKELBERG (1970).

Biology: LAŠTOVKA and MÁCA (1978), PAPP (1976).

Distribution:

HUNGARY: LAŠTOVKA and MÁCA (1978), PAPP (1971, 1973, 1976). — ROMANIA: PAPP (1971, 1973). — USSR: HACKMAN (1954, 1957), ŠTAKELBERG (1970).

Drosophila hiharai OKADA, 1967

General features of adults: OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Biology: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

***Drosophila histrio* MEIGEN, 1830**

Other name used: *D. pokornyi* DUDA (syn.).

General features of adults: BECKER (1903a), BURLA (1951a), BURLA and GLOOR (1952), CHUNG and RHO (1959), DUDA (1924c, 1926a, 1935), FRYDENBERG (1955), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), MACQUART (1835), MEIGEN (1830), NATER (1953), NEUHAUS (1886), OKADA (1953b, 1954d, 1955a, 1956, 1961b), OKADA and KUROKAWA (1957), OLDENBERG (1914), SÉGUY (1934a, 1934b), WAHLGREN (1927), ZETTERSTEDT (1847).

Figures: BEPPU et al. (1977), BURLA (1951a), DUDA (1924a, 1924c, 1935), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), MEIGEN (1830), MONCLÚS (1964), MORGE (1976a), NATER (1953), OKADA (1955a, 1956, 1968a), PAPP (1973), ROCHA PITÉ (1975a), SÉGUY (1934b), ŠTAKELBERG (1970).

Keys: BEPPU et al. (1977), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), HACKMAN (1954), KIKKAWA and PENG (1938), LEE (1964c), MONCLÚS (1964), OKADA (1956), PAPP (1973), ROCHA PITÉ (1975a), SCHINER (1864), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), TAKADA (1971), WAHLGREN (1927).

Development: BURLA (1951a), MAYER (1935), OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), BEUTHIN (1887), BONNAMOUR (1926), BURLA (1949, 1951a), BURLA and BÄCHLI (1968), BUXTON (1960), CANZANELLI (1941), COE (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), FALCOZ (1924), HACKMAN (1954), HADORN et al. (1952), HERTING (1955), ISHIHARA (1955a, 1955b), KANEKO (1960), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), KÖNIG (1965), KRÖBER (1910, 1935), MAYER (1935), MINAMI et al. (1979), OKADA (1954d, 1956), OLDENBERG (1914), SÉGUY (1934b, 1950), SHORROCKS (1977), SHORROCKS and WOOD (1973), SUZUKI (1955), TAKADA (1954, 1957, 1958), TAKADA and LEE (1958), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1957a, 1962b, 1964), WATABE (1979).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1924c, 1935), MEIGEN (1830), PALM (1869), STROBL (1880, 1894, 1901), TIEF (1888). — CZECHOSLOVAKIA: STROBL (1901). — FINLAND: HACKMAN (1954, 1971), LUMME et al. (1978). — FRANCE: BONNAMOUR (1926), FALCOZ (1924), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1924c, 1935), NEUHAUS (1886). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), DUDA (1924c, 1935), HERTING (1955), KÖNIG (1965), KRÖBER (1910, 1935). — GREAT BRITAIN: FONSECA (1965), SHORROCKS (1977). — HUNGARY: ARADI (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973), SOÓS (1945). — ITALY: DUDA (1924c, 1935). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — NORWAY: ROCHA PITÉ and TSACAS (1980). — POLAND: DUDA (1924c, 1935), KARL (1936). — PORTUGAL: ROCHA PITÉ (1972, 1975a). — ROMANIA: ARADI (1959), OLDENBERG (1914), SOÓS (1945). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: WAHLGREN (1927), ZETTERSTEDT (1847). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973b, 1974b, 1974c, 1975a, 1975b, 1979), BURLA (1948, 1949, 1951a, 1961), BURLA and BÄCHLI (1968), HSU (1949), NATER (1953). — TURKEY: unpublished. — USSR: FROLOVA (1926), HACKMAN (1954, 1957), ŠTAKELBERG (1970). — YUGOSLAVIA: COE (1959), KEKIĆ and MARINKOVIĆ (1979). — ALGERIA: SÉGUY (1934b). — N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959), KIM (1962), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), ISHIHARA (1955a, 1955b), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954d, 1955a, 1956, 1968a), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977).
Recorded also in South China.

***Drosophila hydei* STURTEVANT, 1921**

Other names used: *D. repleta* WOLLASTON (misident.), *D. setosa* DOBZHANSKY and PAVAN (syn.).

General features of adults: BASDEN (1954b), BICKLEY (1956), BREUER and ROCHA (1971), BURLA (1951a), DOBZHANSKY and PAVAN (1943), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KUROKAWA and HIHARA (1976), NATER (1953), OKADA (1953b, 1955a, 1956, 1959, 1981b), PATTERSON (1943), STURTEVANT (1921), WASSERMAN (1962b), WHEELER (1960b), WHEELER and TAKADA (1964).

Figures: BREUER and ROCHA (1971), BURLA (1951a), COVA GARCÍA and SUÁREZ (1962), DOBZHANSKY and PAVAN (1943), HARDY (1965), HARRISON (1952, 1959), HSU (1949), HUFF (1925), NATER (1953), OKADA (1955a, 1956, 1968a), PAPP (1973), PATTERSON (1943), THROCKMORTON (1962), WASSERMAN (1962b), WHEELER and TAKADA (1964).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1976), BURLA (1951a), FONSECA (1965), FRYDENBERG (1956a), HARDY (1965), HARRISON (1952, 1959), LAŠTOVKA and MÁČA (1977), MALLOCH (1923a, 1927), MALLOCH and MCATEE (1924), MONCLÚS (1964), OKADA (1956), PAPP (1973), PATTERSON (1943), PATTERSON and MAINLAND (1944), PAVAN and DA CUNHA (1947), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a), SHORROCKS (1972), TAKADA (1971), WASSERMAN (1962b).

Development: HENNIG (1952), HUFF (1925), KAMBYSELLIS (1968), OKADA (1963a, 1968a).

Biology: ATKINSON and SHORROCKS (1977), BASDEN (1954b, 1957a), BICKLEY (1956), BURLA (1949, 1951a), CARSON (1965, 1971), COLLINS (1956), COLYER (1951), COVA GARCÍA and SUÁREZ (1962), FRYDENBERG (1956a), GUYER et al. (1956), HEED (1968), HERTING (1955), HUNTER et al. (1973), KAWANISHI and WATANABE (1977), KIMURA and TODA (1976), KÜHLHORN (1964, 1968, 1978, 1979), LEVER and SOBELS (1951), LINDNER (1928), MCCOY (1962), MATHER (1956), MINAMI et al. (1979), NOZAWA (1956), OKADA (1956, 1962), OLDROYD (1965), ORTIZ (1968), PAPP (1975, 1976), PATTERSON (1942), PATTERSON and STONE (1952), PIPKIN (1952), RICHARDS and HERFORD (1930), SHAW (1969), SHORROCKS (1974, 1975), SHORROCKS et al. (1979), SOBELS et al. (1954), STALKER (1945), TAKADA (1957), WAKAHAMA (1957a, 1964), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: ROCHA PITÉ and TSACAS (1980). — BELGIUM: unpublished. — CZECHOSLOVAKIA: LAŠTOVKA and MÁČA (1977), MÁČA (1972b), MARTINEK (1973), ZUSKA and LAŠTOVKA (1969). — DENMARK: BASDEN (1956), FRYDENBERG (1956a). — FINLAND: HACKMAN (1971). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: unpublished. — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÜHLHORN (1964, 1968, 1978, 1979), LINDNER (1928). — GREAT BRITAIN: ATKINSON and SHORROCKS (1977), BASDEN (1952, 1954b, 1957a), COLYER (1951, 1954), FONSECA (1965), HUNTER et al. (1973), RICHARDS and HERFORD (1930), SHAW (1969), SHORROCKS (1974, 1975, 1977), SHORROCKS et al. (1979), SMITH (1960). — HUNGARY: PAPP (1973, 1975, 1976). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: STONE (1942). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — NORWAY: BASDEN (1956). — PORTUGAL: ROCHA PITÉ (1972, 1975a, 1977b, 1979). — SPAIN: HACKMAN (1969a), MONCLÚS (1964), ORTIZ (1968). — SWEDEN: BASDEN (1956). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1975a, 1975b, 1979), BURLA (1948, 1949, 1951a, 1961), NATER (1953). —

YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1978, 1979), KEKIĆ et al. (1980), MARINKOVIĆ et al. (1980). — AZORES: HACKMAN (1960). — MADEIRA: unpublished. — MOROCCO: PREVOSTI (1974). — TUNISIA: PAPP (1978). — EGYPT: TANTAWY et al. (1970). — ISRAEL: unpublished. — LEBANON: PIPKIN (1952). — JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1957, 1965a), NOZAWA (1956), OKADA (1955a, 1956, 1959, 1962, 1968a), TAKADA (1957), TAKADA et al. (1953), TODA (1973a), WAKAHAMA (1957a, 1964).
Recorded as virtually cosmopolitan species.

Drosophila imaii MORIWAKI, KITAGAWA and OKADA, 1967

Other name used: *D. bifasciata* POMINI (misident.).

General features of adults: KUROKAWA and HIHARA (1976), MORIWAKI et al. (1967), TAKADA et al. (1979).

Figures: BEPPU et al. (1977), MORIWAKI et al. (1967), TAKADA et al. (1979).

Keys: BEPPU et al. (1977), TAKADA (1971).

Biology: BEPPU (1976), BEPPU and TODA (1976), KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), MINAMI et al. (1979), TODA (1973a, 1973b, 1973c, 1974, 1977).

Distribution:

JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), KANEKO and TOKUMITSU (1969), KANEKO et al. (1969), KIMURA and TODA (1976), LAKOVAARA et al. (1972c), MINAMI (1979), MINAMI et al. (1979), MORIWAKI et al. (1967), OHNISHI and MORIWAKI (1968), TAKADA (1968), TODA (1973a, 1973b, 1973c, 1974, 1977), YAMAGUCHI (1973).

Drosophila immigrans STURTEVANT, 1921

Other names used: *D. brouni* HUTTON (syn.), *D. cilifemur* VILLENEUVE (syn.), *D. flexipilosa* PIPKIN (syn.), *D. tripunctata* LOEW (misident.).

General features of adults: BECKER (1908b), BRNCIC (1957), BURLA (1951a), DE CASTRO (1953), CURRAN (1932), DUDA (1924c, 1926a, 1926b, 1934), HARDY (1965), HARRISON (1952, 1959), HEMMING (1956), HSU (1949), HUTTON (1901), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), LIN and TING (1971), LIN and TSENG (1973), MALLOCH (1923a, 1934a), MALOGOLOWKN (1953), NATER (1953), OKADA (1953b, 1955a, 1956, 1959, 1961b), PARSHAD and DUGGAL (1966), PATTERSON (1943), PENG (1937), PIPKIN (1964), RINGDAHL (1949), SÉGUY (1934b, 1936), STURTEVANT (1921), VILLENEUVE (1923), WHEELER and TAKADA (1964).

Figures: BEPPU et al. (1977), BURLA (1951a), DUDA (1924c, 1926b, 1934), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), MALLOCH and MCATEE (1924), MALOGOLOWKN (1953), NATER (1953), OKADA (1955a, 1956, 1968a), PAPP (1973), PARSHAD and DUGGAL (1966), PATTERSON (1943), PATTERSON and STONE (1952), PIPKIN (1964), ROCHA PITÉ (1975a), SHORROCKS (1972), THROCKMORTON (1962), WHEELER and TAKADA (1964).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1976), BRNCIC (1957), BRYAN (1938), BURLA (1951a), DUDA (1924a, 1924c, 1926b, 1934), ENDERLEIN (1936), FONSECA (1965), FRYDENBERG (1956a), GUPTA and RAY-CHAUDHURI (1970), HACKMAN (1954), HARDY (1965), HARRISON (1952, 1959), KIKKAWA and PENG (1938), LEE (1964c), MALLOCH (1923a, 1924b, 1927), MALLOCH and MCATEE (1924), MONCLÚS (1964, 1976), OKADA (1956, 1966a), PAPP (1973), PATTERSON (1943), PATTERSON and MAINLAND (1944), PAVAN and DA CUNHA (1947), PENG (1937), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a), SÉGUY (1934a, 1934b), SHORROCKS (1972), STURTEVANT (1921, 1927), TAKADA (1971), WHEELER and TAKADA (1964).

Development: BURLA (1951a), HENNIG (1952), KAMBYSELLIS (1968), KIKKAWA and PENG (1938), OKADA (1963a, 1968a), PATTERSON (1943), PIPKIN (1964).

Biology: ATKINSON and SHORROCKS (1977), BÄCHLI (1979), BASDEN (1952, 1954b, 1957a), BEPPU (1976), BEPPU and TODA (1976), BICKLEY (1956), BOCK (1976), BURLA (1949, 1951a, 1961), BURUGA (1976), CARSON (1965, 1971), COLLINS (1956), DOBZHANSKY and PAVAN (1950), DUDA (1934, 1940), FRYDENBERG (1956a), HACHIYA (1954), HEBD (1968), HENNIG (1953), HERTING (1955), ISHIHARA (1955a), KANEKO (1960), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KATÓ (1954), KATÓ and HORI (1952), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), KÖNIG (1965), KÜHLHORN (1964, 1978, 1979), LEVER and SOBELS (1951), MCKENZIE and PARSONS (1974), MATHER (1956), MERRILL and HUTSON (1953), MINAMI et al. (1979), MOMMA (1965b), NASWATY (1959), NOZAWA (1956), OKADA (1954d, 1956, 1962), PAPP (1975), PARSONS (1978), PATTERSON (1942), PETERSEN (1960), PIPKIN (1952, 1964), PIPKIN et al. (1966), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), SABATH (1974), SAITO et al. (1962), SÉGUY (1934b), SCHATZMANN (1977), SHORROCKS (1972, 1974), SHORROCKS et al. (1979), SOBELS et al. (1954), SUZUKI (1955), TAKADA (1954, 1957, 1958), TAKADA and TOYOFUKU (1960), TODA (1973a, 1973b, 1973c, 1974, 1976, 1977), WAKAHAMA (1957a, 1961, 1962b, 1962c, 1964), WATABE (1979), WHEELER and THROCKMORTON (1960), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: unpublished. — BELGIUM: unpublished. — CZECHOSLOVAKIA: MÁČA (1972b), ZUSKA and LAŠTOVKA (1969). — DENMARK: BASDEN (1956), FRYDENBERG (1956a). — FINLAND: HACKMAN (1971). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b), VILLENEUVE (1923). — GERMAN DEMOCRATIC REPUBLIC: unpublished. — GERMAN FEDERAL REPUBLIC: DUDA (1934), HERTING (1955), KÖNIG (1965), KRÖBER (1935), KÜHLHORN (1964, 1978, 1979), NASWATY (1959). — GREAT BRITAIN: ATKINSON and SHORROCKS (1977), BASDEN (1952, 1954b, 1957a), BEATRY and SIDHU (1969), FONSECA (1965), RICHARDS and HERFORD (1930), SHORROCKS (1969, 1974, 1977), SHORROCKS et al. (1979), SMITH (1960). — GREECE: DIS 37: 95. — HUNGARY: PAPP (1978, 1975). — IRELAND: unpublished. — ITALY: DUDA (1924c, 1934), MAINX (1958), NIORO (1979), SPERLICH (1961). — NETHERLANDS: unpublished. — NORWAY: STURTEVANT (1921). — PORTUGAL: ROCHA PITÉ (1972), LEVER and SOBELS (1951), SOBELS et al. (1954). — SPAIN: HACKMAN (1969a), MONCLÚS (1964), ORTIZ (1968). — SWEDEN: BASDEN (1956), RINGDAHL (1949). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1979), BURLA (1948, 1949, 1951a, 1961), DUDA (1934), HSU (1949), NATER (1953), SCHATZMANN (1977). — TURKEY: unpublished. — USSR: DIS 11: 44. — YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1978, 1979), KEKIĆ et al. (1980). — AZORES: FREY (1945), HACKMAN (1960), SÉGUY (1934b, 1936). — MADEIRA: unpublished. — CANARY IS.: BECKER (1908b), DUDA (1924c, 1934), FREY (1936), MONCLÚS (1976). — MOROCCO: unpublished. — TUNISIA: unpublished. — EGYPT: MOURAD and MALLAH (1960), TANTAWY et al. (1970). — ISRAEL: CARSON (1965). — LEBANON: PIPKIN (1952). — CHINA: HSU (1949), KIKKAWA and PENG (1938), PENG (1937), TAN et al. (1949). — S. KOREA: CHUNG (1958, 1959, 1960a), KANG et al. (1958, 1959), KIM (1962, 1963), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), HACHIYA (1954), HIRUMI (1961), ISHIHARA (1955a), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968), KATÓ (1954), KATÓ and HORI (1952, 1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), KUROKAWA (1967a), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), NOZAWA (1956), OKADA

(1954d, 1955a, 1956, 1959, 1962, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960), SUZUKI (1955), TAKADA (1952, 1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU (1957, 1958a, 1958b, 1961), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977), WATANABE and KAWA. NISHI (1976).
Recorded as virtually cosmopolitan species.

Drosophila ingrlica HACKMAN (1957)

General features of adults: HACKMAN (1957).

Figures: HACKMAN (1957), ŠTAKELBERG (1970).

Key: ŠTAKELBERG (1970).

Distribution:

USSR: HACKMAN (1957), ŠTAKELBERG (1970).

Drosophila iri BURLA, 1954

General features of adults: BURLA (1954a).

Figures: BURLA (1954a).

Keys: BURLA (1954a), FONSECA (1965).

Biology: BASDEN (1957a), BURLA (1954a), LACHAISE (1975).

Distribution:

GREAT BRITAIN: BASDEN (1957a), FONSECA (1965).

Recorded mainly in the Ivory Coast.

Comment:

This species is frequently introduced by ships into British ports, but is not yet recorded there as a wild species.

Drosophila kanekoi WATABE and HIGUCHI, 1979

Other name used: *Drosophila* sp. 4.

General features of adults: WATABE and HIGUCHI (1979).

Figures: BEPPU et al. (1977), WATABE and HIGUCHI (1979).

Key: BEPPU et al. (1977).

Development: WATABE and HIGUCHI (1979).

Biology: WATABE and HIGUCHI (1979).

Distribution:

JAPAN: LAKOVAARA and HOIKKALA (1979), MINAMI (1979), WATABE and HIGUCHI (1979).

Drosophila kangii OKADA and LEE, 1961

General features of adults: KANG et al. (1965b), OKADA and LEE (1961).

Figures: OKADA and LEE (1961).

Keys: BEPPU et al. (1977), KANG and LEE (1964), OKADA (1967), TAKADA (1971).

Distribution:

S. KOREA: KANG and LEE (1964), LEE (1966b), OKADA and LEE (1961). — JAPAN: TAKADA (1968).

Drosophila kikkawai BURLA, 1954

Other name used: *D. montium* DE MEIJERE (misident.).

General features of adults: BOCK and WHEELER (1972), BURLA (1954b), DE CASTRO (1953), DUDA (1926a), HARDY (1965), HSU (1949), KIKKAWA (1936), KIKKAWA and PENG (1938), KUROKAWA and HIHARA (1976), MALLOCH (1934b), OKADA (1953b, 1954c, 1956, 1959, 1961b), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), PAVAN and DA CUNHA (1947), TSACAS and DAVID (1977), VAIDYA and GODBOLE (1971), WATABE (1977), WHEELER and TAKADA (1964).

Figures: BOCK and WHEELER (1972), BURLA (1954b), DUDA (1926a), HARDY (1965), HSU (1949), KIKKAWA (1936), KIKKAWA and PENG (1938), LACHAISE (1976), OKADA (1954c, 1956, 1966a, 1968a), PAVAN and DA CUNHA (1947), THROCKMORTON (1962), TSACAS and BOCQUET (1976), TSACAS and DAVID (1977), VAIDYA and GODBOLE (1971), WHEELER and TAKADA (1964).

Keys: DUDA (1926a), GUPTA and RAY-CHAUDHURI (1970), HARDY (1965), HARRISON (1954), KIKKAWA and PENG (1938), MALLOCH (1934b), OKADA (1956), PAVAN and DA CUNHA (1947), WHEELER and TAKADA (1964).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a), PARSHAD and PAIKA (1964).

Biology: BOCK (1976), HACHIYA (1954), HUNTER (1966), KATŌ and HORI (1952), KIKKAWA and PENG (1938), LACHAISE (1976), NOZAWA (1956), OKADA (1956, 1964), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), TODA (1976).

Distribution:

CHINA: HSU (1949), KIKKAWA and PENG (1938), TAN et al. (1949). — S. KOREA: KANG et al. (1958, 1959), LEE (1966b).

— JAPAN: HACHIYA (1954), KATŌ and HORI (1952, 1954), KAWANISHI et al. (1975), KIKKAWA (1936), KIKKAWA and PENG (1938), NOZAWA (1956), OKADA (1954c, 1956, 1959, 1968a).

Recorded as pantropical species.

Drosophila kirishimana OKADA, 1967

General features of adults: OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

***Drosophila kuntzei* DUDA, 1924**

General features of adults: BURLA (1951a), BURLA and GLOOR (1952), DUDA (1924c, 1926a, 1935), HSU (1949), KUROKAWA and HIHARA (1976), NATER (1953), OKADA (1956, 1961b, 1973c).

Figures: BEPPU et al. (1977), BURLA (1951a), DUDA (1924a, 1924c, 1935), HSU (1949), NATER (1953), OKADA (1956, 1968a, 1973c), PAPP (1973), SHORROCKS (1972).

Keys: BEPPU et al. (1977), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), LEE (1964c), MONCLÚS (1964), OKADA (1956), PAPP (1973), SHORROCKS (1972), TAKADA (1971).

Development: BURLA (1951a), OKADA (1968a).

Biology: BÄCHLI (1969, 1979), BURLA (1949, 1951a, 1961), BURLA and BÄCHLI (1968), COE (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), HADORN et al. (1952), HERTING (1955), KANG et al. (1960), KEKIĆ and MARINKOVIĆ (1979), KÖNIG (1965), KÜHLHORN (1978, 1979), LEVER and SOBELS (1951), NASWATY (1959), OKADA (1956), PAPP (1976, 1979), SAITO et al. (1962), SCHATZMANN (1977), SCHMID (1968), SHORROCKS and WOOD (1973), SOBELS et al. (1954), TAKADA (1957), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: unpublished. — BELGIUM: unpublished. — CZECHOSLOVAKIA: ARADI (1959), Soós (1945), ZUSKA and LAŠTOVKA (1969). — FRANCE: DUDA (1935), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN FEDERAL REPUBLIC: DUDA (1924c, 1935), HERTING (1955), KÖNIG (1965), KÜHLHORN (1978, 1979), NASWATY (1959). — GREAT BRITAIN: FONSECA (1965), SHORROCKS (1977), SHORROCKS and WOOD (1973). — GREECE: DIS 88:76. — HUNGARY: ARADI (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DUDA (1924, 1935), PAPP (1973, 1976), Soós (1945). — ITALY: NIGRO (1979). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — POLAND: DUDA (1924c). — ROMANIA: ARADI (1959), Soós (1945). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWITZERLAND: BÄCHLI (1969, 1972b, 1972c, 1973a, 1974b, 1974c, 1975a, 1975b, 1979), BURLA (1948, 1949, 1951a, 1951b, 1961), BURLA and BÄCHLI (1968), HSU (1949), NATER (1953), SCHATZMANN (1977), SCHMID (1968). — TURKEY: unpublished. — USSR: PAPP (1979). — YUGOSLAVIA: BADSEN (1961), COE (1959), KEKIĆ and MARINKOVIĆ (1979). — MOROCCO: PREVOSTI (1974). — IRAN: unpublished. — S. KOREA: CHUNG and RHO (1959, 1960), KANG et al. (1959, 1960), LEE (1964c, 1966b). — JAPAN: KAWANISHI et al. (1975), MOMMA (1957), OKADA (1956, 1968a), SAITO et al. (1962), SHIMA (1960), TAKADA (1957), WAKAHAMA (1964).

***Drosophila kurokawai* OKADA, 1971**

General features of adults: OKADA (1971d).

Figures: OKADA (1971d).

Key: OKADA (1971d).

Distribution:

JAPAN: KAWANISHI et al. (1975), OKADA (1971d).

***Drosophila kyushuensis* TSACAS and CHASSAGNARD, 1976**

Other name used: *D. brunnea* DE MEIJERE (misident.).

General features of adults: OKADA (1968d), TSACAS and CHASSAGNARD (1976).

Figures: OKADA (1968d).

Distribution:

JAPAN: OKADA (1968d), TSACAS and CHASSAGNARD (1976).

***Drosophila lacertosa* OKADA, 1956**

Other name used: *Drosophila* sp. of *robusta* group I.

General features of adults: CHUNG and RHO (1959), KANEKO and TAKADA (1966), KIM (1962), KUROKAWA and HIHARA (1976), LIN and TING (1971), MOMMA (1956), OKADA (1953b, 1955a, 1956, 1959, 1961b), TAKADA (1959).

Figures: BEPPU et al. (1977), KIM (1962), MOMMA (1956), OKADA (1955a, 1955b, 1956, 1963a, 1968a).

Keys: BEPPU et al. (1977), GUPTA and RAY-CHAUDHURI (1970), LEE (1964c), OKADA (1955a, 1956), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976, 1979, 1980), BEPPU and TODA (1976), KANEKO (1960, 1968), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KANG et al. (1960), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI et al. (1979), MOMMA (1956b), OKADA (1956, 1962), SAITO et al. (1962), SHIMA (1960), TAKADA (1957, 1958), TODA (1973a, 1973b, 1974, 1977), WAKAHAMA (1957a, 1961, 1962b, 1964), WAKAHAMA et al. (1963).

Distribution:

S. KOREA: CHUNG (1958, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959, 1960), KIM (1962), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978, 1979, 1980), BEPPU and TODA (1976), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1954, 1956, 1957, 1965a, 1965b), OKADA (1955a, 1956, 1959, 1962, 1968a), SAITO et al. (1962), SHIMA (1960), TAKADA (1957, 1958, 1959, 1960, 1968), TAKADA and OKADA (1960), TAKAHASHI and KANEKO (1969), TODA (1973a, 1973b, 1974, 1977), TOYOFUKU (1957, 1958a, 1958b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963).

Recorded also in Nepal, India and Taiwan.

***Drosophila latifrontata* FROTA-PESSOA, 1945**

Other names used: *D. carinata* DUDA (syn.), *D. latifrons* DUDA (syn.), *D. latifrontata yakuensis* OKADA.

General features of adults: BÄCHLI (1974a), DUDA (1923), OKADA (1956, 1967).

Figures: BÄCHLI (1974a), DUDA (1924a), OKADA (1967).

Keys: BÄCHLI (1974a), DUDA (1924a, 1925, 1926, 1927), OKADA (1967).

Biology: OKADA (1967).

Distribution:

JAPAN: BÄCHLI (1974a), OKADA (1967).

Recorded mainly in southeast Asia.

Comment:

The subspecies *yakuensis* OKADA is probably a separate species.

Drosophila latinokogiri OKADA, 1968

General features of adults: OKADA (1968d).

Figures: OKADA (1968d).

Distribution:

JAPAN: OKADA (1968d).

Drosophila lebanonensis WHEELER, 1949

Other names used: *D. lebanonensis casteeli* PIPKIN, *D. victoria* STURTEVANT (misident.).

General features of adults: HSU (1949), MATHER (1955), PIPKIN (1956, 1961, 1962), WATABE (1977), WHEELER (1949a).

Figures: HSU (1949).

Key: MONCLÚS (1976).

Biology: PIPKIN (1952).

Distribution:

GREECE: ROCHA PITÉ and TSACAS (1980). — SPAIN: ROCHA PITÉ and TSACAS (1980). — CANARY IS.: MONCLÚS (1976). — ISRAEL: PIPKIN (1961, 1962). — LEBANON: PIPKIN (1952, 1956, 1962), WHEELER (1949a).

Recorded also in North America.

Drosophila limbata VON ROSER, 1840

General features of adults: BECKER (1903a), BURLA (1951a), BURLA and GLOOR (1952), DUDA (1924c, 1935), HERTING (1940), HSU (1949), NATER (1953), NIGRO (1979), VON ROSER (1840).

Figures: BURLA (1951a), DUDA (1924c), HSU (1949), NATER (1953), PAPP (1973), ŠTAKELBERG (1970).

Keys: DUDA (1924a, 1924c, 1935), BURLA (1951a), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), PAPP (1973), ŠTAKELBERG (1970).

Development: BURLA (1951a).

Biology: BURLA (1951a, 1961), BURLA and BÄCHLI (1968), FRYDENBERG (1956b), HERTING (1955), HUMMEL et al. (1979), KÜHLHORN (1978, 1979), LEVER and SOBELS (1951), NASWATY (1959), PAPP (1979), SCHATZMANN (1977), SOBELS et al. (1954).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1924c, 1935), THALER (1977). — BELGIUM: unpublished. — CZECHOSLOVAKIA: ARADI (1959), SOÓS (1945). — DENMARK: FRYDENBERG (1966a). — FINLAND: HACKMAN (1954, 1971). — FRANCE: DUDA (1935), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1935). — GERMAN FEDERAL REPUBLIC: DUDA (1935), HERTING (1955), KÜHLHORN (1978, 1979), NASWATY (1959), VON ROSER (1840). — GREAT BRITAIN: FONSECA (1965), SHORROCKS (1977). — HUNGARY: ARADI (1959), DUDA (1924c, 1935), PAPP (1973), SOÓS (1945). — ITALY: NIGRO (1979), ZANGHERI (1969). — NETHERLANDS: HUMMEL et al. (1979), LEVER and SOBELS (1951), SOBELS et al. (1954). — POLAND: DUDA (1924c, 1935). — ROMANIA: ARADI (1959), SOÓS (1945). — SPAIN: HADORN et al. (1952). — SWEDEN: unpublished. — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b), BURLA (1948, 1951a, 1951b, 1961), BURLA and BÄCHLI (1968), HSU (1949), NATER (1953), SCHATZMANN (1977). — USSR: ARADI (1959), DUDA (1924c, 1935), HACKMAN (1957), SOÓS (1945), PAPP (1979), ŠTAKELBERG (1970). — YUGOSLAVIA: ARADI (1959), KEKIĆ and MARINKOVIĆ (1979), SOÓS (1945). — JAPAN: TAKADA et al. (1979).

Drosophila littoralis MEIGEN, 1830

Other names used: *D. parenti* VILLENEUVE (syn.), *D. lugubrina* DUDA (syn.), *D. imeretensis* SOKOLOV (syn.).

General features of adults: BURLA (1951a), DUDA (1924c, 1935), HACKMAN (1969c, 1972), HSU (1949), LAKOVAARA and HACKMAN (1973), MACQUART (1835), MEIGEN (1830), NATER (1953), OKADA (1961b), PATTERSON (1952), SOKOLOV (1948), TAKADA and OKADA (1958), VILLENEUVE (1921), WATABE and HIGUCHI (1979), ZETTERSTEDT (1838).

Figures: BURLA (1951a), DUDA (1924a, 1935), HACKMAN (1972), HSU (1949), KUROKAWA (1972), MORGE (1976c), NATER (1953), PAPP (1973), ROCHA PITÉ (1975a), SHORROCKS (1972), TAKADA and OKADA (1958), THROCKMORTON (1962), WATABE and HIGUCHI (1979).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), PAPP (1973), ROCHA PITÉ (1975a), SHORROCKS (1972), ŠTAKELBERG (1970).

Development: BURLA (1951a).

Biology: BASDEN (1954b), BASDEN and HARNDEN (1956), BURLA (1949, 1951a), COE (1959), FREY (1932), FRYDENBERG (1956b), HACKMAN (1954), HERTING (1955), KÜHLHORN (1978), LAKOVAARA et al. (1972b), LEVER and SOBELS (1951), LUMME et al. (1978, 1979), NASWATY (1959), SOBELS et al. (1954), SPIETH (1979), STORÁ (1957), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: BASDEN (1961), PATTERSON (1952). — CZECHOSLOVAKIA: ZUSKA and LAŠTOVKA (1969). — DENMARK: FRYDENBERG (1956a). — FINLAND: BASDEN (1956), DUDA (1935), FREY (1929, 1932), HACKMAN (1954, 1971), LAKOVAARA and HOIKKALA (1979), LAKOVAARA et al. (1972b, 1973), LUMME and OIKARINEN (1977), LUMME et al. (1972, 1974, 1975, 1978, 1979), STORÁ (1956, 1957). — FRANCE: DUDA (1935), HADORN et al. (1952), PATTERSON (1952), ROCHA PITÉ and TSACAS (1979), VILLENEUVE (1921). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1924c, 1935). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÜHLHORN (1978), NASWATY (1959), VON ROSER (1840). — GREAT BRITAIN: BASDEN (1954b), FONSECA (1962), SHORROCKS (1972, 1977), WALKER (1858). — HUNGARY: PAPP (1973), THALHAMMER (1899). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: PATTERSON (1952). — NETHERLANDS: LEVER and SOBELS (1951), DE MEIJERE (1928), SOBELS et al. (1954). — NORWAY: BASDEN and HARNDEN (1956). — POLAND:

DUDA (1924c, 1935), KARL (1936). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a). — ROMANIA: ARADI (1959), LAKOVAARA and HOIKKALA (1979), PAPP (1973). — SPAIN: HADORN et al. (1952). — SWEDEN: DUDA (1935), LAKOVAARA and HOIKKALA (1979), LAKOVAARA et al. (1972b). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1975b, 1977), BURLA (1948, 1949, 1951a, 1951b), CLAYTON and WARD (1954), HSU (1949), JOHNSON et al. (1966), LAKOVAARA and HOIKKALA (1979), LAKOVAARA et al. (1973), LUMME and OIKARINEN (1977), LUMME et al. (1972, 1974, 1975), NATER (1953), PATTERSON (1952), PATTERSON and STONE (1952), THROCKMORTON (1962). — TURKEY: unpublished. — USSR: BASDEN (1956, 1961), DUDA (1935), HACKMAN (1957), LAKOVAARA and HOIKKALA (1979), LUMME and OIKARINEN (1977), SOKOLOV (1948), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: COB (1959), KEKIĆ and MARINKOVIĆ (1979). — ? AZORES: FREY (1945). — IRAN: unpublished.

Comment:

Some records may refer to other species.

***Drosophila lummei* HACKMAN, 1972**

General features of adults: HACKMAN (1972), LAKOVAARA and HACKMAN (1973), WATABE and HIGUCHI (1979).

Figures: HACKMAN (1972), LAKOVAARA and HACKMAN (1973), WATABE and HIGUCHI (1979).

Biology: LUMME et al. (1978), SPIETH (1979).

Distribution:

CZECHOSLOVAKIA: unpublished. — FINLAND: HACKMAN (1972), LAKOVAARA and HOIKKALA (1979), LUMME et al. (1978, 1979). — NORWAY: ROCHA PITÉ and TSACAS (1980). — SWEDEN: HACKMAN (1972), LAKOVAARA and HOIKKALA (1979). — USSR: HACKMAN (1972). — JAPAN: WATABE and HIGUCHI (1979).

***Drosophila lundstroemi* DUDA, 1935**

Other names used: *D. oldenbergi* DUDA (misident.), *D. rufipes* (misident.).

General features of adults: BÄCHLI (1972a), BASDEN (1961), DUDA (1935), HACKMAN (1965a).

Figures: BASDEN (1961), HACKMAN (1957, 1965a), PAPP (1973), ŠTAKELBERG (1970).

Keys: HACKMAN (1954), OKADA (1967), PAPP (1973), ŠTAKELBERG (1970).

Biology: DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973).

Distribution:

AUSTRIA: BASDEN (1961), STROBL (1894). — FINLAND: DUDA (1935), HACKMAN (1954, 1965a), LUMME et al. (1979). — HUNGARY: BÄCHLI (1972a), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973). — ROMANIA: BÄCHLI (1972a), PAPP (1973). — USSR: HACKMAN (1957, 1965a), ŠTAKELBERG (1970).

***Drosophila lutescens* OKADA, 1975**

Other names used: *D. luteola* OKADA (syn.), *D. lutea* KIKKAWA and PENG (syn.).

General features of adults: BOCK and WHEELER (1972), FREIRE-MAIA (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), MATHER (1955, 1957), OKADA (1953a, 1954c, 1954d, 1955c, 1956, 1959, 1961b), PARSHAD and PAIKA (1964).

Figures: BEPPU et al. (1977), BOCK and WHEELER (1972), KIKKAWA and PENG (1938), KIM (1962), OKADA (1954c, 1955c, 1956, 1968a).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LEE (1964a), OKADA (1956), TAKADA (1971).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1960), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KATŌ (1954), KATŌ and HORI (1952), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976b), KIMURA et al. (1977), MINAMI et al. (1979), NOZAWA (1956), OKADA (1954d, 1956, 1962), SAITO et al. (1962), SUZUKI (1955), TAKADA (1954, 1957, 1958), TAKADA and TOYOFUKU (1960), TODA (1973a, 1973b, 1974, 1977), WAKAHAMA (1957a, 1961, 1962b, 1962c, 1964, 1966).

Distribution:

S. KOREA: CHUNG (1960a), KANG et al. (1958, 1959), KIM (1962, 1963), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976), BEPPU and TODA (1976), FUKATAMI (1975), ISHIHARA (1955a), KANEKO (1960, 1968), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KATŌ (1954), KATŌ and HORI (1952, 1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976a, 1976b), KIMURA et al. (1977), KUROKAWA (1967a), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), NOZAWA (1956), OKADA (1954c, 1954d, 1956, 1959, 1961b, 1962, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1968), TAKADA and OKADA (1960), TAKADA et al. (1953), TODA (1973a, 1973b, 1974, 1977), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1961, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATANABE and KAWANISHI (1976).

***Drosophila macromaculata* KANG and LEE, 1961**

General features of adults: KANG and LEE (1961).

Figures: KANG and LEE (1961).

Keys: BEPPU et al. (1977), KANG and LEE (1964), OKADA (1967).

Biology: KANG and LEE (1961), MINAMI et al. (1979).

Distribution:

S. KOREA: KANG and LEE (1961, 1964), LEE (1966b). — JAPAN: MINAMI et al. (1979).

***Drosophila maculnotata* OKADA, 1956**

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1956, 1961b).

Figures: OKADA (1956, 1968a).

Key: OKADA (1956).

Development: OKADA (1963a, 1968a).

Biology: OKADA (1956, 1968a).

Distribution:

JAPAN: KAWANISHI et al. (1975), OKADA (1956, 1968a).

***Drosophila magnipectinata* OKADA, 1956**

Other names used: *D. megaloplectinata*, *Drosophila* sp. from Sapporo.

General features of adults: BOCK and WHEELER (1972), KIM (1962), LEE (1959), OKADA (1954c, 1955b, 1956, 1961b), TAKADA and OKADA (1960).

Figures: BEPPU et al. (1977), KIM (1962), OKADA (1954c, 1955b).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1954c, 1956), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1965b), OKADA (1956), SUZUKI (1955), TAKADA (1957), WAKAHAMA (1957a, 1964).

Distribution:

S. KOREA: KANG et al. (1959), KIM (1962), LEE (1964c, 1966b). — JAPAN: KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968, 1969), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954c, 1956), SUZUKI (1955), TAKADA (1957, 1968), WAKAHAMA (1957a, 1964), WAKAHAMA et al. (1963).

***Drosophila makinoi* OKADA, 1956**

Other names used: *Drosophila* sp. like *pallida*, *D. cameraria* HALIDAY (misident.).

General features of adults: KIM (1962), KUROKAWA and HIHARA (1976), OKADA (1956, 1961b).

Figures: BEPPU et al. (1977), KIM (1962), OKADA (1956).

Keys: BEPPU et al. (1977), OKADA (1956), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), OKADA (1954d, 1956), TAKADA (1957, 1958), TODA (1977).

Distribution:

S. KOREA: KIM (1962), LEE (1966b). — JAPAN: BEPPU (1978), KANEKO and TOKUMITSU (1969), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MOMMA (1957), OKADA (1954b, 1956), TAKADA (1957, 1958), TODA (1977), WAKAHAMA (1964).

***Drosophila mediohispidia* OKADA, 1967**

General features of adults: OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Biology: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

***Drosophila melanogaster* MEIGEN, 1830**

Other names used: *D. fasciata* MEIGEN (syn.), *D. nigripectris* MACQUART (syn.), *D. approximata* ZETTERSTEDT (syn.),

D. ampelophilila LOEW (syn.), *D. uvarum* RONDANI (syn.), *D. pilosula* BECKER (syn.), *D. fenestrarum* FALLÉN (misident.).

General features of adults: ASTAUROFF (1929), AUSTEN (1905), BAIRATI (1967, 1968), BECKER (1903b, 1908b), BIGOT (1881), BOCK (1976), BOCK and WHEELER (1972), BOESIGER (1974), BOHART and GRESSITT (1951), BRNCIC (1957), BURLA (1951a, 1954a), COCKERELL (1923), CURRAN (1932), DAVID and BOQUET (1972), DAVID et al. (1974), DELCOURT (1909), DUDA (1924c, 1934, 1935), FREIRE-MAIA (1949), FREY (1921), GALLO (1973), GLEICHAUF (1936), GUGGENHEIM et al. (1975), HALIDAY (1833), HANNAH-ALAVA (1958), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), LIN et al. (1973), LINTNER (1882), LOEW (1862), MACQUART (1843), MAINX (1949), MALOGOLOWKIN (1948), MEIGEN (1830), DE MEIJERE (1911a), NATER (1953), NEUHAUS (1886), OKADA (1953, 1954a, 1954c, 1954d, 1956, 1958, 1959), PARSHAD and DUGGAL (1966), PARSHAD et al. (1964), PATTERSON (1943), PENG (1937), PERTTUNEN (1955), RAY-CHAUDHURI and MUKHERJEE (1941), RILEY (1919), RONDANI (1875, 1876), SALLES (1948), SÉGUY (1934a, 1934b), SOKOLOV (1948), STURTEVANT (1916, 1919a, 1921, 1929), TAKADA (1952, 1966b), TSACAS (1975), TSACAS and BOQUET (1976), TSACAS et al. (1971), VAIDYA and GODBOLE (1971), VILLENEUVE (1911), WAHLGREN (1927), WHEELER (1960b), ZETTERSTEDT (1847).

Figures: BAIRATI (1967, 1968), BANKS (1912), BEPPU et al. (1977), BOCK and WHEELER (1972), BOESIGER (1974), BURLA (1951a), COVA GARCÍA and SUÁREZ (1962), DUDA (1924a, 1924c, 1935), FREY (1921), GLEICHAUF (1936), GUGGENHEIM et al. (1975), GURNEY (1912), HANNAH-ALAVA (1958), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KEILIN (1915), KIKKAWA and PENG (1938), KIM (1962), LACHAISE (1976), LAŠTOVKA and MÁČA (1977), LINTNER (1882), MAINX (1949), MARTELLI (1910), MAYER (1935), MONCLÚS (1964), MORGE (1976a, 1976c), OKADA (1954c, 1956, 1968a), PAPP (1973), PARSHAD et al. (1964), PATTERSON (1943), PATTERSON and STONE (1952), PENG (1937), RILEY (1919), ROCHA PITÉ (1975a), RONDANI (1875), SALLES (1948), SÉGUY (1934b), SHORROCKS (1972), SILVESTRI (1917), SMART (1937), STURTEVANT (1921), THROCKMORTON (1962), TSACAS et al. (1971), VAIDYA and GODBOLE (1971), ZIMIN (1948).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1976), BOHART and GRESSITT (1951), BRNCIC (1957), BRYAN (1938), BURLA (1951a), DUDA (1924a, 1924c, 1925, 1926, 1927, 1935, 1940), FONSECA (1965), FRYDENBERG (1956a), GREGOR (1961), GUPTA and RAY-CHAUDHURI (1970), HACKMAN (1954), HARDY (1965), HARRISON (1952, 1954, 1959), KIKKAWA and PENG (1938), LAŠTOVKA and MÁČA (1977), LEE (1964c), MALLOCH (1923a, 1927, 1934b, 1934c), MALLOCH and MCATEE (1924), MONCLÚS (1964, 1976), OKADA (1956, 1966a), PAPP (1973), PATTERSON (1943), PATTERSON and MAINLAND (1944), PENG (1937), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a), SCHINER (1864), SÉGUY (1934a, 1934b), SHORROCKS (1972), ŠTAKELBERG (1970), STURTEVANT (1921, 1942), TAKADA (1971), WAHLGREN (1927), ZIMIN (1948).

Development: BANKS (1912), BASDEN (1954a), BURLA (1951), BUZZATTI-TRAVERSO et al. (1938), DUDA (1934), GURNEY (1912), HENNIG (1952), KEILIN (1915), KLUG et al. (1974), MAINX (1949), MARTELLI (1910), MAYER (1935), OKADA (1963a, 1968a), PARSHAD et al. (1964), PATTERSON (1943), PERIQUET (1976), RILEY (1919), SMART (1943), TSACAS (1975), WATABE (1979), ZIMIN (1948).

Biology: ATKINSON and SHORROCKS (1977), AUSTEN (1905), BASDEN (1952, 1954b, 1957a), BEPPU (1976), BICKLEY (1956), BIGOT (1881), BOCK (1977b), BOHART and GRESSITT (1951), BURLA (1949, 1951a, 1954a), BURUGA (1976), BURUGA and OLEMOBO (1971), CANZANELLI (1941), CARSON (1965, 1971), COLLINS (1956), COLYER and HAMMOND (1951), COVA GARCÍA and SUÁREZ (1962), DAVID (1971), DE COURSEY (1925), DUDA (1934), FREY (1936, 1954), FRYDENBERG (1956a), GOLDSCHMIDT (1956b), GRISWOLD (1956), GURNEY (1912), GUYER et al. (1956), HADORN et al. (1952), HARRISON et al. (1954), HEED (1956), HENNIG (1950, 1953), HERTING (1955), HOENIGSBERG and LIN (1977), HOWARD (1900), HUNTER (1966), HUNTER et al. (1973), JÜNGEN (1968a), KANEKO (1960), KANEKO et al. (1966), KAWANISHI and WATANABE (1977), KEKIC

and MARINKOVIĆ (1979), KIKKAWA and PENG (1938), KIMURA and TODA (1976), KIMURA et al. (1977), KÖNIG (1965), KÜHLHORN (1964, 1968, 1978, 1979), LACHAISE (1971, 1975, 1976), LEE (1962), LEVER and SOBELS (1951), LINTNER (1882), MÁCA (1975), MCCOY (1962), MCKENZIE and PARSONS (1974), MAINX (1949), MALLOCH (1933), MALLOCH and MCATEE (1924), MARTELLI (1910), MARTINEZ et al. (1965), MASON (1956), MATHER (1956), MAYER (1935), DE MEIJERE (1946), MELICHAR (1901), MICHELbacher and MIDDLEKAUFF (1954), MINAMI et al. (1979), MOMMA (1965b), NASWATY (1959), NELSON (1938), NOZAWA (1956), OKADA (1956, 1962), OLDROYD (1965), ORTIZ (1968), PAPP (1975), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), PARSHAD et al. (1964), PARSONS (1978), PATTERSON and STONE (1952), PAVAN et al. (1950), PERIQUET (1976), PICARD (1919), PIPKIN (1952, 1965), PIPKIN et al. (1966), RÉAL and RÉAL (1949), RICHARDS and HERFORD (1930), RILEY (1919), ROCHA PITÉ (1972, 1975a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), RONDANI (1875), SABATH (1974), SAITO et al. (1962), SAKIMURA and LINFORD (1940), SCHATZMANN (1977), SCHULZE (1912), SÉGUY (1934a, 1934b, 1950, 1951), SERGENT and ROUGEIEFF (1924, 1926a, 1926b), SHORROCKS (1974, 1975, 1977), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SOBELS et al. (1954), SPENCER (1950), STALKER (1945), STORÁ (1957), STURTEVANT (1919b, 1921), TAKADA (1954, 1957), TAKADA and TOYOFUKU (1960), TAMINI (1938), TIMOFÉEFF-RESSOVSKY and TIMOFÉEFF-RESSOVSKY (1941a, 1941b, 1941c), TODA (1973a, 1974, 1976, 1977), UNWIN (1907), WAKAHAMA (1957a, 1961, 1962b, 1964), WATABE (1979), WATANABE and KAWANISHI (1976), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: ASHBURNER and LEMEUNIER (1976), KUNZE-MÜHL et al. (1958), MEIGEN (1930), MELICHAR (1901), STROBL (1880, 1894), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), ASHBURNER and LEMEUNIER (1976), BRANČIK (1910), ČIZĚK (1910), DOSKOČIL (1962), DOSKOČIL and HURKA (1962), LAŠTOVKA and MÁCA (1977), MÁCA (1972b, 1975), MARTINEK (1973, 1974b), SKUHRAVÝ et al. (1959), STROBL (1901), VIMMER (1913), ZUSKA and LAŠTOVKA (1969). — DENMARK: FRYDENBERG (1956a). — FINLAND: ASHBURNER and LEMEUNIER (1976), FREY (1917, 1918, 1921), HACKMAN (1954, 1963, 1971), LUMME et al. (1978), STORÁ (1957). — FRANCE: ASHBURNER and LEMEUNIER (1976), BIGOT (1881), DAVID (1979), DAVID and BOCCUET (1972), HADORN et al. (1952), KUNTZE (1913), PERIQUET (1976), PLUS et al. (1975), ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b), STURTEVANT (1921), TIMOFÉEFF-RESSOVSKY (1940), WALKER (1849). — GERMAN DEMOCRATIC REPUBLIC: BUZZATI-TRAVERSO et al. (1938), HENNIG (1950), KRAMER (1917), NEUHAUS (1886), RADDATZ (1873), TIMOFÉEFF-RESSOVSKY and TIMOFÉEFF-RESSOVSKY (1941a, 1941b, 1941c). — GERMAN FEDERAL REPUBLIC: BAUMANN (1977), HERTING (1955), KÖNIG (1965), KRÖBER (1910, 1935), KÜHLHORN (1964, 1968, 1978, 1979), MEIGEN (1830), NASWATY (1959). — GREAT BRITAIN: ASHBURNER and LEMEUNIER (1976), ATKINSON and SHORROCKS (1977), AUDCUTT (1950), AUSTEN (1905), BASDEN (1952, 1954b, 1957a), BEARDMORE (1973), FONSECA (1965), GORDON (1936), HUNTER et al. (1973), HALIDAY (1833), RICHARDS and HERFORD (1930), SHORROCKS (1969, 1972, 1974, 1975, 1977), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SMITH (1959, 1960), TANTAWY and EL-HELW (1970), TIMOFÉEFF-RESSOVSKY (1940), WALKER (1849). — GREECE: ASHBURNER and LEMEUNIER (1976), BEARDMORE (1973), PENTZOS-DAPONTE (1964), TRIANTAPHYLIDIS (1973). — HUNGARY: ARADI (1959), ASHBURNER and LEMEUNIER (1976), PAPP (1973, 1975), SOÓS (1943), THALHAMMER (1899). — IRELAND: BASDEN (1952). — ITALY: ASHBURNER and LEMEUNIER (1976), BASDEN (1961), BEZZI (1891, 1892a, 1892b, 1895), BEZZI and DE STEFANI-PEREZ (1897), KARLIK and SPERLICH (1962), KUNZE-MÜHL and SPERLICH (1961), STURTEVANT (1921), ZANGHERI (1950, 1969). — NETHERLANDS: BEARDMORE (1973), EISSES et al. (1979), LEVER and SOBELS (1951), DE MEIJERE (1907, 1928, 1935, 1946), SOBELS et al. (1954), STURTEVANT (1921). — POLAND: BOBEK (1890), KARL (1936). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978). — ROMANIA: ARADI (1959), THALHAMMER (1899). — SPAIN: ASHBURNER and LEMEUNIER (1976), FRAUENFELD (1867), HACKMAN (1969a), HADORN et al. (1952), MONCLÚS (1964), ORTIZ (1968), STROBL (1906), STURTEVANT (1921), TIMOFÉEFF-RESSOVSKY (1940). — SWEDEN: WAHLGREN (1927), ZETTERSTEDT (1847). — SWITZERLAND: BACHLI (1972b, 1972c, 1973a, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1949, 1951a), NATER (1953), SCHATZMANN (1977). — TURKEY: ASHBURNER and LEMEUNIER (1976), BEARDMORE (1973), LOEW (1864). — USSR: ASHBURNER and LEMEUNIER (1976), BUZZATI-TRAVERSO et al. (1938), DUBININ et al. (1934, 1937a, 1937b), FROLova (1926), GROSSMAN and KORENEVA (1970), HACKMAN (1957), MASING (1927), NARODITSKAYA (1941), PETROVA (1968), PLUS et al. (1975), ŠTAKELBERG (1970), TIMOFÉEFF-RESSOVSKY (1932, 1933, 1940), ZUJIN (1941). — YUGOSLAVIA: BASDEN (1961), KEKIĆ and MARINKOVIĆ (1978, 1979), KEKIĆ et al. (1980), MARINKOVIĆ et al. (1980), STROBL (1898a, 1900a, 1904). — AZORES: FREY (1945), SÉGUY (1936). — MADEIRA: BEARDMORE (1973), FREY (1949). — CANARY IS.: BECKER (1908b), BIGOT (1891), FREY (1936, 1958), HACKMAN (1958), MONCLÚS (1976). — MOROCCO: ASHBURNER and LEMEUNIER (1976), PLUS et al. (1975), PREVOSTI (1974), SÉGUY (1934b). — ALGERIA: SÉGUY (1934b), SERGENT and ROUGEIEFF (1924, 1926a, 1926b). — TUNISIA: JÜNGEN (1968a), PAPP (1978). — LIBYA: BEZZI (1924b). — EGYPT: ASHBURNER and LEMEUNIER (1976), BEARDMORE (1973), BECKER (1903b), KHISHIN (1961), TANTAWY (1964), TANTAWY and EL-HELW (1970), TANTAWY and MALLAH (1961), TANTAWY et al. (1970). — ISRAEL: ASHBURNER and LEMEUNIER (1971), BASDEN (1966), EISSES et al. (1979), GOLDSCHMIDT (1951, 1956b), GOLDSCHMIDT et al. (1955). — LEBANON: ASHBURNER and LEMEUNIER (1976), KHISHIN (1961), PIPKIN (1952), TANTAWY and MALLAH (1961). — IRAN: ASHBURNER and LEMEUNIER (1976). — AFGHANISTAN: HACKMAN (1969b). — CHINA: HSU (1949), KIKKAWA and PENG (1938), PENG (1937), TAN et al. (1949). — MONGOLIA: HACKMAN (1968b), OKADA (1973c). — N. KOREA: KIKKAWA and PENG (1938), KANG et al. (1958, 1959, 1964a, 1964b), KIKKAWA and PENG (1938), KIM (1962, 1963), LEE (1962, 1964c, 1966b), PAIK (1958, 1960), TAKADA and LEE (1958), YANG and YOON (1962). — JAPAN: ASHBURNER and LEMEUNIER (1976), BEPPU (1976), KANEKO (1960), KANEKO et al. (1966), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MINAMORI and AZUMA (1962), MOMMA (1957, 1965a), NOZAWA (1956), OKADA (1954c, 1954d, 1956, 1959, 1962, 1966b, 1968a), PLUS et al. (1975), SAITO et al. (1962), TAKADA (1952, 1954, 1957, 1968), TAKADA and TOYOFUKU (1960), TAKADA et al. (1953), TAKAHASHI and KANEKO (1969), TANTAWY and EL HELW (1970), TODA (1973a, 1974, 1977), TOYOFUKU (1957), WAKAHAMA (1956b, 1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WATABE (1979), WATANABE and KAWANISHI (1976).

Recorded as virtually cosmopolitan species.

Comment:

There is an immense literature about this species and our collection of references is far from being complete. Some records may refer to other *Drosophila* species, especially to *D. simulans* STURTEVANT.

Drosophila mercatorum PATTERSON and WHEELER, 1942

Other names used: *D. carinata* GRIMSHAW (syn.), *D. pararepleta* DOBZHANSKY and PAVAN (syn.), *D. pattersoni*, *D. mulleri*.

General features of adults: DE BARROS (1950), BREUER and ROCHA (1971), BRNCIC (1957), DOBZHANSKY and PAVAN (1943), GRIMSHAW (1901), HARDY (1965), HSU (1949), KUROKAWA and HIHARA (1976), NATER (1953), PATTERSON (1943), PATTERSON and WHEELER (1942), WASSERMAN (1962a).

Figures: BREUER and ROCHA (1971), COVA GARCÍA and SUÁREZ (1962), DOBZHANSKY and PAVAN (1943), GRIMSHAW (1901), HARDY (1965), HSU (1949), NATER (1953), PATTERSON (1943), THROCKMORTON (1962), WASSERMAN (1962a).

Keys: BRNCIC (1957), DOBZHANSKY and PAVAN (1943), GRIMSHAW (1901), HARDY (1965), MONCLÚS (1964, 1976), PATTERSON (1943), PATTERSON and MAINLAND (1944), PAVAN and DA CUNHA (1947), ROCHA PITÉ (1975a), STURTEVANT (1942).

Development: HENNIG (1952), PATTERSON (1943).

Biology: CARSON (1965), COVA GARCÍA and SUÁREZ (1962), HEED (1968).

Distribution:

PORTUGAL: ROCHA PITÉ (1972, 1975a). — SPAIN: MONCLÚS (1964), ORTIZ (1968). — MADEIRA: unpublished. — CANARY IS.: MONCLÚS (1976). — MOROCCO: PREVOSTI (1974).

Recorded mainly in America and Hawaii.

Drosophila metakuntzei OKADA, 1973

General features of adults: OKADA (1973c).

Figures: OKADA (1973c).

Distribution:

MONGOLIA: OKADA (1973c).

Drosophila miki DUDA, 1924

General features of adults: DUDA (1924c, 1935), LAŠTOVKA and MÁČA (1978).

Figures: DUDA (1924a, 1935), LAŠTOVKA and MÁČA (1978).

Keys: DUDA (1924a, 1924c, 1935), LAŠTOVKA and MÁČA (1978), PAPP (1973).

Distribution:

AUSTRIA: DUDA (1924c, 1935), LAŠTOVKA and MÁČA (1978).

Drosophila mommai TAKADA and OKADA, 1960

Other name used: *Drosophila* sp. like *magnipunctinata*.

General features of adults: LAŠTOVKA and MÁČA (1978), OKADA (1956, 1966a, 1974b), TAKADA and OKADA (1960).

Figures: BEPPU et al. (1977), OKADA (1956, 1968a), TAKADA and OKADA (1960).

Keys: BEPPU et al. (1977), OKADA (1956, 1968a), TAKADA (1971).

Development: OKADA (1968a).

Biology: KIMURA (1976a), KIMURA et al. (1977).

Distribution:

JAPAN: KANEKO et al. (1969), KIMURA (1976a), KIMURA et al. (1977), LAŠTOVKA and MÁČA (1978), MOMMA (1965a), OKADA (1956, 1968a), TAKADA (1968), TAKADA and OKADA (1960), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1964).

Drosophila montana PATTERSON and WHEELER, 1942

Other names used: *D. montana* STONE, GRIFFEN and PATTERSON (? syn.), *D. ovivororum* LAKOVAARA and HACKMAN (syn.).

General features of adults: HSU (1949), LAKOVAARA and HACKMAN (1973), NATER (1953), PATTERSON (1943), PATTERSON and WHEELER (1942), WATABE and HIGUCHI (1979).

Figures: HSU (1949), NATER (1953), PATTERSON (1943), THROCKMORTON (1962), WATABE and HIGUCHI (1979).

Keys: PATTERSON (1943), STURTEVANT (1942).

Development: PATTERSON (1943).

Biology: CARSON (1971), CARSON et al. (1956), LUMME et al. (1978, 1979), SPENCER (1950), SPIETH (1979), WHEELER and THROCKMORTON (1960).

Distribution:

FINLAND: LAKOVAARA and HACKMAN (1973), LUMME et al. (1978, 1979). — NORWAY: DIS 51: 122. — SWEDEN: LAKOVAARA and HACKMAN (1973). — JAPAN: WATABE and HIGUCHI (1979).

Recorded mainly in North America.

Drosophila moriwakii OKADA and KUROKAWA, 1957

Other name used: *Drosophila* sp. of *robusta* group II.

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1953b, 1956, 1959, 1961b), OKADA and KUROKAWA (1957).

Figures: BEPPU et al. (1977), OKADA (1955b, 1956, 1968a), OKADA and KUROKAWA (1957).

Keys: BEPPU et al. (1977), OKADA (1956), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976, 1979, 1980), BEPPU and TODA (1976), KANEKO and TOKUMITSU (1963, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), TAKADA (1957, 1958), TODA (1973a, 1973b, 1973c, 1977), WAKAHAMA (1957a, 1964).

Distribution:

JAPAN: BEPPU (1976, 1978, 1979, 1980), BEPPU and TODA (1976), ISHIHARA (1955b), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1968, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1954, 1957, 1965a), OKADA (1959, 1968a), OKADA and KUROKAWA (1957), TAKADA (1957, 1958, 1960, 1968), TAKAHASHI and KANEKO (1969), TODA (1973a, 1973b, 1973c, 1977), TOKUMITSU et al. (1967), WAKAHAMA (1957a, 1964, 1966), WAKAHAMA et al. (1963), WATABE and BEPPU (1977).

Drosophila multispina OKADA, 1956

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1956, 1961b), PARSHAD and DUGGAL (1966).

Figures: BEPPU et al. (1977), OKADA (1956, 1968a).

Keys: BEPPU et al. (1977), OKADA (1956), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976), KANEKO and TOKUMITSU (1969), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), OKADA (1956, 1968a), TODA (1973a, 1977), WAKAHAMA (1964), WATABE (1979).

Distribution:

JAPAN: BEPPU (1976, 1978), KANEKO (1960), KANEKO and TOKUMITSU (1969), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965a), OKADA (1956, 1968a), TAKADA (1968), TODA (1973a, 1977), WAKAHAMA (1964), WATABE (1979).

Drosophila neokadai KANEKO and TAKADA, 1966

General features of adults: KANEKO and TAKADA (1966).

Figures: BEPPU et al. (1977), KANEKO and TAKADA (1966).

Keys: BEPPU et al. (1977), TAKADA (1971).

Biology: BEPPU (1976, 1978, 1979, 1980), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), KIMURA et al. (1977), TODA (1973a).

Distribution:

JAPAN: BEPPU (1976, 1978, 1979, 1980), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), TODA (1973a), WATABE and BEPPU (1977).

Drosophila nigricolor STROBL, 1898

General features of adults: BASDEN (1961), DUDA (1924c, 1935, 1940), LAŠTOVKA and MÁČA (1978), STROBL (1898b).

Figures: DUDA (1924a, 1924c, 1935), LAŠTOVKA and MÁČA (1978), PAPP (1973).

Keys: DUDA (1924a, 1924c, 1935), LAŠTOVKA and MÁČA (1978), PAPP (1973), ŠTAKELBERG (1970).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1924c, 1935), STROBL (1898b, 1901, 1910), THALER (1977). — FINLAND: HACKMAN (1957), LAŠTOVKA and MÁČA (1978). — GERMAN FEDERAL REPUBLIC: DUDA (1935), LAŠTOVKA and MÁČA (1978). — USSR: HACKMAN (1957), ŠTAKELBERG (1970).

Drosophila nigripennis KANG, LEE and BAHNG, 1965

General features of adults: KANG et al. (1965b), OKADA (1968).

Figures: KANG et al. (1965b).

Key: OKADA (1967).

Biology: KANG et al. (1965b).

Distribution:

S. KOREA: KANG et al. (1965b), LEE (1966b), OKADA (1967).

Drosophila nigromaculata KIKKAWA and PENG, 1938

General features of adults: KIKKAWA and PENG (1938), KANEKO and SHIMA (1965), KIM (1962), KUROKAWA and HIRAHARA (1976), OKADA (1953b, 1954d, 1955a, 1956, 1959, 1961b).

Figures: BEPPU et al. (1977), KIKKAWA and PENG (1938), KIM (1962), OKADA (1955a, 1956, 1968a).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: KIKKAWA and PENG (1938), OKADA (1956, 1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), HACHIYA (1954), ISHIHARA (1955a, 1955b), KANEKO (1960, 1968), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966), KANG et al. (1960), KIKKAWA and PENG (1938), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI et al. (1979), MOMMA (1965b), NOZAWA (1956), OKADA (1954d, 1956), SAITO et al. (1962), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958), TAKADA and LEE (1958), TAKADA and TOYOFUKU (1960), TODA (1973a, 1973b, 1973c, 1974), WAKAHAMA (1956b, 1957a, 1957b, 1961, 1962b, 1964), WATABE (1979), WATABE and BEPPU (1977).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958, 1959), CHUNG and RHO (1960), KANG et al. (1958, 1959, 1960), KIM (1962), LEE (1962, 1964c, 1966a), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), HACHIYA (1954), ISHIHARA (1955a, 1955b), KANEKO (1960, 1968), KANEKO and SHIMA (1962, 1965), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1954, 1957, 1965a, 1965b), NOZAWA (1956), OKADA (1954d, 1955a, 1956, 1959, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960, 1965), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TAKAHASHI and KANEKO (1969), TODA (1973a, 1973b, 1973c, 1974, 1977), TOKUMITSU et al. (1967), TOYOFUKU (1957, 1958a, 1958b, 1960, 1962), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1956b, 1957a, 1957b, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977).

Drosophila nigrosparsa STROBL, 1898

General features of adults: BASDEN (1961), BURLA (1951a), DUDA (1924c, 1934), NATER (1953), OLDENBERG (1914), STROBL (1898b).

Figures: BURLA (1951a), DUDA (1924a, 1924c, 1934), NATER (1953), PAPP (1973).

Keys: BURLA (1951a), DUDA (1924a, 1924c, 1927, 1934), ENDERLEIN (1936), LAŠTOVKA and MÁČA (1977), PAPP (1973).

Development: BURLA (1951a).

Biology: BÄCHLI (1979).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1934), STROBL (1898b, 1910). — CZECHOSLOVAKIA: LAŠTOVKA and MÁČA (1977), MÁČA (1972b, 1975), PAPP (1973). — FRANCE: ROCHA PITE and TSACAS (1979). — GERMAN FEDERAL REPUBLIC: unpublished. — ITALY: DUDA (1934), OLDENBERG (1914). — POLAND: DUDA (1924c, 1934), OLDENBERG (1914). — SPAIN: unpublished. — SWITZERLAND: BÄCHLI (1973c, 1975b, 1977, 1979), BURLA (1951a, 1951b), NATER (1953).

***Drosophila nipponica* KIKKAWA and PENG, 1938**

General features of adults: BOCK and WHEELER (1972), FREIRE-MAIA (1949), KIKKAWA and PENG (1938), LEE (1959), MATHER (1955), OKADA (1953b, 1954c, 1955b, 1956, 1959, 1961b).

Figures: KIKKAWA and PENG (1938), OKADA (1954c, 1955b, 1956).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1965b), OKADA (1954d, 1956), SUZUKI (1955), TAKADA (1958), TAKADA and TOYOFUKU (1960), WAKAHAMA (1956b, 1957a, 1961, 1964).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), KANG et al. (1959), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KAWANISHI (1978), KAWANISHI et al. (1975), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), KIKKAWA and PENG (1938), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954c, 1954d, 1956, 1959, 1966b), SHIMA (1960), SUZUKI (1955), TAKADA (1958, 1968), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TODA and KIMURA (1978), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1956b, 1957a, 1961, 1962a, 1964, 1966), WAKAHAMA et al. (1963).

Recorded also on the Ryukyu Islands.

***Drosophila nokogiri* OKADA, 1956**

General features of adults: BASDEN (1957b), KANG et al. (1965b), KIM (1962), OKADA (1956, 1961b, 1967), OKADA and LEE (1961).

Figures: BEPPU et al. (1977), KIM (1962), OKADA (1956, 1967).

Keys: BEPPU et al. (1977), KANG and LEE (1964), LEE (1964c), OKADA (1956, 1967), TAKADA (1971).

Biology: BEPPU (1976), KANEKO and TOKUMITSU (1969), MINAMI et al. (1979), MOMMA (1965b), OKADA (1956), WAKAHAMA (1957a, 1964).

Distribution:

S. KOREA: CHUNG (1958), KANG and LEE (1964), KANG et al. (1958, 1959), KIM (1962), LEE (1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976), KANEKO and TOKUMITSU (1969), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1956, 1967, 1968a), TAKADA (1968), WAKAHAMA (1957a, 1964).

***Drosophila nudinokogiri* OKADA, 1967**

General features of adults: OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

Recorded also on the Ryukyu Islands.

***Drosophila obscura* FALLÉN, 1823**

Other names used: *D. obscurioides* POMINI (syn.), *D. obscura* var. *meigeni* DUDA, *D. obscura* 2, *D. bifasciata* POMINI (misident.).

General features of adults: BASDEN and HARDEN (1956), BUZZATI-TRAVERSO and SCOSSIROLI (1955), BURLA (1951a), BURLA and KÁLIN (1957), CAIN et al. (1952), CZERNY and STROBL (1909), DUDA (1924c, 1925, 1935), FALLÉN (1823), FREIRE-MAIA (1949), FRYDENBERG (1955, 1956a), HSU (1949), KUROKAWA and HIHARA (1976), LOEW (1873), MACQUART (1835), MEIGEN (1830), MONCLÚS (1964), MORIWAKI et al. (1952), NATER (1953), NEUHAUS (1886), OKADA (1953b, 1958), POMINI (1940), SÉGUY (1934b), SMART (1945), STROBL (1893a, 1910), STURTEVANT (1921), WAHLGREN (1927), ZETTERSTEDT (1838, 1847).

Figures: BASDEN and HARDEN (1956), BURLA (1951a), CAIN et al. (1952), DUDA (1924a, 1924c, 1935), DYSON-HUDSON (1954), HSU (1949), MAYER (1935), DE MEIJERE (1916a), MORGE (1976a), NATER (1953), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SÉGUY (1934b), SHORROCKS (1972), ŠTAKELBERG (1970), STURTEVANT (1921).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1935), DYSON-HUDSON (1954), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), MALLOCH and MCATEE (1924), MONCLÚS (1964), OKADA (1956), PAPP (1973), POMINI (1940), RICHARDS and HERFORD (1930), ROCHA PITÉ (1975a), SCHNER (1864), SÉGUY (1934a, 1934b), SHORROCKS (1972), ŠTAKELBERG (1970), STURTEVANT (1921), WAHLGREN (1927).

Development: BURLA (1951a), DUDA (1934), HENNIG (1952), MAYER (1935), DE MEIJERE (1916a, 1947), STURTEVANT (1921).

Biology: BÁCHLI (1977, 1979), BASDEN (1952, 1953, 1954b), BASDEN and HARDEN (1956), BEGON (1975, 1976a, 1978), BEGON et al. (1975), BONNAMOUR (1926), BURLA (1949, 1951a, 1961), BURLA and GREUTER (1959a, 1959b, 1961), BURUGA (1976), BUZZATI-TRAVERSO and SCOSSIROLI (1955), CANZANELLI (1941), COE (1959), COLYER and HAMMOND (1951), DYSON-HUDSON (1956), FALCOZ (1924), FREY (1932), FRYDENBERG (1956a), GORDON (1942), GREUTER (1963), HACKMAN (1954), HADORN et al. (1952), HERTING (1955), JÜNGEN (1968a), KEKIĆ and MARINKOVIĆ (1979), KOCH (1976), KÖNIG (1965), KRAMER (1917), KÜHLHORN (1978), LEVER and SOBELS (1951), LUMME et al. (1978, 1979), MAYER (1935), DE MEIJERE (1916a), PERRIS (1876), RADDAZ (1873), ROBERTSON (1965), ROCHA PITÉ (1978), ROCHA PITÉ and DA COSTA NICOLAU (1978), SCHATZMANN (1977), SÉGUY (1934a, 1934b, 1950), SHORROCKS (1974, 1975, 1977), SHORROCKS and BEGON (1975), SHORROCKS and WOOD (1973), SOBELS et al. (1954), STORÁ (1957), STURTEVANT (1921), TESCHNER (1961, 1962).

Distribution:

AUSTRIA: BASDEN (1961), MAINX et al. (1953), STROBL (1894, 1901), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), CZIZEK (1906), STROBL (1901), VIMMER (1913). — DENMARK: FRYDENBERG (1956a), ZETTERSTEDT (1847). — FINLAND: BASDEN (1956), FREY (1932), HACKMAN (1954, 1963, 1971), LAKOVAARA and SÄURA (1971a), LAKOVAARA et al. (1972c), LUMME et al. (1978, 1979), STORÁ (1956, 1957), ZETTERSTEDT (1860). — FRANCE: BONNAMOUR (1926), FALCOZ (1924), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: KRAMER (1917), NEUHAUS (1886), POMINI (1940), RADDAZ (1873), SCHUMANN (1963). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), DUDA (1935), HERTING (1955), KÖNIG (1965), KRÖBER (1910, 1935), KÜHLHORN (1978), TESCHNER (1961, 1962). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1953, 1954a, 1954b), BASDEN and GOODEY (1955), BEATTY and

SIDHU (1969), BEGON (1975, 1976a, 1978), BEGON et al. (1975), CAIN et al. (1952), DYSON-HUDSON (1954, 1956), FONSECA (1965), GORDON (1942), RICHARDS and HERFORD (1930), ROBERTSON (1965), SHORROCKS (1969, 1970, 1972, 1974, 1975, 1977), SMITH (1959, 1960). — GREECE: ROCHA PITÉ and TSACAS (1980). — HUNGARY: ARADI (1959), PAPP (1973). — IRELAND: BASDEN (1952). — ITALY: BEZZI (1891, 1892a, 1892b), BEZZI and DE STEFANI-PEREZ (1897), CANZANELLI (1941), MAINX et al. (1953), STURTEVANT (1921). — NETHERLANDS: EISSES et al. (1979), LEVER and SOBELS (1951), DE MEIJERE (1916a, 1928), SOBELS et al. (1954), STURTEVANT (1921). — NORWAY: BASDEN (1956), BASDEN and HARNDEN (1956), LAKOVAARA and SAURA (1971a), LAKOVAARA et al. (1972c). — ? POLAND: KARL (1936). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978). — ROMANIA: ARADI (1959), SACK (1904), STROBL (1897), THALHAMMER (1899, 1901). — SPAIN: CZERNY and STROBL (1909), HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: BUZZATI-TRAVERSO and SCOSSIROLI (1955), FALLÉN (1823), LAKOVAARA and SAURA (1971a), RINGDAHL (1941, 1951), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1860). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1949, 1951a, 1961), BURLA and GREUTER (1959a, 1959b), BURLA and KÄLIN (1957), GREUTER (1963), HSU (1949), KOCH (1967), LAKOVAARA et al. (1972c), NATER (1953), SCHATZMANN (1977), SCHMID (1968), STUMM-ZOLLINGER (1953). — TURKEY: unpublished. — USSR: DUBININ et al. (1937b), FROLOWA (1926), FROLOWA and ASTAUROW (1929), GERSHENSON (1923, 1934), HACKMAN (1957), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: COE (1959), KEKIĆ and MARINKOVIĆ (1979), STROBL (1893a, 1894, 1898a, 1900a). — ? CANARY IS.: SÉGUY (1934b). — IRAN: unpublished.

Comment:

This species may have been confused with other species of the *obscura* species group.

Drosophila okadai TAKADA, 1959

General features of adults: KANEKO and TAKADA (1966), TAKADA (1959).

Figures: BEPPU et al. (1977), TAKADA (1959).

Key: BEPPU et al. (1977).

Biology: BEPPU (1976, 1978, 1979, 1980), KANEKO and TOKUMITSU (1963, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), TODA (1973a, 1973b).

Distribution:

JAPAN: BEPPU (1976, 1978, 1979, 1980), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1968, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), MOMMA (1965a), TAKADA (1958, 1959, 1968), TAKADA and OKADA (1960), TAKAHASHI and KANEKO (1969), TODA (1973a, 1973b), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1964), WAKAHAMA et al. (1963), WATABE and BEPPU (1977).

Drosophila okadomei OKADA, 1967

General features of adults: OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

Drosophila oldenbergi DUDA, 1924

General features of adults: BÄCHLI (1972a), DUDA (1924c, 1935), HACKMAN (1965a).

Figures: HACKMAN (1957, 1965a), ŠTAKELBERG (1970).

Keys: DUDA (1924a, 1924c, 1925, 1927), ENDERLEIN (1936), OKADA (1967), PAPP (1973), ŠTAKELBERG (1970).

Distribution:

AUSTRIA: BÄCHLI (1972a). — ROMANIA: BÄCHLI (1972a), DUDA (1924c, 1935), PAPP (1973), ROHLFIEN and EWALD (1972), Soós (1945). — SWITZERLAND: BÄCHLI (1972a, 1972b, 1975b). — USSR: HACKMAN (1957, 1965a), ŠTAKELBERG (1970).

Drosophila omogoensis OKADA, 1956

General features of adults: OKADA (1956).

Figures: OKADA (1956).

Key: OKADA (1956, 1967).

Biology: OKADA (1956).

Distribution:

JAPAN: OKADA (1956).

Drosophila oshimai CHOO and NAKAMURA, 1973

Other name used: *Drosophila* sp.

General features of adults: CHOO and NAKAMURA (1973).

Figures: CHOO and NAKAMURA (1973).

Biology: KAWANISHI (1978), OKADA (1975).

Distribution:

JAPAN: CHOO and NAKAMURA (1973), KAWANISHI (1978), KAWANISHI and WATANABE (1977).

Drosophila pappi OKADA, 1974

General features of adults: LAŠTOVKA and MÁČA (1978), OKADA (1974b).

Figures: OKADA (1974b).

Distribution:

N. KOREA: OKADA (1974b).

Drosophila parakuntzei OKADA, 1973

General features of adults: OKADA (1973c).

Figures: OKADA (1973c).

Distribution:

MONGOLIA: OKADA (1973c).

Drosophila pattersoni PIPKIN, 1956

General features of adults: PIPKIN (1956, 1961).

Figures: PIPKIN (1956), THROCKMORTON (1962).

Biology: PIPKIN (1961).

Distribution:

LEBANON: PIPKIN (1956), THROCKMORTON (1962).

Drosophila pengi OKADA and KUROKAWA, 1957

Other name used: *D. melanissima* STURTEVANT (misident.).

General features of adults: KIKKAWA and PENG (1938), KUROKAWA and HIHARA (1976), OKADA (1953a, 1955a, 1956, 1961b), OKADA and KUROKAWA (1957).

Figures: BEPPU et al. (1977), OKADA (1955a, 1956, 1968a), OKADA and KUROKAWA (1957).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: KIKKAWA and PENG (1957), OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), KANEKO and TOKUMITSU (1969), KIKKAWA and PENG (1938), KIMURA and TODA (1976), MINAMI et al. (1979), OKADA (1956, 1962, 1968a), OKADA and KUROKAWA (1957), TODA (1973a, 1974, 1977), WAKAHAMA (1957a, 1962b, 1964).

Distribution:

S. KOREA: LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), KANEKO (1968), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968, 1969), KIKKAWA and PENG (1938), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1957, 1965a), OKADA (1955a, 1956, 1959, 1962, 1968a), OKADA and KUROKAWA (1957), TODA (1973a, 1974, 1977), WAKAHAMA (1957a, 1962a, 1962b, 1962c, 1964, 1966), WATABE and BEPPU (1977).

Drosophila phalerata MEIGEN, 1830

General features of adults: BECKER (1902), BURLA (1951a), BURLA and GLOOR (1952), DUDA (1924c, 1926a, 1935), DUFOUR (1839), HENNIG (1958), HERING (1940), HSU (1949), MACQUART (1835), MEIGEN (1830), NATER (1953), NEUHAUS (1886), OLDENBERG (1914), SÉGUY (1934b), STROBL (1893, 1906), VILLENEUVE (1911, 1923), WAHLGREN (1927).

Figures: BURLA (1951a), DUDA (1924a, 1924c, 1935), HSU (1949), MEIGEN (1830), DE MEIJERE (1947), MONCLÚS (1964), MORGE (1976), NATER (1953), PAPP (1973), ROCHA PITÉ (1975), SÉGUY (1934b), SHORROCKS (1972), ŠTAKELBERG (1970), THROCKMORTON (1962).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), LAŠTOVKA and MÁCA (1977), MONCLÚS (1964), PAPP (1973), ROCHA PITÉ (1975a), SCHINER (1864), SÉGUY (1934a, 1934b), SHORROCKS (1972), ŠTAKELBERG (1970), WAHLGREN (1927).

Development: BURLA (1951a), HENNIG (1952), DE MEIJERE (1947), SCHATZMANN (1977).

Biology: AZARJAN (1968), BÄCHLI (1970, 1979), BASDEN (1952, 1953, 1954b, 1956), BEUTHIN (1887), BONNAMOUR (1926), BURLA (1949, 1951a, 1961), BURLA and BÄCHLI (1968), BUXTON (1960), CANZANELLI (1941), CHARLESWORTH and SHORROCKS (1980), COE (1959), CURTIS (1833), DELY-DRASKOVITS (1976), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), FALCOZ (1924), FRYDENBERG (1956a), HACKMAN (1954), HACKMAN and MEINANDER (1979), HADORN et al. (1952), HENNIG (1953), HERTING (1955), KALTENBACH (1874), KEKIĆ and MARINKOVIĆ (1979), KÖNIG (1965), KRAMER (1917), KRÖBER (1910, 1935), KÜHLHORN (1978), LEVER and SOBELS (1951), LUMME et al. (1978), MAYER (1935), NASWATY (1959), ORTIZ (1968), PAPP (1976, 1979), PIPKIN (1952), RADDATZ (1873), RIEL (1921), ROCHA PITÉ (1977a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), SCHMID (1968), SCHULZE (1912), SÉGUY (1934a, 1934b, 1950), SHORROCKS (1970, 1972, 1974, 1975, 1977), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SOBELS et al. (1954), STORA (1957), TIMOFEEFF-RESSOVSKY and TIMOFEEFF-RESSOVSKY (1941a).

Distribution:

AUSTRIA: BASDEN (1961), STROBL (1880, 1894, 1901, 1910), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), CZIŽEK (1910), DOSKOČIL (1962), LAŠTOVKA and MÁCA (1977), MARTINEK (1973, 1974b), STROBL (1901), VIMMER (1913). — DENMARK: FRYDENBERG (1956a). — FINLAND: HACKMAN (1954, 1971), HACKMAN and MEINANDER (1979), LUMME et al. (1978), STORA (1957). — FRANCE: BONNAMOUR (1926), FALCOZ (1924), HADORN et al. (1952), RIEL (1921), ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b). — GERMAN DEMOCRATIC REPUBLIC: NEUHAUS (1886), RADDATZ (1873), TIMOFEEFF-RESSOVSKY and TIMOFEEFF-RESSOVSKY (1941a). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), HERTING (1955), KÖNIG (1965), KRÖBER (1910, 1935), KÜHLHORN (1978), NASWATY (1959). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1953, 1954b), BUXTON (1960), CURTIS (1833), EDWARDS and COLLIN (1932), HALIDAY (1833), HENDERSON (1911), SHORROCKS (1969, 1970, 1974, 1975, 1977), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SMITH (1960), WALKER (1849), YERBURY (1913). — GREECE: ROCHA PITÉ and TSACAS (1980). — HUNGARY: ARADI (1959), BASDEN (1961), DELY-DRASKOVITS (1976), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973, 1976), THALHAMMER (1899). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: BEZZI (1892b), CANZANELLI (1941), CORTI (1897), NIGRO (1979), POKORNY (1887), ZANGHERI (1950, 1969). — NETHERLANDS: DE MEIJERE (1947), LEVER and SOBELS (1951), SOBELS et al. (1954). — NORWAY: BASDEN (1956). — POLAND: KARL (1936). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978). — ROMANIA: ARADI (1959), STROBL (1897), THALHAMMER (1899, 1901). — SPAIN: CHARLESWORTH and SHORROCKS (1980), HACKMAN (1969a), HADORN et al. (1952), MONCLÚS (1964), ORTIZ (1968). — SWEDEN: BASDEN (1956), RINGDAHL (1941, 1949), WAHLGREN (1927). — SWITZERLAND: BÄCHLI (1970, 1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1949, 1951a, 1961), BURLA and BÄCHLI (1968), HSU (1949), NATER (1953), SCHATZMANN (1977), SCHMID (1968). — TURKEY: unpublished. — USSR: AZARJAN (1968), BALKASCHINA and ROMASCHOFF (1935), BOBEK (1897), EVERSMANN (1834), FROLOWA (1926), GEYSPTS and SIMONENKO (1970), GIMMERthal (1845, 1847), HACKMAN (1954, 1957), PAPP (1979), ŠTAKELBERG (1970). — YUGOSLAVIA: ARADI (1959), COE (1959), KEKIĆ and MARINKOVIĆ (1979), STROBL (1898a, 1900a). — AZORES: FREY (1945), SÉGUY (1936). — MOROCCO: PREVOSTI (1974). — TUNISIA: unpublished. — LEBANON: CLAYTON and WARD (1954), JOHNSON et al. (1966), PIPKIN (1952), THROCKMORTON (1962). — IRAN: unpublished.

***Drosophila picta* ZETTERSTEDT, 1847**

Other names used: *D. macularis* VILLENEUVE (syn.), *D. pleurofasciata* DUDA (syn.), *D. histrio* MEIGEN (misident.).

General features of adults: DUDA (1924c, 1935), FRYDENBERG (1955), OKADA (1956), OKADA and KUROKAWA (1957), TSACAS (1969), VILLENEUVE (1921), ZETTERSTEDT (1847).

Figures: DUDA (1924a, 1935), FRYDENBERG (1955), TSACAS (1969).

Keys: DUDA (1924a, 1924c, 1935), FONSECA (1965), FRYDENBERG (1956a), PAPP (1973), ZETTERSTEDT (1847).

Development: DUDA (1934), HENNIG (1952), TSACAS (1969).

Biology: DUDA (1935), DYSON-HUDSON and VOCKEROTH (1955), FRYDENBERG (1955), LEVER and SOBELS (1951), PAPP (1976), SOBELS et al. (1954), TESCHNER (1961, 1962), TSACAS (1969).

Distribution:

AUSTRIA: DUDA (1924c, 1935), TSACAS (1969). — CZECHOSLOVAKIA: unpublished. — DENMARK: FRYDENBERG (1955, 1956a), TSACAS (1969), ZETTERSTEDT (1847). — FINLAND: ROCHA PITÉ and TSACAS (1980). — FRANCE: DUDA (1935), ROCHA PITÉ and TSACAS (1979), TSACAS (1969), VILLENEUVE (1921). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1924c), ROHLFIEN and EWALD (1972), TSACAS (1969). — GERMAN FEDERAL REPUBLIC: TESCHNER (1961, 1962). — GREAT BRITAIN: DYSON-HUDSON and VOCKEROTH (1955), FONSECA (1965), TSACAS (1969). — GREECE: TSACAS (1969). — HUNGARY: ARADI (1959), DUDA (1924c, 1935), PAPP (1973, 1976), SOÓS (1945), TSACAS (1969). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954), TSACAS (1969). — POLAND: DUDA (1935), TSACAS (1969). — SPAIN: unpublished. — SWEDEN: RINGDAHL (1949).

***Drosophila polychaeta* PATTERSON and WHEELER, 1942**

Other name used: *D. pattersoni*.

General features of adults: BOHART and GRESSITT (1951), DE CASTRO (1953), HARDY (1965), HSU (1949), LIN and TSENG (1971), NATER (1953), PATTERSON (1943), PATTERSON and WHEELER (1942), WHEELER and TAKADA (1964).

Figures: HARDY (1965), HSU (1949), MALOGOLOWKIN (1953), NATER (1953), PATTERSON (1943), THROCKMORTON (1962), WHEELER and TAKADA (1964).

Keys: BOHART and GRESSITT (1951), FONSECA (1965), HARDY (1965), LIN and TSENG (1971), PATTERSON (1943), STURTEVANT (1942), TAKADA (1971), WHEELER and TAKADA (1964).

Development: PATTERSON (1943).

Biology: BASDEN (1957a), BOHART and GRESSITT (1951), PATTERSON and WHEELER (1942), SOBELS et al. (1954).

Distribution:

GREAT BRITAIN: BASDEN (1957a), FONSECA (1965). — NETHERLANDS: SOBELS et al. (1954).

Recorded mainly in America and on some Pacific Islands.

***Drosophila pseudonokogiri* KANG, LEE and BAHNG, 1965**

General features of adults: KANG et al. (1965b, 1967), LIN and TING (1971), OKADA (1967, 1973a).

Figures: BEPPU et al. (1977), KANG et al. (1965b, 1967), OKADA (1967).

Keys: BEPPU et al. (1977), OKADA (1967), TAKADA (1971).

Biology: KANG et al. (1965b).

Distribution:

S. KOREA: KANG et al. (1965b, 1967), LEE (1966b). — JAPAN: OKADA (1967).

***Drosophila pseudosordidula* KANEKO, TOKUMITSU and TAKADA, 1964**

General features of adults: KANEKO and TAKADA (1966), KANEKO et al. (1964).

Figures: BEPPU et al. (1977), KANEKO et al. (1964).

Keys: BEPPU et al. (1977), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976, 1979, 1980), BEPPU and TODA (1976), KANEKO and TOKUMITSU (1963, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), TAKADA (1971), TODA (1973a, 1973b).

Distribution:

JAPAN: BEPPU (1976, 1978, 1979, 1980), BEPPU and TODA (1976), KANEKO (1968), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1969), KANEKO et al. (1964, 1968, 1969), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1977), MINAMI et al. (1979), TAKAHASHI and KANEKO (1969), TODA (1973a, 1973b), TOKUMITSU et al. (1967), WATABE and BEPPU (1977).

***Drosophila pulchrella* TAN, HSU and SHENG, 1949**

General features of adults: BOCK and WHEELER (1972), HSU (1949), KUROKAWA and HIHARA (1976), OKADA (1953b, 1954c, 1956, 1959, 1961b, 1966a), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), TAN et al. (1949).

Figures: BOCK and WHEELER (1972), HSU (1949), OKADA (1954c, 1956, 1968a).

Keys: GUPTA and RAY-CHAUDHURI (1970), OKADA (1956, 1966a).

Development: OKADA (1963a, 1968a).

Biology: KAWANISHI et al. (1975), NOZAWA (1956), OKADA (1956, 1962), PARSHAD and DUGGAL (1966), WAKAHAMA (1962b, 1964).

Distribution:

JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), NOZAWA (1956), OKADA (1954c, 1956, 1959, 1962, 1968a), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966).

Recorded also in South Asia.

***Drosophila pullata* TAN, HSU and SHENG, 1949**

General features of adults: HSU (1949), OKADA (1956), TAN et al. (1949).

Figures: HSU (1949).

Distribution:

CHINA: TAN et al. (1949).

***Drosophila puncticeps* OKADA, 1956**

General features of adults: OKADA (1956, 1968d), WAKAHAMA (1966).

Figures: OKADA (1956, 1968d), WAKAHAMA (1966).

Keys: BEPPU et al. (1977), LEE (1964c).

Biology: OKADA (1956).

Distribution:

S. KOREA: CHUNG (1958), KANG et al. (1958, 1959), LEE (1964, 1966b). — JAPAN: KAWANISHI (1978), KAWANISHI et al. (1975), OKADA (1956, 1968d), WAKAHAMA (1966).

***Drosophila quadrisetata* TAKADA, BEPPU and TODA, 1979**

Other name used: *Drosophila* sp. 3.

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Key: BEPPU et al. (1977).

Distribution:

JAPAN: TAKADA et al. (1979).

***Drosophila quadrivittata* OKADA, 1956**

General features of adults: HACKMAN (1969c), KUROKAWA and HIHARA (1976), OKADA (1956, 1961b, 1967).

Figures: BEPPU et al. (1977), OKADA (1956, 1967, 1968a).

Keys: BEPPU et al. (1977), KANG and LEE (1964), LEE (1964c), OKADA (1956, 1967, 1968a), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976), KIMURA (1976b), KIMURA et al. (1977), OKADA (1956), TODA (1973b), WAKAHAMA (1962b, 1964).

Distribution:

S. KOREA: KANG and LEE (1964), KANG et al. (1958, 1959), LEE (1964c, 1966b). — JAPAN: BEPPU (1976), KIMURA (1976b), KIMURA et al. (1977), OKADA (1956, 1967, 1968a), TAKADA (1968), TODA (1973b), WAKAHAMA (1962a, 1962b, 1962c, 1964).

***Drosophila repteta* WOLLASTON, 1858**

Other names used: *D. punctulata* LOEW (syn.), *D. adspersa* MIK (syn.), *D. prореpteta* DUDA (syn.), *D. austrorepteta* DOBZHANSKY and PAVAN (syn.).

General features of adults: BRNCIC (1957), BURLA (1951a), DE CASTRO (1953), COE (1943), DOBZHANSKY and PAVAN (1943), DUDA (1924c, 1925, 1935, 1939), FRAPPA (1931), HACKMAN (1969a), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), KNAB (1912), KUROKAWA and HIHARA (1976), LOEW (1862), MALLOCH (1923a, 1924b), MALOGOLOWKIN (1953), NATER (1953), OKADA (1956, 1959, 1961b), PATTERSON (1943), SALLES (1948), SÉGUY (1934b), STURTEVANT (1916, 1921), VAIDYA and GODBOLE (1971), WHEELER (1960b), WOLLASTON (1858).

Figures: COVA GARCÍA and SUÁREZ (1962), DUDA (1935), FRAPPA (1931), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), MALOGOLOWKIN (1953), OKADA (1956), PAPP (1973), PATTERSON (1943), SÉGUY (1934b), THROCKMORTON (1962), VAIDYA and GODBOLE (1971), WHEELER (1960b).

Keys: BOCK (1976), BRNCIC (1957), BRYAN (1938), BURLA (1951a), DUDA (1924a, 1924c, 1925, 1926, 1935, 1940), ENDERLEIN (1936), FONSECA (1965), GUPTA and RAY-CHAUDHURI (1970), HARDY (1965), HARRISON (1952, 1959), KIKKAWA and PENG (1938), LAŠTOVKA and MÁCA (1977), MALLOCH and MCATEE (1924), MATHER (1955), MONCLÚS (1964, 1976), OKADA (1956), PAPP (1973), PATTERSON (1943), PATTERSON and MAINLAND (1944), ROCHA PITÉ (1975a), SÉGUY (1934a, 1934b), STURTEVANT (1921, 1942), WILLISTON (1896).

Development: DUDA (1934), FRAPPA (1931), HENNIG (1952), KAMBYSELLIS (1968), KIKKAWA and PENG (1938), OKADA (1963a), PATTERSON (1943).

Biology: BASDEN (1957a), BICKLEY (1956), BURLA (1949, 1954a), BURUGA and OLEMO (1971), BUXTON (1954, 1960), CARSON (1965, 1971), COE (1943), COLYER (1954), COLYER and HAMMOND (1951), COVA GARCÍA and SUÁREZ (1962), DUDA (1934), HEED (1956), HENNIG (1953), HERTING (1955), KIKKAWA and PENG (1938), KÖNIG (1965), KÜHLHORN (1964, 1968, 1978), LEVER and SOBELS (1951), MARTINEZ et al. (1965), MATHER (1956), NELSON (1938), OLDROYD (1965), ORTIZ (1968), PIPKIN (1952, 1965), PIPKIN et al. (1966), ROCHA PITÉ (1979), SAKIMURA and LINFORD (1940), SÉGUY (1933b, 1934b, 1951), SHORROCKS and WOOD (1973), SIMMONS and DOVE (1942), STURTEVANT (1919b), TAYLOR (1955), TESCHNER (1959), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: SÉGUY (1934b), STURTEVANT (1921). — CZECHOSLOVAKIA: LAŠTOVKA and MÁCA (1977), MÁCA (1972b), MARTINEK (1973), SKUHRÁVÝ et al. (1959), ZUSKA and LAŠTOVKA (1969). — FINLAND: HACKMAN (1965b). — FRANCE: ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b). — GERMAN DEMOCRATIC REPUBLIC: unpublished. — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÖNIG (1965), KÜHLHORN (1964, 1968, 1978), TESCHNER (1959). — GREAT BRITAIN: BASDEN (1954b, 1957a), BUXTON (1954, 1960), COE (1943), COLYER (1954), FONSECA (1965), TAYLOR (1955). — GREECE: DIS 37: 95. — HUNGARY: ARADI (1959), PAPP (1973), SOÓS (1943, 1945). — ITALY: BEZZI (1910), NIGRO (1979), OKADA (1959), SÉGUY (1934b), ZANGHERI (1950, 1969). — NETHERLANDS: LEVER and SOBELS (1951), DE MEIJERE (1935). — ? POLAND: DUDA (1935). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1977b, 1979). — SPAIN: CZERNY and STROBL (1909), MONCLÚS (1964), ORTIZ (1968), SÉGUY (1934b), STURTEVANT (1921). — SWITZERLAND: BÄCHLI (1973a, 1975a, 1975b), BURLA (1948, 1949, 1951a, 1961), NATER (1953). — TURKEY: unpublished. — YUGOSLAVIA: unpublished. — AZORES: FREY (1945), SÉGUY (1936). — MADEIRA: FREY (1949), GARDNER and CLAS-

SEY (1960), WOLLASTON (1858). — CANARY IS.: BECKER (1908b), FREY (1936), HACKMAN (1958), MONCLÚS (1976), SÉ-GUY (1934a, 1934b). — MOROCCO: SÉ-GUY (1933b, 1934b). — ALGERIA: SÉ-GUY (1934b). — TUNISIA: unpublished. — LIBYA: BEZZI (1924b). — EGYPT: DIS 30: 124. — LEBANON: PIPKIN (1952). — ISRAEL: unpublished. — CHINA: KIKKAWA and PENG (1938). — S. KOREA: LEE (1966b). — JAPAN: KIKKAWA and PENG (1938), WHARTON (1942). Recorded as virtually cosmopolitan species.

Comment:

Some records may refer to *D. hydei* STURTEVANT.

***Drosophila repletoidea* HSU, 1943**

Other names used: *D. tumiditarsus* TAN, HSU and SHENG (syn.), *D. chinoi* OKADA (syn.), *D. hayashii* OKADA, *Drosophila* sp. of *repleta* group I.

General features of adults: HSU (1949), KUROKAWA and HIHARA (1976), OKADA (1953b, 1955a, 1956), TAN et al. (1949).

Figures: HSU (1949), OKADA (1955a, 1956a, 1968), THROCKMORTON (1962).

Keys: OKADA (1955a, 1956).

Development: OKADA (1963a, 1968a).

Biology: OKADA (1956, 1962), TAN et al. (1949).

Distribution:

CHINA: HSU (1949), TAN et al. (1949), THROCKMORTON (1962). — JAPAN: OKADA (1955a, 1956, 1962, 1968a).

***Drosophila rufa* KIKKAWA and PENG, 1938**

General features of adults: BOCK and WHEELER (1972), BURLA (1954b), FREIRE-MAIA (1949), HSU (1949), KIM (1962), KIKKAWA and PENG (1938), KUROKAWA and HIHARA (1976), MATHER (1955), OKADA (1953b, 1954c, 1954d, 1956, 1959, 1961b), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964).

Figures: BEPPU et al. (1977), BOCK and WHEELER (1972), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), LIN et al. (1973), OKADA (1954c, 1956, 1968a), PARSHAD and PAIKA (1964), THROCKMORTON (1962).

Keys: BEPPU et al. (1977), GUPTA and RAY-CHAUDHURI (1970), KIKKAWA and PENG (1938), OKADA (1956), TAKADA, (1971).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a), PARSHAD and PAIKA (1964).

Biology: ISHIHARA (1955a), KANEKO (1960), KAWANISHI and WATANABE (1977), KIKKAWA and PENG (1938), NOZAWA (1956), OKADA (1956, 1962), PARSHAD and DUGGAL (1966), WAKAHAMA (1957a, 1961, 1962b, 1964).

Distribution:

CHINA: HSU (1949), TAN et al. (1949), THROCKMORTON (1962). — S. KOREA: CHUNG (1959, 1960a), KANG et al. (1959), KIM (1962, 1963), LEE (1966b). — JAPAN: ISHIHARA (1955a), KANEKO (1960), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KUROKAWA (1967a), MOMMA (1954, 1957, 1965a), NOZAWA (1956), OKADA (1954c, 1954d, 1956, 1959, 1962, 1966b, 1968a), TAKADA et al. (1953), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966).

Recorded also on the Ryukyu Islands and in India.

***Drosophila rufifrons* LOEW, 1873**

Other name used: *D. nitens* BUZZATI-TRAVERSO (syn.).

General features of adults: BURLA (1948, 1951a), BUZZATI-TRAVERSO (1943), DUDA (1924c, 1935), HERTING (1953), LOEW (1873), MATHER (1955), NATER (1953), OKADA (1973b), OLDENBERG (1914), PAPP (1973), PARSHAD and DUGGAL (1966), PIPKIN (1961), POMINI (1940), STROBL (1893a), WHEELER (1949a).

Figures: BURLA (1948, 1951a), BUZZATI-TRAVERSO (1943), DUDA (1924a, 1924c, 1935), MONCLÚS (1964), OKADA (1955b), PAPP (1973), ROCHA PITÉ (1975a).

Keys: BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), MONCLÚS (1964), PAPP (1973), ROCHA PITÉ (1975a), STAKELBERG (1970).

Development: BASDEN (1954a), BURLA (1951a), BUZZATI-TRAVERSO (1943).

Biology: BASDEN (1954b), BERTANI (1947), BURLA (1951a), BUZZATI-TRAVERSO (1943), COE (1959), COLLIN (1952), HADORN et al. (1952), HERTING (1955), KEKIĆ and MARINKOVIĆ (1979), KÜHLHORN (1978), OLDENBERG (1914), ORTIZ (1968), SOBELS et al. (1954).

Distribution:

AUSTRIA: DUDA (1924c, 1935). — CZECHOSLOVAKIA: ROCHA PITÉ and TSACAS (1980). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1924c, 1935). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÜHLHORN (1978). — GREAT BRITAIN: BASDEN (1954b), COLLIN (1952), FONSECA (1965), SHORROCKS (1977). — GREECE: DIS 37: 135–136. — HUNGARY: ARADI (1959), PAPP (1973, 1975). — ITALY: BASDEN (1961), BUZZATI-TRAVERSO (1943), HERTING (1953), MAGNI (1959), NATER (1953). — NETHERLANDS: SOBELS et al. (1954). — POLAND: DUDA (1935). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977b). — ROMANIA: ARADI (1959), OLDENBERG (1914), THALHAMMER (1899). — SPAIN: HADORN et al. (1952), MONCLÚS (1964), ORTIZ (1968). — SWEDEN: DIS 29: 160–161. — SWITZERLAND: BÄCHLI (1972c, 1973a, 1975a), BURLA (1948, 1951a). — ? TURKEY: unpublished. — USSR: HACKMAN (1957), STAKELBERG (1930, 1970). — YUGOSLAVIA: ARADI (1959), COE (1959), KEKIĆ and MARINKOVIĆ (1979). — ? MOROCCO: unpublished. — ? IRAN: unpublished.

Comment:

Some records may refer to *D. deflexa* DUDA.

***Drosophila scaptomyzoptera* DUDA, 1935**

General features of adults: DUDA (1935).

Key: DUDA (1935).

Distribution:

USSR: DUDA (1935).

***Drosophila schmidti* DUDA, 1924**

General features of adults: DUDA (1924c, 1935).

Figures: DUDA (1924a, 1924c, 1935), PAPP (1973).

Keys: DUDA (1924a, 1924c, 1935), PAPP (1973).

Distribution:

HUNGARY: ARADI (1959), DUDA (1924c, 1935), PAPP (1973), SOÓS (1945).

***Drosophila sexvittata* OKADA, 1956**

Other names used: *D. sexvittata triangulata* OKADA, *Drosophila* (*Hirtodrosophila*) sp. I.

General features of adults: CHUNG and RHO (1959), KIM (1962), KUROKAWA and HIHARA (1976), OKADA (1956, 1959, 1961b, 1967).

Figures: BEPPU et al. (1977), KIM (1962), OKADA (1956, 1968a).

Keys: BEPPU et al. (1977), KANG and LEE (1964), LEE (1964c), OKADA (1956, 1967), TAKADA (1971).

Development: OKADA (1963a, 1968a).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976b, 1980a, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1965b), OKADA (1954d, 1956, 1968a), SUZUKI (1955), TAKADA (1960), TODA (1977), WAKAHAMA (1957a, 1961, 1962b, 1964).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), CHUNG and RHO (1959), KIM (1962), KANG and LEE (1964), KANG et al. (1959), LEE (1964c, 1966b). — JAPAN: BEPPU and TODA (1976), KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968), KIMURA (1976a, 1976b, 1980a, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954d, 1956, 1959, 1967, 1968a), SUZUKI (1955), TAKADA (1960, 1968), TODA (1977), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963).

***Drosophila simulans* STURTEVANT, 1919**

Other name used: *D. melanogaster* MEIGEN (misident.).

General features of adults: BOCK (1976), BOCK and WHEELER (1972), BURLA (1951a, 1954a), BRNCIC (1957), DAVID and BOCCQUET (1972), DAVID et al. (1974), DUDA (1927), FREIRE-MAIA (1949), GALLO (1973), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), KUROKAWA and HIHARA (1976), MALOGOLOWKIN (1948), NATER (1953), OKADA (1953b, 1954c, 1956, 1961b), PATTERSON (1943), SALLES (1948), SÉGUY (1934b), STURTEVANT (1919a, 1929), TSACAS et al. (1971).

Figures: BEPPU et al. (1977), BOCK and WHEELER (1972), BURLA (1951a), COVA GARCÍA and SUÁREZ (1962), HARDY (1965), HARRISON (1952, 1959), HSU (1949), KIKKAWA and PENG (1938), LACHAISE (1976), MAYER (1935), MONCLÚS (1964), OKADA (1954c, 1956, 1968a), PAPP (1973), PATTERSON (1943), ROCHA PITÉ (1975a), SALLES (1948), SÉGUY (1934b), SHORROCKS (1972), STURTEVANT (1919a, 1921), THROCKMORTON (1962), TSACAS et al. (1971).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1976), BRNCIC (1957), BURLA (1951a), DUDA (1925, 1927), FONSECA (1965), FRYDENBERG (1956a), HARDY (1965), HARRISON (1952, 1959), KIKKAWA and PENG (1938), MALLOCH and MCATEE (1924), MONCLÚS (1964, 1976), OKADA (1956), PAPP (1973), PATTERSON (1943), PATTERSON and MAINLAND (1944), PAVAN and DA CUNHA (1947), ROCHA PITÉ (1975a), SÉGUY (1934a, 1934b), SHORROCKS (1972), STURTEVANT (1921, 1942).

Development: HENNIG (1952), KIKKAWA and PENG (1938), MAYER (1935), OKADA (1968a), PATTERSON (1943), SÉGUY (1934b), WATABE (1979).

Biology: ATKINSON and SHORROCKS (1977), BASDEN (1954b, 1957a), BOCK (1977b), BURLA (1949, 1951a), BURUGA (1976), BURUGA and OLEMO (1971), CARSON (1965, 1971), COLLINS (1965), COVA GARCÍA and SUÁREZ (1962), DAVID (1971), DOBZHANSKY (1965), DOBZHANSKY and DA CUNHA (1955), DOBZHANSKY and PAVAN (1950), FRYDENBERG (1956a), GOLDSCHMIDT (1956b), HEED (1956, 1968), HUNTER (1966), JUNGLEN (1968a), KAWANISHI and WATANABE (1977), KEKIC and MARINKOVIĆ (1979), KIKKAWA and PENG (1938), LACHAISE (1976), MATHER (1956), MCKENZIE and PARSONS (1974), OKADA (1956), ORTIZ (1968), PARSONS (1978), PAVAN et al. (1950), PIPKIN (1952, 1965), ROCHA PITÉ (1975a, 1977a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), SHORROCKS et al. (1979), STURTEVANT (1921), TODA (1976), WATABE (1979), WATANABE and KAWANISHI (1976).

Distribution:

AUSTRIA: ROCHA PITÉ and TSACAS (1980). — CZECHOSLOVAKIA: unpublished. — DENMARK: FRYDENBERG (1956a). — FINLAND: HACKMAN (1971), LUMME et al. (1978). — FRANCE: DAVID and BOCCQUET (1972), HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979), SÉGUY (1934b). — GERMAN DEMOCRATIC REPUBLIC: unpublished. — GREAT BRITAIN: ATKINSON and SHORROCKS (1977), BASDEN (1952, 1954b, 1957a), FONSECA (1965), SHORROCKS et al. (1979). — GREECE: TRIANTAPHYLIDIS (1973). — HUNGARY: PAPP (1973). — IRELAND: unpublished. — ITALY: BEARDMORE (1973), KUNZE-MÜHL and SPERLICH (1962), MAGNI (1959), MAINX (1958), NIGRO (1979), SPERLICH (1961), ZANGHERI (1969). — NETHERLANDS: ROCHA PITÉ and TSACAS (1980). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977a, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978). — SPAIN: BEARDMORE (1973), MONCLÚS (1964), ORTIZ (1968). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1974b), BURLA (1948, 1949, 1951a). — TURKEY: BEARDMORE (1973). — USSR: BOCK and WHEELER (1972). — YUGOSLAVIA: KEKIC and MARINKOVIĆ (1978, 1979), MARINKOVIĆ et al. (1980). — AZORES: FREY (1945), HACKMAN (1960), SÉGUY (1936). — MADEIRA: unpublished. — CANARY IS.: unpublished. — MOROCCO: PREVOSTI (1974). — TUNISIA: JUNGLEN (1968a). — EGYPT: BEARDMORE (1973), TANTAWY (1964), TANTAWY and MALLAH (1961), TANTAWY et al. (1970). — ISRAEL: BASDEN (1966), GOLDSCHMIDT (1956b). — LEBANON: PIPKIN (1952), TANTAWY and MALLAH (1961). — IRAQ: unpublished. — S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), WATABE (1979), WATANABE and KAWANISHI (1976).

Recorded as virtually cosmopolitan species, but absent in higher latitudes.

***Drosophila sordidula* KIKKAWA and PENG, 1938**

General features of adults: KANEKO et al. (1964), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), LIN and TING (1971), OKADA (1953b, 1955a, 1955b, 1956, 1959), TAN et al. (1949).

Figures: BEPPU et al. (1977), KIKKAWA and PENG (1938), KIM (1962), OKADA (1955a, 1955b, 1956, 1968a), THROCKMORTON (1962).

Keys: BEPPU et al. (1977), KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: BEPPU (1976, 1979, 1980), BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1960, 1968), KANEKO and TOKUMITSU (1969), KATŌ (1954), KATŌ and HORI (1952), KIKKAWA and PENG (1938), KIMURA et al. (1977), MINAMI et al. (1979), OKADA (1956, 1961b, 1962, 1968a), SAITO et al. (1962), TAKADA (1954, 1957, 1958), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1957a, 1962b, 1964).

Distribution:

S. KOREA: CHUNG (1958), KANG et al. (1958, 1959, 1964a), KIKKAWA and PENG (1938), KIM (1962), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978, 1979), BEPPU and TODA (1976), BEPPU et al. (1977), ISHIHARA (1955a), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968, 1969), KATŌ (1954), KATŌ and HORI (1952, 1954), KIKKAWA and PENG (1938), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1954, 1957, 1965a), OKADA (1955a, 1956, 1959, 1962, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960), TAKADA (1954, 1957, 1958), TAKAHASHI and KANEKO (1969), THROCKMORTON (1962), TODA (1973a, 1973b, 1973c, 1974, 1977), TOKUMITSU et al. (1967), TOYOFUKU (1957, 1958a, 1958b), WAKAHAMA (1957a, 1962a, 1962b, 1962c, 1964), WATABE and BEPPU (1977).

Drosophila stackelbergi DUDA, 1935

General features of adults: DUDA (1935).

Key: DUDA (1935).

Distribution:

USSR: DUDA (1935).

Drosophila sternopleuralis OKADA and KUROKAWA, 1957

Other names used: *Drosophila* sp. of *quinaria* section, *Drosophila* sp. of *histrio* group I.

General features of adults: KUROKAWA and HIRAHARA (1976), OKADA (1953b, 1956, 1959, 1961b, 1966a), OKADA and KUROKAWA (1957).

Figures: OKADA (1956, 1968a), OKADA and KUROKAWA (1957).

Keys: BEPPU et al. (1977), LEE (1964c).

Development: OKADA (1963a, 1968a).

Biology: KAWANISHI et al. (1975), OKADA (1962), OKADA and KUROKAWA (1957), WAKAHAMA (1961, 1962b, 1964).

Distribution:

S. KOREA: CHUNG (1958, 1960), KANG et al. (1959), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), OKADA (1956, 1959, 1962, 1968a), OKADA and KUROKAWA (1957), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964, 1966).

Drosophila stoneli PIPKIN, 1956

General features of adults: PIPKIN (1956, 1961).

Figures: PIPKIN (1956).

Biology: PIPKIN (1961).

Distribution:

LEBANON: PIPKIN (1956).

Drosophila subarctica HACKMAN, 1969

General features of adults: HACKMAN (1969c).

Figures: HACKMAN (1969c).

Biology: LAKOVAARA et al. (1972b), LUMME et al. (1979).

Distribution:

FINLAND: HACKMAN (1969c, 1971), LAKOVAARA et al. (1972b), LUMME et al. (1978, 1979). — NORWAY: LAKOVAARA et al. (1972b). — SWEDEN: LAKOVAARA et al. (1972b).

Drosophila subobscura COLLIN, 1936

Other names used: *D. obscura* FALLÉN (misident.), *D. obscura* 3.

General features of adults: BURLA (1951a), CAIN et al. (1952), FREIRE-MAIA (1949), GORDON (1936), HSU (1949), MISRA (1966), MISRA and REEVE (1964), MONCLÚS (1964), MORIWAKI et al. (1952), NATER (1953), OKADA (1953b, 1961b), POMINI (1940), PREVOSTI (1955a, 1976), REED and REED (1948), SMART (1945).

Figures: BURLA (1951a), CAIN et al. (1952), DYSON-HUDSON (1954), HOLLINGSWORTH (1960), HSU (1949), MAYNARD SMITH and SONDHI (1961), OKADA (1956), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SHORROCKS (1972).

Keys: BASDEN (1954b), BURLA (1951a), DYSON-HUDSON (1954), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), MONCLÚS (1964), OKADA (1956), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SHORROCKS (1972).

Development: BURLA (1951a), SMART (1945).

Biology: ATKINSON and SHORROCKS (1977), BÄCHLI (1977, 1979), BASDEN (1952, 1953, 1954b, 1956, 1957a), BEGON (1975, 1976a, 1976b, 1977, 1978), BEGON et al. (1975), BURLA (1949, 1951a, 1961), BURLA and GREUTER (1959a, 1959b, 1961), BUXTON (1960), BUZZATI-TRAVERSO (1942a), BUZZATI-TRAVERSO and SCOSSIROLI (1955), COE (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DYSON-HUDSON (1956), DYSON-HUDSON and VOCKEROTH (1955), FRYDENBERG (1956a), GOLDSCHMIDT (1956b), GORDON (1942), GREUTER (1963), HADORN et al. (1952), HERTING (1955), JÜNGEN (1968a), KEKIĆ and MARINKOVIĆ (1979), KOCH (1967), KÖNIG (1965), KÜHLHORN (1978, 1979), LEVER and SOBELS (1951), LEWIS and TAYLOR (1964), MAINX et al. (1953), PHILIP et al. (1944), PIPKIN (1952), RUSCH (1971), ROBERTSON (1965), ROCHA PITÉ (1972, 1975a, 1977a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), SCHATZMANN (1977), SCHMID (1978), SHORROCKS (1972, 1974, 1975, 1977), SHORROCKS and BEGON (1975), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SMART (1945), SOBELS et al. (1954), TAYLOR and KALMUS (1954), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: BALDUZZI (1954), KUNZE-MÜHL and SPERLICH (1955), KUNZE-MÜHL et al. (1958), MAINX (1950), MAINX et al. (1953), MISRA and REEVE (1964), POMINI (1940), RICHTER and HÜNDLER (1955), SPERLICH (1959, 1966), SPERLICH and

FEUERBACH (1966), THALER (1977). — BELGIUM: WATTIAUX (1968). — CYPRUS: unpublished. — CZECHOSLOVAKIA: ARADI (1959), ZUSKA and LAŠTOVKA (1969). — DENMARK: BASDEN (1956), FRYDENBERG (1956a), LAKOVAARA et al. (1976b), McFARQUHAR and ROBERTSON (1963), MISRA and REEVE (1964), SAURA et al. (1973). — FINLAND: HACKMAN (1971), LAKOVAARA and SAURA (1971b), LAKOVAARA et al. (1972c, 1976b), SAURA et al. (1973). — FRANCE: BALDUZZI (1954), HADORN et al. (1952), LAKOVAARA et al. (1976b), MISRA and REEVE (1964), PREVOSTI (1964a, 1966b, 1968), PREVOSTI et al. (1975), ROCHA PITÉ and TSACAS (1979), SAURA et al. (1973), STUMM-ZOLLINGER (1953). — GERMAN DEMOCRATIC REPUBLIC: POMINI (1940). — GERMAN FEDERAL REPUBLIC: DAHL (1966), HERTING (1955), KÖNIG (1965), KÜHLHORN (1978, 1979), PINSKER and SPERLICH (1979), PINSKER et al. (1978). — GREAT BRITAIN: ATKINSON and SHORROCKS (1977), BASDEN (1952, 1953, 1954a, 1954b, 1957a), BASDEN and GOODEY (1955), BEGON (1975, 1976a, 1976b, 1978), BEGON et al. (1975), BUZZATI-TRAVERSO (1942b), CAIN et al. (1952), CLARKE et al. (1961), DYSON-HUDSON (1954, 1956), DYSON-HUDSON and VOCKEROTH (1955), FONSECA (1965), GONZALEZ-DUARTE et al. (1973), GORDON (1936, 1942), GORDON et al. (1939), HARTMANN-GOLDSTEIN and SPERLICH (1963), KNIGHT (1961), KUNZE-MÜHL and SPERLICH (1955), LEWIS and TAYLOR (1964), McFARQUHAR and ROBERTSON (1963), MAINX et al. (1953), MAYNARD SMITH et al. (1955), MILANI (1953), MISRA and REEVE (1964), PHILIP et al. (1944), POMINI (1940), PREVOSTI (1955a, 1955b, 1957), RICHTER and HÜNDLER (1955), ROBERTSON (1965), SHORROCKS (1969, 1970, 1974, 1975, 1977), SHORROCKS and CHARLESWORTH (1980), SHORROCKS and WOOD (1973), SHORROCKS et al. (1979), SMART (1945), SMITH (1959, 1960), SPERLICH (1966), TAYLOR and KALMUS (1954). — GREECE: KRIMBAS (1964a, 1967), KRIMBAS and ALMEZIOS (1973), LAKOVAARA and SAURA (1971b), PENTZOS-DAPONTE (1964), PENTZOS-DAPONTE et al. (1967), SPERLICH (1966), ZOUROS et al. (1974). — HUNGARY: ARADI (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973). — IRELAND: BASDEN (1952), PREVOSTI (1955b). — ITALY: BALDUZZI (1954), BUZZATI-TRAVERSO (1942a, 1942b), FRIZZI (1950), KUNZE-MÜHL and SPERLICH (1955, 1962), LAKOVAARA et al. (1976b), MAGNI (1959), MAINX (1950, 1958), MAINX et al. (1953), MILANI (1953), MISRA and REEVE (1964), PHILIP et al. (1944), PINSKER and SPERLICH (1979), POMINI (1940), PREVOSTI et al. (1975), RICHTER and HÜNDLER (1955), RUDERER (1959), SAURA et al. (1973), SPERLICH (1961, 1966), SPERLICH and KUNZE-MÜHL (1963). — NETHERLANDS: EISSES et al. (1979), KRIMBAS (1964b), KUNZE-MÜHL and SPERLICH (1955), LEVER and SOBELS (1951), RICHTER and HÜNDLER (1955), SOBELS et al. (1954). — NORWAY: BASDEN (1956), JOHNSON et al. (1966), SPERLICH (1964, 1966). — PORTUGAL: HADORN et al. (1952), ROCHA PITÉ (1972, 1975a, 1975b, 1977a, 1977b, 1978, 1979), ROCHA PITÉ and DA COSTA NICOLAU (1978), STUMM-ZOLLINGER (1953). — SPAIN: BALDUZZI (1954), BASDEN (1961), FRUOS (1972), GONZALEZ-DUARTE et al. (1973), HACKMAN (1969a), HADORN et al. (1952), LAKOVAARA and SAURA (1971b), MONCLÚS (1953, 1964), ORTIZ (1968), PREVOSTI (1951, 1952, 1954, 1955a, 1957, 1960, 1961, 1964b, 1966a, 1966b, 1967, 1968). — SWEDEN: BALDUZZI (1954), BASDEN (1956), LAKOVAARA et al. (1976b), MAINX et al. (1953), PINSKER and SPERLICH (1979), SAURA et al. (1973). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BALDUZZI (1954), BECK (1972), BURLA (1948, 1949, 1951a, 1961), BURLA and GÖTZ (1965), BURLA and GREUTER (1959a, 1959b), CLARKE et al. (1961), GÖTZ (1965a), GREUTER (1963), HSU (1949), JUNGLEN (1970), KOCH (1967), KUNZE-MÜHL and SPERLICH (1955), LAKOVAARA and SAURA (1971b), McFARQUHAR and ROBERTSON (1963), MAINX (1950), MAINX et al. (1953), MAYNARD SMITH et al. (1955), MISRA and REEVE (1964), NÄTER (1953), PINSKER and SPERLICH (1979), PREVOSTI (1957), RISCH (1971), SCHATZMANN (1977), SCHMID (1968), STUMM-ZOLLINGER (1953), ZOLLINGER (1950). — TURKEY: GÖTZ (1965a, 1967). — USSR: DUBININ et al. (1937b), MAINX et al. (1953). — YUGOSLAVIA: ANĐELKOVIĆ and SPERLICH (1973), BASDEN (1961), COE (1959), KEKIĆ and MARINKOVIĆ (1974, 1979), KEKIĆ et al. (1980), MARINKOVIĆ et al. (1980). — AZORES: FREY (1945), HACKMAN (1960). — MADEIRA: FREY (1949), PREVOSTI (1972). — CANARY IS.: FREY (1936), HACKMAN (1958), MONCLÚS (1976), PREVOSTI (1971, 1972). — MOROCCO: GONZALEZ-DUARTE et al. (1973), GÖTZ (1965a, 1965b), PREVOSTI (1974), PREVOSTI et al. (1975). — TUNISIA: JUNGLEN (1968a, 1968b), PAPP (1978), PINSKER and SPERLICH (1979). — EGYPT: unpublished. — ISRAEL: CLARKE et al. (1961), GOLDSCHMIDT (1956a, 1956b, 1958), KUNZE-MÜHL and SPERLICH (1955), McFARQUHAR and ROBERTSON (1963), MISRA and REEVE (1964), RICHTER and HÜNDLER (1955), STUMM-ZOLLINGER and GOLDSCHMIDT (1959), WATTIAUX (1968). — LEBANON: PIPKIN (1952). — SYRIA: KUNZE-MÜHL and SPERLICH (1955), MAINX et al. (1953), RICHTER and HÜNDLER (1955). — IRAN: GÖTZ (1965a, 1967). Recorded also in South America.

Drosophila subsilvestris HARDY and KANESHIRO, 1968

Other names used: *D. silvestris* BASDEN (syn.), *D. obscura* X, *Drosophila* sp. near *obscura*.

General features of adults: BASDEN (1954b), BASDEN and HARNDEN (1956), BURLA (1951a), CAIN et al. (1952), DYSON-HUDSON (1954), KNIGHT (1956).

Figures: DYSON-HUDSON (1954), KNIGHT (1956), SHORROCKS (1972), ŠTAKELBERG (1970).

Keys: BASDEN (1954b), DYSON-HUDSON (1954), FONSECA (1965), FRYDENBERG (1956a), PAPP (1973), SHORROCKS (1972), ŠTAKELBERG (1970).

Biology: BASDEN (1953, 1954b), BASDEN and HARNDEN (1956), BEGON (1978), BURLA (1961), FRYDENBERG (1956a), HERTING (1955), KÜHLHORN (1978), LUMME et al. (1978, 1979), SCHATZMANN (1977), SHORROCKS (1972, 1975), SOBELS et al. (1954).

Distribution:

AUSTRIA: unpublished. — CZECHOSLOVAKIA: ROCHA PITÉ and TSACAS (1980). — DENMARK: FRYDENBERG (1956a). — FINLAND: HACKMAN (1971), LAKOVAARA et al. (1972a, 1972c), LUMME et al. (1978, 1979). — FRANCE: ROCHA PITÉ and TSACAS (1979). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÜHLHORN (1978). — GREAT BRITAIN: BASDEN (1952, 1953, 1954b), BASDEN and GOODEY (1955), BEGON (1978), BUZZATI-TRAVERSO and SCOSSIROLI (1955), DYSON-HUDSON (1954), FONSECA (1965), KNIGHT (1956), SHORROCKS (1969, 1970, 1975, 1977), SMITH (1959). — IRELAND: ROCHA PITÉ and TSACAS (1980). — NETHERLANDS: SOBELS et al. (1954). — NORWAY: BASDEN and HARNDEN (1956). — SWEDEN: LAKOVAARA et al. (1972a, 1972c). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1979), BURLA (1951a, 1961), SCHATZMANN (1977). — USSR: HACKMAN (1957), ŠTAKELBERG (1970). — YUGOSLAVIA: unpublished.

Drosophila subtilis KIKKAWA and PENG, 1938

General features of adults: HSU (1949), KIKKAWA and PENG (1938), OKADA (1953a, 1955a, 1956, 1961b).

Figures: HSU (1949), KIKKAWA and PENG (1938), OKADA (1955a, 1956, 1959, 1968a).

Keys: KIKKAWA and PENG (1938), OKADA (1956).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: KIKKAWA and PENG (1938), NOZAWA (1956), OKADA (1956, 1962, 1968a), TAN et al. (1949), WAKAHAMA (1962b, 1962c, 1964).

Distribution:

S. KOREA: CHUNG (1960a), KANG et al. (1959), LEE (1966b). — JAPAN: KAWANISHI and WATANABE (1977), KIKKAWA and PENG (1938), NOZAWA (1956), OKADA (1955a, 1956, 1959, 1962, 1968a), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966). Recorded also in South China.

***Drosophila suzukii* MATSUMURA, 1931**

Other name used: *D. suzukii indica* PARSHAD and PAIKA.

General features of adults: BOCK and WHEELER (1972), FREIRE-MAIA (1949), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), MATSUMURA (1931), OKADA (1953b, 1954c, 1954d, 1956, 1959, 1961b, 1966a), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), PENG (1937).

Figures: BEPPU et al. (1977), BOCK and WHEELER (1972), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), MATSUMURA (1931), OKADA (1954c, 1956, 1968a), PARSHAD and PAIKA (1964).

Keys: BEPPU et al. (1977), GUPTA and RAY-CHAUDHURI (1970), KIKKAWA and PENG (1938), LEE (1964c), OKADA (1956), PENG (1937), TAKADA (1971).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), HENNIG (1953), ISHIHARA (1955a), KANEKO (1960), KANEKO and TOKUMITSU (1963, 1969), KATŌ (1964), KATŌ and HORI (1952), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), LEE (1962), MINAMI (1979), MINAMI et al. (1979), MOMMA (1965a), NOZAWA (1956), OKADA (1956, 1962), PARSHAD and DUGGAL (1966), PARSHAD and PAIKA (1964), SAITO et al. (1962), TAKADA (1954, 1957, 1958), TODA (1973a, 1973b, 1974, 1976, 1977), WAKAHAMA (1957a, 1961, 1962b, 1964).

Distribution:

CHINA: HSU (1949), PENG (1937), TAN et al. (1949). — S. KOREA: CHUNG (1958, 1959, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959), KIM (1962, 1963), LEE (1962, 1964c, 1965, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1968, 1969), KATŌ (1954), KATŌ and HORI (1952, 1954), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIKKAWA and PENG (1938), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MATSUMURA (1931), MINAMI et al. (1979), MOMMA (1957, 1965a), NOZAWA (1956), OKADA (1954c, 1954d, 1956, 1962, 1966b, 1968a), SAITO et al. (1962), SHIMA (1960), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TODA (1973a, 1973b, 1974, 1977), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE and BEPPU (1977).

Recorded also in India and on the Ryukyu and Bonin Islands.

***Drosophila takadai* LEE, 1964**

General features of adults: LEE (1964a, 1964c).

Figures: LEE (1964a, 1964c).

Key: LEE (1964c).

Development: LEE (1964a, 1964c).

Distribution:

S. KOREA: LEE (1964a, 1964c, 1966b).

***Drosophila takahashii* STURTEVANT, 1927**

General features of adults: BOCK and WHEELER (1972), BOHART and GRESSITT (1951), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA and HIHARA (1976), NATER (1950, 1953), OKADA (1953b, 1954c, 1954d, 1955, 1956, 1959, 1961b), PARSHAD and PAIKA (1964), PENG (1937), VAIDYA and GODBOLE (1971), WHEELER and TAKADA (1964).

Figures: BOCK and WHEELER (1972), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), NATER (1950, 1953), OKADA (1954c, 1955c, 1956, 1968a), PARSHAD and PAIKA (1964), PENG (1937), THROCKMORTON (1962), VAIDYA and GODBOLE (1971), WHEELER and TAKADA (1964).

Keys: BOHART and GRESSITT (1951), GUPTA and RAY-CHAUDHURI (1970), KIKKAWA and PENG (1938), OKADA (1956, 1966a), PENG (1937), WHEELER and TAKADA (1964).

Development: KIKKAWA and PENG (1938), OKADA (1963a, 1968a), PARSHAD and PAIKA (1964).

Biology: BOHART and GRESSITT (1951), KIKKAWA and PENG (1938), OKADA (1956), PARSHAD and PAIKA (1964).

Distribution:

CHINA: HSU (1949), KIKKAWA and PENG (1938), OKADA (1954c), PENG (1937), TAN et al. (1949). — S. KOREA: KIM (1962), LEE (1966b). — JAPAN: OKADA (1954c, 1954d, 1955c, 1956, 1959, 1968a).

Recorded mainly in South Asia.

***Drosophila tenuicauda* OKADA, 1956**

Other name used: *Drosophila* sp. III like *grandis*.

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1955b, 1956, 1961b, 1966a), TAKADA and LEE (1958).

Figures: BEPPU et al. (1977), OKADA (1956, 1968a).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: OKADA (1968a).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), OKADA (1956), TAKADA and LEE (1958).

Distribution:

S. KOREA: KANG et al. (1959, 1964a), LEE (1964c, 1966b), TAKADA and LEE (1958). — JAPAN: KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1969), KANEKO et al. (1969), KAWANISHI et al. (1975), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957), OKADA (1956, 1968a, 1968d), TAKADA (1968), TAKADA and OKADA (1960), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1964).

Recorded also on the Ryukyu Islands.

***Drosophila testacea* VON ROSER, 1840**

Other names used: *D. nigrithorax* STROBL (syn.), *D. setosa* VILLENEUVE (syn.), *D. fasciata* MEIGEN (misident.).

General features of adults: BECKER (1903a), BURLA (1951a), BURLA and GLOOR (1952), CHUNG and RHO (1959), COLLIN (1952), DUDA (1924c, 1934), HSU (1949), KIM (1962), KUROKAWA and HIHARA (1976), MALOGOLOWKIN (1953), NATER (1953), NEUHAUS (1886), OKADA (1953a, 1954d, 1955a, 1956, 1959, 1961b), PARSHAD and DUGGAL (1966), VON ROSER (1840), STROBL (1894), TAKADA (1960), VILLENEUVE (1921), WATABE (1977).

Figures: BEPPU et al. (1977), BURLA (1951a), DUDA (1924a, 1924c, 1934), HSU (1949), KIM (1962), NATER (1953), OKADA (1955a, 1956, 1968a), PAPP (1973), TAKADA (1960), THROCKMORTON (1962), WATABE (1977).

Keys: BEPPU et al. (1977), BURLA (1951a), DUDA (1924a, 1924c, 1927, 1934), ENDERLEIN (1936), FONSECA (1965), FRYDENBERG (1956a), GUPTA and RAY-CHAUDHURI (1970), HACKMAN (1954), LAŠTOVKA and MÁCA (1977), LEE (1964c), MONCLÚS (1964), OKADA (1956), PAPP (1973), STAKELBERG (1970), STURTEVANT (1942), TAKADA (1971).

Development: BURLA (1951a), KIMURA et al. (1979), OKADA (1963a, 1968a).

Biology: BÄCHLI (1969, 1979), BEPPU (1976), BEPPU and TODA (1976), BURLA (1949, 1951a, 1961), BURLA and BÄCHLI (1968), COE (1959), COLLIN (1952), DELY-DRASKOVITS (1976), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), HACKMAN (1963), HACKMAN and MEINANDER (1979), HADORN et al. (1952), HERTING (1955), ISHIHARA (1955a, 1955b), KANEKO (1968), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1960, 1968), KEKIĆ and MARINKOVIĆ (1979), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977, 1978), KÖNIG (1965), KÜHLHORN (1978), LEE (1962), LEVER and SOBELS (1951), LUMME et al. (1978, 1979), MINAMI et al. (1979), MOMMA (1965b), OKADA (1954d, 1956, 1968a), PAPP (1979), PARSHAD and DUGGAL (1966), SAITO et al. (1962), SCHMID (1968), SHORROCKS (1977), SHORROCKS and WOOD (1973), SOBELS et al. (1954), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1960), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1956b, 1957a, 1962b, 1964), WATABE (1977, 1979), WHEELER and THROCKMORTON (1960), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: BASDEN (1961), STROBL (1894). — CZECHOSLOVAKIA: ARADI (1959), LAŠTOVKA and MÁCA (1977), SOÓS (1945), ZUSKA and LAŠTOVKA (1969). — DENMARK: BASDEN (1956), FRYDENBERG (1956a). — FINLAND: HACKMAN (1954, 1963, 1971), HACKMAN and MEINANDER (1979), LUMME et al. (1978, 1979). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979), VILLENEUVE (1921). — ? GERMAN DEMOCRATIC REPUBLIC: NEUHAUS (1886). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KÖNIG (1965), KÜHLHORN (1978), VON ROSER (1840). — GREAT BRITAIN: BASDEN (1952), COLLIN (1952), FONSECA (1965), SHORROCKS (1977). — HUNGARY: ARADI (1959), DELY-DRASKOVITS (1976), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1978), SOÓS (1945). — ITALY: NIGRO (1979). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — NORWAY: ROCHA PITÉ and TSACAS (1980). — ROMANIA: ARADI (1959), SOÓS (1945). — SPAIN: BURLA and GLOOR (1952), HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: BASDEN (1956). — SWITZERLAND: BÄCHLI (1969, 1972b, 1972c, 1973a, 1973b, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1949, 1951a, 1951b, 1961), BURLA and BÄCHLI (1968), NATER (1953), SCHMID (1968). — TURKEY: unpublished. — USSR: ARADI (1959), HACKMAN (1954, 1957), SOÓS (1945), PAPP (1979), STAKELBERG (1930, 1970). — YUGOSLAVIA: BASDEN (1961), COE (1959), KEKIĆ and MARINKOVIĆ (1979). — IRAN: unpublished. — MONGOLIA: OKADA (1973c). — N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959), KIM (1962), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978), BEPPU and TODA (1976), ISHIHARA (1955a, 1955b), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968, 1969), KIMURA (1976a, 1976b, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977, 1978), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1954d, 1955a, 1956, 1959, 1968a), SAITO et al. (1962), SHIMA (1960), SUZUKI (1955), TAKADA (1954, 1957, 1958, 1960, 1968), TAKADA and OKADA (1960), TODA (1973a, 1973b, 1973c, 1974, 1977), TOYOFUKU (1957, 1958a), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1956b, 1957a, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1977, 1979), WATABE and BEPPU (1977).

Recorded also in North America and India.

Drosophila throckmortoni OKADA, 1973

Other names used: *D. rufifrons* LOEW (misident.), *Drosophila* sp. like *lebanonensis*.

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1953b, 1956, 1961b, 1973b).

Figures: BEPPU et al. (1977), OKADA (1955b, 1956, 1968a, 1973b).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956).

Development: OKADA (1963a, 1968a).

Biology: BEPPU and TODA (1976), KIMURA and TODA (1976), KIMURA et al. (1977), OKADA (1956, 1962, 1968a), TODA (1973a, 1974, 1977).

Distribution:

S. KOREA: LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU and TODA (1976), KIMURA and TODA (1976), KIMURA et al. (1977), OKADA (1956, 1962, 1968a, 1973b), TODA (1973a, 1974, 1977).

Drosophila transversa FALLÉN, 1823

Other names used: *D. transversa* var. *laeta* ZETTERSTEDT (syn.), *D. transversa subquinaria* SPENCER.

General features of adults: BECKER (1902), BURLA (1951a), DE CASTRO (1953), CZERNY (1903a), DUDA (1924c, 1935), FALLÉN (1823), GOUREAU (1865), HENNIG (1958), HERING (1940), HSU (1949), MACQUART (1835), MALOGOLOWKNIN (1953), MEIGEN (1830), NATER (1953), NEUHAUS (1886), OKADA (1956, 1961b), PATTERSON (1943), SÉGUY (1934b), SPENCER (1942), STROBL (1893b), STURTEVANT (1921), VILLENEUVE (1911), WAHLGREN (1927), WALKER (1853), WHEELER (1960a), ZETTERSTEDT (1838, 1847, 1855).

Figures: BURLA (1951a), DUDA (1924a, 1924c, 1935), HSU (1949), MONCLÚS (1964), MORGE (1976a), NATER (1953), PAPP (1973), PATTERSON (1943), STAKELBERG (1970), THROCKMORTON (1962), WHEELER (1960a).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), LAŠTOVKA and MÁCA (1977), MONCLÚS (1964), PAPP (1973), PATTERSON (1943), SCHINER (1864), SÉGUY (1934a, 1934b), SHORROCKS (1972), STAKELBERG (1970), STURTEVANT (1921, 1942), WAHLGREN (1927).

Development: BURLA (1951a), DUDA (1934), HENNIG (1952).

Biology: AZARJAN (1968), BÄCHLI (1979), BASDEN (1952, 1954b), BASDEN and HARNDEN (1956), BAUMANN (1977), BEUTHIN (1887), BONNAMOUR (1926), BURLA (1949, 1951a), BURUGA (1976), BUXTON (1960), CANZANELLI (1941), CHARLES-WORTH and SHORROCKS (1980), DELY-DRASKOVITS (1976), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DUDA (1934, 1935), EISFELDER (1957), FRYDENBERG (1956a), GOUREAU (1865), HACKMAN (1954, 1963), HACKMAN and MEINANDER (1979), HERTING (1955), KÖNIG (1965), KRAMER (1917), KRÖBER (1910, 1935), KÜHLHORN (1978), LEVER and SOBELS (1951), LUMME et al. (1978, 1979), MAYER (1935), DE MEIJERE (1939a, 1947), NASWATY (1959), PAPP (1976, 1979), RADDATZ (1873), RIEL (1921), SCHULZE (1912), SÉGUY (1934b), SHORROCKS (1972, 1975, 1977), SHORROCKS and WOOD (1973), SMITH (1959), SOBELS et al. (1954), STORÁ (1957).

Distribution:

AUSTRIA: BASDEN (1961), STROBL (1880, 1894, 1901, 1910), THALER (1977), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), BRANCSIK (1910), ČIŽEK (1906), DOSKOČIL (1962), LAŠTOVKA and MÁCA (1977), MARTINEK (1974b), STROBL

(1901), VIMMER (1913). — DENMARK: FRYDENBERG (1956a), ZETTERSTEDT (1847). — FINLAND: FREY (1917a, 1950), HACKMAN (1954, 1963, 1971), HACKMAN and MEINANDER (1979), LUMME et al. (1978, 1979), STORÅ (1956, 1957), ZETTERSTEDT (1847, 1860). — FRANCE: BONNAMOUR (1926), GOURAU (1865), HADORN et al. (1952), RIEL (1921), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: KARL (1936), KRAMER (1917), NEUHAUS (1886), RADDATZ (1873), TIMOFÉEFF-RESSOVSKY and TIMOFÉEFF-RESSOVSKY (1941a). — GERMAN FEDERAL REPUBLIC: BAUMANN (1977), BEUTHIN (1887), EISFELDER (1957), HERTING (1955), KÖNIG (1965), KRÖBER (1910, 1935), KÜHLHORN (1978), NASWATY (1959), ZETTERSTEDT (1847). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1954b), BUXTON (1960), CHARLESWORTH and SHORROCKS (1980), CURTIS (1833), FONSECA (1965), HALIDAY (1833), HENDERSON (1911), SHORROCKS (1972, 1975, 1977), SHORROCKS and WOOD (1973), SMITH (1959), THROCKMORTON (1962), WALKER (1849, 1853), YERBURY (1913). — HUNGARY: ARADI (1959), BASDEN (1961), DELY-DRASKOVITS (1976), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973, 1976), SOÓS (1943), THALHAMMER (1899). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: BEZZI (1892b), CANZANELLI (1941), POKORNY (1887). — NETHERLANDS: DE MEIJERE (1920, 1939a), LEVER and SOBELS (1951), SOBELS et al. (1954), STURTEVANT (1921). — NORWAY: BASDEN and HARNDEN (1956). — POLAND: KARL (1936). — ROMANIA: ARADI (1959), STROBL (1897), THALHAMMER (1899). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: FALLÉN (1923), RINGDAHL (1931, 1951, 1959), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1855, 1860). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974c, 1975a, 1975b, 1977, 1979), BURLA (1948, 1949, 1951a, 1961), HSU (1949), NATER (1953). — TURKEY: unpublished. — USSR: AZARJAN (1968), BALKASCHINA and ROMASCHOFF (1935), BASDEN (1956), BOBEK (1897), EVERSMAHN (1834), FROLIWA (1926), GEYSITS and SIMONENKO (1970), HACKMAN (1954, 1957), PAPP (1979), STAKELBERG (1930, 1970). — YUGOSLAVIA: ARADI (1959), STROBL (1895a, 1900a), KEKIĆ and MARINKOVIĆ (1979). — MONGOLIA: OKADA (1973c). Recorded also in North America.

Drosophila triauraria BOCK and WHEELER, 1972

Other name used: *D. auraria* race C.

General features of adults: BOCK and WHEELER (1972), KIM (1962), KUROKAWA (1956, 1962, 1967b), OKADA (1953b, 1954c).

Figures: BEPPU et al. (1977), BOCK and WHEELER (1972), KIM (1962), OKADA (1954c, 1955b).

Keys: BEPPU et al. (1977), TAKADA (1971).

Development: BOCK and WHEELER (1972).

Biology: KANEKO and TOKUMITSU (1969), KIMURA and TODA (1976), MINAMI (1979), MINAMI et al. (1979), TODA (1973b, 1973c, 1974, 1977), WAKAHAMA (1966).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958, 1960a), CHUNG and RHO (1959), KIM (1962, 1963), KUROKAWA (1962, 1963, 1967a), LEE (1964c, 1965). — JAPAN: BOCK and WHEELER (1972), KANEKO (1968), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1968), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA (1976a), KIMURA and TODA (1976), KUROKAWA (1956, 1960, 1962, 1963, 1967a, 1967b), MINAMI (1979), MINAMI et al. (1979), OKADA (1954c, 1966b), TAKADA (1960), TAKADA and OKADA (1960), TODA (1973b, 1973c, 1974, 1977), TOYO-FUKU and KIMURA (1960, 1961), WAKAHAMA (1966), WAKAHAMA et al. (1963).

Recorded also on the Ryukyu Islands.

Drosophila trilineata CHUNG, 1960

Other name used: *D. trivittata* STROBL (misident.).

General features of adults: CHUNG (1960b), OKADA (1967).

Figures: CHUNG (1960b).

Keys: LEE (1964c), OKADA (1967).

Biology: CHUNG (1960b).

Distribution:

S. KOREA: CHUNG (1958, 1960b), LEE (1964c, 1966b).

Drosophila tristis FALLÉN, 1823

Other names used: *D. spurca* ZETTERSTEDT (syn.), *D. tinctipennis* STROBL (syn.), *D. obscura* var. *tristis*.

General features of adults: BASDEN (1953), BECKER (1902), BURLA (1951a), CAIN et al. (1952), EGGER (1862), FALLÉN (1823), FREIRE-MAIA (1949), FRYDENBERG (1955), HALIDAY (1833), MACQUART (1835), MEIGEN (1830), MONCLÚS (1964), MORIWAKI et al. (1952), NATER (1953), OLDENBERG (1914), OKADA (1953b), POMINI (1940), SCHINER (1864), SÉGUY (1934b), STROBL (1901), ZETTERSTEDT (1847).

Figures: BURLA (1951a), DUDA (1924a), DYSON-HUDSON (1954), MORGE (1976a, 1976c), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SHORROCKS (1972).

Keys: BASDEN (1954b), BURLA (1951a), DUDA (1924a, 1924c), DYSON-HUDSON (1954), FONSECA (1965), FRYDENBERG (1956a), HACKMAN (1954), MONCLÚS (1964), OKADA (1956), PAPP (1973), POMINI (1940), ROCHA PITÉ (1975a), SÉGUY (1934a, 1934b), SHORROCKS (1972).

Biology: BASDEN (1953, 1954b), BEGON et al. (1975), BURLA (1949, 1951a), BUZZATI-TRAVERSO and SCOSSIROLI (1955), COLLIN (1911), FRYDENBERG (1956a), HADORN et al. (1952), HERTING (1955), RADDATZ (1873), ROCHA PITÉ and DA COSTA NICOLAU (1978), SCHMID (1968), SHORROCKS (1975), SOBELS et al. (1954), SMART (1945).

Distribution:

AUSTRIA: BASDEN (1961), MAINX et al. (1953), STROBL (1901). — CZECHOSLOVAKIA: BASDEN (1961), STROBL (1901). — DENMARK: BASDEN (1956), FRYDENBERG (1956a), ZETTERSTEDT (1847). — FRANCE: HADORN et al. (1952), ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: RADDATZ (1873). — GERMAN FEDERAL REPUBLIC: HERTING (1955), KRÖBER (1910, 1935). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1953, 1954a, 1954b), BASDEN and GOODEY (1955), BEGON et al. (1975), CAIN et al. (1952), COLLIN (1911), CURTIS (1833), DYSON-HUDSON (1954), FONSECA (1965), HALIDAY (1833), SHORROCKS (1969, 1970, 1975, 1977), SMART (1945), SMITH (1959, 1960), WALKER (1849, 1853). — HUNGARY: ARADI (1959), PAPP (1973). — IRELAND: ROCHA PITÉ and TSACAS (1980). — ITALY: BUZZATI-TRAVERSO (1942b), MAINX et al. (1953), POMINI (1940). — NETHERLANDS: LEVER and SOBELS (1951), SOBELS et al. (1954). — PORTUGAL: ROCHA PITÉ (1975a, 1975b, 1977b), ROCHA PITÉ and DA COSTA NICOLAU (1978). — ROMANIA: THALHAMMER (1899). — SPAIN: HADORN et al. (1952), MONCLÚS (1964). — SWEDEN: BASDEN (1956), FALLÉN (1823), WAHLGREN (1927), ZETTERSTEDT (1847). — SWITZERLAND: BÄCHLI (1972b, 1972c, 1973a, 1974b, 1974c, 1975a, 1975b), BURLA (1948, 1949, 1951a), LAKOVAARA et al. (1972a, 1972c), NATER (1953), SCHMID (1968). — TURKEY: unpublished. — USSR: unpublished. — YUGOSLAVIA: KEKIĆ and MARINKOVIĆ (1978, 1979). — IRAN: unpublished.

***Drosophila trivittata* STROBL, 1893**

Other names used: *D. trivittata* var. *ussurica* DUDA, *Drosophila* sp. II.

General features of adults: BASDEN (1957b, 1961), CHUNG (1960b), DUDA (1921, 1924c, 1935), HENNIG (1958), OKADA (1956, 1961b), OLDENBERG (1914), STROBL (1893b).

Figures: DUDA (1935), OKADA (1956, 1967).

Keys: BEPPU et al. (1977), DUDA (1924a, 1924c, 1935), KANG and LEE (1964), OKADA (1956, 1967), PAPP (1973), ŠTAKELBERG (1970), TAKADA (1971).

Biology: COE (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), KANEKO and TOKUMITSU (1969), KANG et al. (1960), KIMURA (1976b, 1980a, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1965b), OKADA (1956), OLDENBERG (1914), PAPP (1979), TODA (1973a).

Distribution:

AUSTRIA: DUDA (1935), STROBL (1893b, 1894). — CZECHOSLOVAKIA: unpublished. — HUNGARY: DELY-DRASKOVITS and BABOS (1975), DELY-DRASKOVITS and PAPP (1973), SOÓS (1945). — ROMANIA: ARADI (1959), DUDA (1924c, 1935), OLDENBERG (1914), SOÓS (1945). — SWEDEN: unpublished. — USSR: DUDA (1935), FROLOWA (1926), HACKMAN (1957), PAPP (1979), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: COE (1959). — S. KOREA: KANG and LEE (1964), KANG et al. (1959, 1960), LEE (1966b). — JAPAN: KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KAWANISHI et al. (1975), KIMURA (1976b, 1980a, 1980b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), OKADA (1956, 1967), TAKADA (1968), TODA (1973a), WAKAHAMA (1964), WAKAHAMA et al. (1963).

Recorded also on the Ryukyu Islands and in Taiwan.

***Drosophila tsigana* BURLA and GLOOR, 1952**

General features of adults: BURLA and GLOOR (1952), NATER (1953).

Figures: BURLA and GLOOR (1952), NATER (1953).

Keys: ROCHA PITÉ (1975a).

Biology: HADORN et al. (1952).

Distribution:

FRANCE: BURLA and GLOOR (1952), HADORN et al. (1952), NATER (1953), ROCHA PITÉ and TSACAS (1979). — PORTUGAL: BURLA and GLOOR (1952), HADORN et al. (1952), ROCHA PITÉ (1972).

***Drosophila unimaculata* STROBL, 1893**

General features of adults: BASDEN (1961), BURLA (1951a), CZERNY (1903a), DUDA (1924c, 1935), HSU (1949), NATER (1953), OLDENBERG (1914), STROBL (1893b).

Figures: BASDEN (1961), DUDA (1924b, 1935), HSU (1949), NATER (1953), PAPP (1973).

Keys: BURLA (1951a), DUDA (1924a, 1924c, 1935), FONSECA (1965), PAPP (1973).

Development: BURLA (1951a).

Biology: BURLA (1951a), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DUDA (1924c), HERTING (1955), SCHMID (1968), TESCHNER (1961, 1962).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1935), STROBL (1893b, 1894, 1910). — CZECHOSLOVAKIA: ARADI (1959), SOÓS (1945). — GERMAN FEDERAL REPUBLIC: DUDA (1935), HERTING (1955), OLDENBERG (1914), TESCHNER (1961, 1962). — GREAT BRITAIN: FONSECA (1965). — HUNGARY: DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973), SOÓS (1945). — POLAND: DUDA (1924c, 1935). — ROMANIA: ARADI (1959), DUDA (1935), OLDENBERG (1914), PAPP (1973), SOÓS (1945). — SWITZERLAND: BÄCHLI (1972c, 1975b), BURLA (1948, 1951a), DUDA (1935), HSU (1949), NATER (1953), OLDENBERG (1914), SCHMID (1968). — YUGOSLAVIA: unpublished.

***Drosophila unipectinata* DUDA, 1924**

Other name used: *Drosophila* sp. like *unipectinata*.

General features of adults: BOOK and WHEELER (1972), DUDA (1924b, 1931), OKADA (1953b, 1954c, 1956, 1959, 1961b).

Figures: DUDA (1924a), OKADA (1954c, 1956).

Keys: DUDA (1924a), OKADA (1956).

Biology: OKADA (1956), SAITO et al. (1962).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: OKADA (1954c, 1956, 1959), SAITO et al. (1962).

Recorded also in Taiwan and India.

***Drosophila unispina* OKADA, 1956**

Other names used: *D. transversa* FALLÉN (misident.), *D. transversa* type C, *D. transversa* type III.

General features of adults: CHUNG and RHO (1959), KIM (1962), LEE (1964c), OKADA (1953b, 1955a, 1955b, 1956, 1961b), TAKADA (1952), WAKAHAMA (1956a).

Figures: BEPPU et al. (1977), KIM (1962), OKADA (1955a, 1956, 1968a), WAKAHAMA (1956a).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: OKADA (1963a, 1968a).

Biology: BEPPU (1976), BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1960), KANEKO and TOKUMITSU (1963, 1969), KANG et al. (1960), KATŌ (1954), KATŌ and HORI (1952), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1977), NOZAWA (1956), OKADA (1954d), SUZUKI (1955), TAKADA (1954, 1957, 1958), TODA (1973a, 1973b, 1973c, 1974, 1977), WAKAHAMA (1956b, 1957a, 1961, 1962b, 1964), WATABE (1979).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959, 1960, 1964a), KIM (1962, 1963), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976, 1978),

BEPPU and TODA (1976), ISHIHARA (1955a), KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1969), KATÔ (1954), KATÔ and HORI (1952, 1954), KAWANISHI (1978), KAWANISHI et al. (1975), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MIZUNO (1952), MOMMA (1957, 1965a), NOZAWA (1956), OKADA (1954d, 1955a, 1956, 1968a), SHIMA (1967), SUZUKI (1955), TAKADA (1952, 1954, 1957, 1958, 1968), TAKADA and OKADA (1960), TAKADA et al. (1953), TODA (1973a, 1973b, 1973c, 1974, 1977), TOKUMITSU et al. (1967), TOYOFUKU (1957), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1956a, 1956b, 1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963), WATABE (1979), WATABE and BEPPU (1977).

Drosophila virilis STURTEVANT, 1916

General features of adults: DE CASTRO (1953), CHINO (1936), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA (1972), KUROKAWA and HIHARA (1976), NATER (1953), OKADA (1953b, 1955a, 1956, 1961b), PATTERSON (1943), PENG (1937), STURTEVANT (1916, 1921), WATABE and HIGUCHI (1979).

Figures: BEPPU et al. (1977), CHINO (1936), HSU (1949), KIKKAWA and PENG (1938), KIM (1962), KUROKAWA (1972), MALOGOLOWIKIN (1953), MAYER (1935), NATER (1953), OKADA (1955a, 1956, 1968a), PATTERSON (1943), PATTERSON and STONE (1952), PENG (1937), STURTEVANT (1921), THROCKMORTON (1962), WATABE and HIGUCHI (1979).

Keys: BEPPU et al. (1977), DUDA (1927), KIKKAWA and PENG (1938), LEE (1964c), MONCLÚS (1976), OKADA (1956), PATTERSON (1943), PATTERSON and MAINLAND (1944), PENG (1937), STURTEVANT (1918, 1921), TAKADA (1971).

Development: HENNIG (1952), KIKKAWA and PENG (1938), MAYER (1935), OKADA (1963a, 1968a), PATTERSON (1943).

Biology: HACHIYA (1954), HUNTER (1966), KANEKO (1960), KANEKO et al. (1966), KIKKAWA and PENG (1938), KIMURA and TODA (1976), NOZAWA (1956), OHMORI et al. (1960), OKADA (1956, 1962), PATTERSON (1942), SAITO et al. (1962), SPIETH (1979), STURTEVANT (1921), TAKADA (1954, 1957, 1958), TAKADA and TOYOFUKU (1960), TAN et al. (1949), TODA (1973a), WAKAHAMA (1957a, 1961, 1962b, 1964).

Distribution:

NETHERLANDS: LAKOVAARA and HOIKKALA (1979). — SPAIN: MONCLÚS (1976). — TURKEY: ROCHA PITÉ and TSACAS (1980). — USSR: KIKKAWA and PENG (1938), LAKOVAARA and HOIKKALA (1979), WHEELER and HAMILTON (1972). — MADEIRA: unpublished. — CANARY IS.: MONCLÚS (1976). — CHINA: KIKKAWA and PENG (1938), PATTERSON and GRIFFEN (1944), PATTERSON and STONE (1952), PENG (1937), TAN et al. (1949), WARTERS (1944). — N. KOREA: KIKKAWA and PENG (1938), OKADA (1974b). — S. KOREA: CHUNG (1958, 1959), KANG et al. (1959, 1964a), KIKKAWA and PENG (1938), KIM (1962), LEE (1962, 1964c, 1966b), OKADA (1956), PAIK (1958), TAKADA and LEE (1958). — JAPAN: HACHIYA (1954), KANEKO (1960, 1968), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1968), KAWANISHI and WATANABE (1977), KIKKAWA and PENG (1938), KIMURA and TODA (1976), MOMMA (1954, 1957, 1965a), NOZAWA (1956), OHMORI et al. (1960), OKADA (1955a, 1956, 1962, 1968a), PATTERSON and STONE (1952), SAITO et al. (1962), SHIMA (1960), TAKADA (1952, 1954, 1957, 1958, 1968, 1971), TAKADA and OKADA (1960), TAKAHASHI and KANEKO (1969), TODA (1973a), TOYOFUKU (1957), TOYOFUKU and KIMURA (1960, 1961), TSUNO (1973), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WARTERS (1944).
Recorded also in America.

Drosophila yakushimana OKADA, 1967

General features of adults: OKADA (1967).

Figures: OKADA (1967).

Key: OKADA (1967).

Distribution:

JAPAN: OKADA (1967).

Gitona MEIGEN, 1830

Gitona beckeri DUDA, 1924

General features of adults: DUDA (1934).

Figures: DUDA (1924a, 1934).

Keys: DUDA (1924a, 1934), MCALPINE (1968).

Distribution:

CHINA: DUDA (1924a, 1934).

Gitona canariensis DUDA, 1934

General features of adults: DUDA (1934), SÉGUY (1941).

Key: DUDA (1934).

Distribution:

CANARY IS.: DUDA (1934), FREY (1936), MONCLÚS (1976), TSACAS and DESMIER DE CHENON (1976)

Gitona distans BEZZI, 1924

General features of adults: BASDEN (1966), BEZZI (1924a).

Figures: BEZZI (1924a).

Biology: BEZZI (1924a).

Distribution:

CYPRUS: BEZZI (1924a).

Recorded also in Pakistan.

***Gitona distigma* MEIGEN, 1830**

General features of adults: BEZZI (1924a), COLLIN (1902a), DUDA (1934), LANGHOFFER (1897), LOEW (1864), MACQUART (1835), MEIGEN (1830), NEUHAUS (1886), OKADA (1973c), OLDENBERG (1914), SÉGUY (1933a, 1934a, 1934b).

Figures: BEZZI (1924a), DUDA (1924a, 1934), FRAUENFELD (1868b), LIOY (1895), OKADA (1973c), PAPP (1973), SÉGUY (1934b), ŠTAKELBERG (1970).

Keys: DUDA (1924a, 1934), ENDERLEIN (1936), LAŠTOVKA and MÁCA (1977), PAPP (1973), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970).

Biology: BRAUER (1883), DOSKOČIL (1962), DUDA (1934), KALTENBACH (1874), KNAB (1914), LANGHOFFER (1897), SCHOLTZ (1848/50), SÉGUY (1933b, 1934a, 1934b, 1951), STURTEVANT (1921), TIEF (1888), WHEELER (1952), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: ARADI (1959), BASDEN (1961), SCHINER (1864), STROBL (1894), TIEF (1888). — CZECHOSLOVAKIA: CZIŽEK (1906, 1910), DOSKOČIL (1962), LAŠTOVKA and MÁCA (1977), VIMMER (1913), ZUSKA and LAŠTOVKA (1969). — FRANCE: MACQUART (1835), MEIGEN (1830), SÉGUY (1934a, 1934b). — GERMAN DEMOCRATIC REPUBLIC: DUDA (1934), NEUHAUS (1886), OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: unpublished. — HUNGARY: ARADI (1959), PAPP (1973), SOÓS (1943), THALHAMMER (1899). — ITALY: BEZZI (1924a), LIOY (1895), OLDENBERG (1914). — POLAND: SCHOLTZ (1848/50). — ROMANIA: ARADI (1959). — SPAIN: CZERNY and STROBL (1909). — SWITZERLAND: unpublished. — USSR: DUDA (1934), ŠTAKELBERG (1970). — YUGOSLAVIA: COB (1959), LANGHOFFER (1897), STROBL (1898a, 1900a), THALHAMMER (1899). — CHINA: SÉGUY (1934a, 1934b). — MONGOLIA: OKADA (1973c).

***Gitona microchaeta* SÉGUY, 1941**

General features of adults: SÉGUY (1941).

Distribution:

MOROCCO: SÉGUY (1941), TSACAS and DESMIER DE CHENON (1976).

Hypselothyrea* DE MEIJERE, 1906**Hypselothyrea breviscutellata* DUDA, 1928**

General features of adults: DUDA (1928), GUPTA (1974b), OKADA (1956, 1961b).

Figures: DUDA (1928), OKADA (1956).

Keys: DUDA (1928), OKADA (1956).

Biology: OKADA (1956).

Distribution:

JAPAN: OKADA (1956).

Recorded also in Taiwan.

Leucophenga* MIK, 1886**Leucophenga angusta* OKADA, 1956**

Other names used: *L. nigriventris* MACQUART (misident.), *L. nigripalpis* DUDA (misident.), *L. guttiventris* DE MEIJERE (misident.), *Leucophenga* sp.

General features of adults: BOCK (1979), BOHART and GRESSITT (1951), LIN and WHEELER (1972), OKADA (1956, 1966a, 1970), WHEELER and TAKADA (1964).

Figures: LIN and WHEELER (1972), OKADA (1956, 1966a, 1970), WHEELER and TAKADA (1964).

Keys: BEPPU et al. (1977), BOCK (1979), OKADA (1956, 1970), WHEELER and TAKADA (1964).

Biology: BOHART and GRESSITT (1951), OKADA (1956), WAKAHAMA (1962b, 1964).

Distribution:

JAPAN: KAWANISHI (1978), LIN and WHEELER (1972), OKADA (1956, 1965, 1966a), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966).

Recorded also in South Asia, Australia and on some Pacific Islands.

***Leucophenga atrinervis* OKADA, 1968**

Other names used: *L. nigrinervis* DUDA (misident.), *Leucophenga* sp.

General features of adults: OKADA (1968c).

Figures: OKADA (1968a, 1968c).

Development: OKADA (1963a, 1968a).

Biology: OKADA (1968a).

Distribution:

JAPAN: OKADA (1968a, 1968c).

***Leucophenga bellula* BERGROTH, 1894**

Other names used: *L. guttiventris* DE MEIJERE (syn.), *L. maculiventris* DE MEIJERE (syn.).

General features of adults: BERGROTH (1894), BOCK (1979), BURLA (1954a), DUDA (1923, 1939), GUPTA (1970), LIN and WHEELER (1972), MALLOCH (1923a), DE MEIJERE (1908, 1911b, 1918b), OKADA (1956, 1966a, 1970, 1971e).

Figures: BOCK (1979), DUDA (1924a), DE MEIJERE (1908), OKADA (1956, 1966a, 1970).

Keys: BOCK (1979), DUDA (1924a, 1939), DE MEIJERE (1908), OKADA (1956, 1966a, 1970), SINGH and GUPTA (1974).
Biology: OKADA (1956).

Distribution:

JAPAN: KAWANISHI (1978), OKADA (1956, 1966a, 1970).

Recorded mainly in South Asia and Australia.

Leucophenga concilia OKADA, 1956

General features of adults: KANG et al. (1965a), KIM (1962), OKADA (1956, 1968c).

Figures: KIM (1962), OKADA (1956, 1968c).

Keys: LEE (1964c), OKADA (1956).

Biology: OKADA (1956), WAKAHAMA (1962b, 1964).

Distribution:

S. KOREA: KANG et al. (1958, 1959), KIM (1962), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). —

JAPAN: KAWANISHI (1978), OKADA (1956, 1966b, 1968c), WAKAHAMA (1962a, 1962b, 1962c, 1964, 1966).

Recorded also on the Ryukyu Islands.

Leucophenga interrupta DUDA, 1923

General features of adults: DUDA (1924b), LIN and WHEELER (1972), OKADA (1956), SINGH and GUPTA (1974).

Figures: DUDA (1924a), LIN and WHEELER (1972), OKADA (1956), SINGH and GUPTA (1974).

Keys: DUDA (1924a, 1939), OKADA (1956), SINGH and GUPTA (1974).

Biology: OKADA (1954, 1956).

Distribution:

JAPAN: OKADA (1954d, 1956, 1964).

Recorded mainly in South Asia.

Leucophenga lacteusa TAKADA and WAKAHAMA, 1967

General features of adults: TAKADA and WAKAHAMA (1967).

Figures: TAKADA and WAKAHAMA (1967).

Distribution:

JAPAN: OKADA (1968c).

Recorded also on the Ryukyu Islands.

Leucophenga maculata DUFOUR, 1839

Other name used: *Leucophenga* sp. from Hokkaido.

General features of adults: BASDEN (1957b), DUDA (1923, 1924c, 1934), DUFOUR (1839), KIM (1962), KUROKAWA and HIHARA (1976), LAMB (1914), LIN and WHEELER (1972), DE MEIJERE (1911b), MIK (1886a), OKADA (1956), OLDENBERG (1914), SÉGUY (1934a, 1934b), SHARP (1900), STROBL (1893b, 1894), TAKADA and WAKAHAMA (1967), WAHLBERG (1927), ZETTERSTEDT (1847, 1860).

Figures: BEPPU et al. (1977), DUDA (1934), DUFOUR (1839, 1845), HENNIG (1952, 1958), KIM (1962), LAŠTOVKA and MÁČA (1977), LIN and WHEELER (1972), OKADA (1956), PAPP (1973), SÉGUY (1934b).

Keys: BEPPU et al. (1977), DUDA (1924a, 1934, 1939), ENDERLEIN (1936), FONSECA (1965), LAŠTOVKA and MÁČA (1977), LEE (1964c), OKADA (1956), PAPP (1973), SCHINER (1864), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), TAKADA (1971), WAHLBERG (1927).

Development: DUDA (1934), DUFOUR (1839, 1840, 1845, 1846), HENNIG (1952), MAYER (1935), OKADA (1968a).

Biology: BRAUER (1883), BUXTON (1960), CANZANELLI (1941), COLYER and HAMMOND (1951), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), DUFOUR (1839, 1840, 1845), KANEKO and TOKUMITSU (1969), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), KIRCHBERG (1960), MÁČA (1978), MAYER (1935), MINAMI et al. (1979), MOMMA (1957), OKADA (1954d, 1962), OLDENBERG (1922), RINGDAHL (1949), SCHMID (1968), SCHULZE (1912), SÉGUY (1934a, 1934b), TODA (1973a, 1977).

Distribution:

AUSTRIA: BASDEN (1961), MIK (1886a), RINGDAHL (1957), STROBL (1894, 1901), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), LAŠTOVKA and MÁČA (1977), MÁČA (1978), VIMMER (1913). — FRANCE: DUFOUR (1839, 1840, 1845), SÉGUY (1934a, 1934b), ZETTERSTEDT (1847). — GERMAN DEMOCRATIC REPUBLIC: KIRCHBERG (1960), OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: KRÖBER (1910, 1935), OLDENBERG (1922). — GREAT BRITAIN: AUDCENT (1950), BUXTON (1960), FONSECA (1965), SHARP (1900). — HUNGARY: ARADI (1959), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973). — ITALY: BEZZI (1892b), CANZANELLI (1941), OLDENBERG (1914), POKORNY (1887), SCHINER (1864). — POLAND: RIEDEL (1930). — ROMANIA: ARADI (1959), OLDENBERG (1914), THALHAMMER (1899). — SPAIN: HACKMAN (1969a). — SWEDEN: RINGDAHL (1949), WAHLBERG (1927), ZETTERSTEDT (1860). — SWITZERLAND: BÄCHLI (1972c, 1973a, 1973c, 1974c, 1975a, 1975b, 1979), BURLA (1951a), SCHMID (1968). — TURKEY: unpublished. — USSR: ŠTAKELBERG (1970). — YUGOSLAVIA: BASDEN (1961), COE (1959), STROBL (1894, 1898a, 1900a). — S. KOREA: KANG et al. (1958, 1959, 1964a), KIM (1962), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: KANEKO (1960), KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KAWANISHI (1978), KAWANISHI et al. (1975), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965a), OKADA (1954d, 1956, 1962), TAKADA (1968), TODA (1973a, 1977), WAKAHAMA (1962a, 1964, 1966). Recorded also in Taiwan.

Leucophenga orientalis LIN and WHEELER, 1972

Other name used: *L. magnipalpis* DUDA (misident.).

General features of adults: KUROKAWA and HIHARA (1976), KIM (1962), LIN and WHEELER (1972), OKADA (1956, 1961a, 1970, 1971e), WAKAHAMA (1956a).

Figures: KIM (1962), LIN and WHEELER (1972), OKADA (1956, 1970), WAKAHAMA (1956a).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956, 1970), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976a), MOMMA (1957), WAKAHAMA (1962b, 1964).

Distribution:

S. KOREA: CHUNG (1960a), KANG et al. (1958, 1959), KIM (1962, 1963), LEE (1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: KANEKO and TOKUMITSU (1969), KAWANISHI (1978), KAWANISHI et al. (1975), KIMURA (1976a), LIN and WHEELER (1972), MOMMA (1957, 1965a), OKADA (1956, 1966b), TAKADA (1968), WAKAHAMA (1956a, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963).

Recorded also on the Ryukyu and Bonin Islands and in Taiwan.

Leucophenga ornata WHEELER, 1959

Other name used: *L. ornatipennis* DE MEIJERE (syn.).

General features of adults: BASDEN (1957b), BOCK (1979), KIM (1962), KUOKAWA and HIHARA (1976), LIN and WHEELER (1972), DE MEIJERE (1914), OKADA (1953a, 1956, 1961a, 1968c).

Figures: BOCK (1979), DUDA (1924a), KIM (1962), DE MEIJERE (1914), OKADA (1956, 1968c).

Keys: BOCK (1979), DUDA (1924a), LEE (1964c), DE MEIJERE (1914), OKADA (1956, 1966a).

Biology: BEPPU (1976), KIMURA (1976a), OKADA (1956, 1964), WAKAHAMA (1961, 1962b, 1964).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: BEPPU (1976), KAWANISHI (1978), KAWANISHI et al. (1975), KIMURA (1976a), LIN and WHEELER (1972), OKADA (1956, 1966b, 1968c), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964).

Recorded mainly in South Asia and Australia.

Leucophenga quadripunctata DE MEIJERE, 1908

General features of adults: BOCK (1979), DE MEIJERE (1908), OKADA (1956), TAKADA and MOMMA (1975).

Figures: BOCK (1979), DUDA (1924a), DE MEIJERE (1908), OKADA (1956).

Keys: BOCK (1979), DUDA (1924a, 1939), DE MEIJERE (1908), OKADA (1956).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: OKADA (1956).

Recorded mainly in South Asia and Australia.

Leucophenga quinque maculata STROBL, 1893

Other name used: *L. quinque maculata* var. *marginalis* OLDENBERG.

General features of adults: BASDEN (1961), DUDA (1934), OKADA (1956), OLDENBERG (1914), STROBL (1893b), TAKADA and LEE (1958), WHEELER (1952).

Figures: DUDA (1924a, 1934), PAPP (1973).

Keys: DUDA (1924a, 1934, 1939), ENDERLEIN (1936), PAPP (1973), ŠTAKELBERG (1970).

Biology: PAPP (1979).

Distribution:

AUSTRIA: DUDA (1934), STROBL (1893b, 1894). — FINLAND: FREY (1929). — ITALY: OLDENBERG (1914). — POLAND: DUDA (1934). — SWEDEN: unpublished. — SWITZERLAND: BÄCHLI (1975b). — USSR: PAPP (1979), ŠTAKELBERG (1970).

Leucophenga quinque maculipennis OKADA, 1956

Other names used: *Leucophenga* sp., *L. quinque maculata* STROBL (lapsus).

General features of adults: KIM (1962), OKADA (1956, 1968c), TAKADA (1960), TAKADA and LEE (1958).

Figures: KIM (1962), OKADA (1968a, 1968c), TAKADA (1960).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956), TAKADA (1971).

Development: OKADA (1968a).

Biology: BEPPU (1976), KANEKO and TOKUMITSU (1969), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965b), OKADA (1954d), SUZUKI (1955), TAKADA (1960), TODA (1973a, 1973b, 1977).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG and RHO (1959), KANG et al. (1959), KIM (1962), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: BEPPU (1976), BEPPU and TODA (1976), KANEKO and TOKUMITSU (1969), KANEKO et al. (1969), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965b), OKADA (1954d, 1956, 1968a, 1968c), SUZUKI (1955), TAKADA (1960, 1968), TODA (1973a, 1973b, 1977), WAKAHAMA (1964), WAKAHAMA et al. (1964).

Leucophenga saigusai OKADA, 1968

General features of adults: OKADA (1968c).

Figures: OKADA (1968c).

Distribution:

JAPAN: OKADA (1968c).

Leucophenga sorii KANG, LEE and BAHNG, 1965

General features of adults: KANG et al. (1965a).

Figures: BEPPU et al. (1977), KANG et al. (1965a).

Key: BEPPU et al. (1977).

Biology: KANG et al. (1965).

Distribution:

S. KOREA: KANG et al. (1965a), LEE (1966b). — JAPAN: BEPPU et al. (1977).

***Leucophenga stackelbergi* DUDA, 1934**

General features of adults: DUDA (1934).

Key: DUDA (1934).

Distribution:

USSR: DUDA (1934).

***Leucophenga stenomaculipennis* OKADA, 1968**

General features of adults: OKADA (1968c).

Figures: OKADA (1968c).

Biology: KIMURA (1976b), TODA (1974).

Distribution:

JAPAN: KIMURA (1976b), OKADA (1968c), TODA (1974).

***Leucophenga subpollinosa* DE MEIJERE, 1914**

General features of adults: BÄCHLI (1971, 1973b), BOCK (1979), DUDA (1926a), GUPTA (1974b), LIN and WHEELER (1972), DE MEIJERE (1914), OKADA (1956, 1966a), WHEELER and TAKADA (1964).

Figures: BÄCHLI (1971), BOCK (1979), DUDA (1924a), GUPTA (1974b), OKADA (1956).

Keys: BÄCHLI (1971), BOCK (1979), DUDA (1924, 1939), DE MEIJERE (1914), OKADA (1956, 1966), SINGH and GUPTA (1974), WHEELER and TAKADA (1964).

Biology: LACHAISE (1975).

Distribution:

JAPAN: OKADA (1956).

Recorded mainly in Old World tropics and Australia.

Liodrosophila* DUDA, 1922**Liodrosophila aerea* OKADA, 1956**

Other names used: *Paramycodrosophila* sp., *L. rugulosa* DE MEIJERE (misident.).

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1953a, 1955b, 1956, 1961a, 1965, 1968d, 1974a), OKADA and CHUNG (1960).

Figures: OKADA (1956, 1965, 1968a, 1968d, 1974a).

Keys: BEPPU et al. (1977), OKADA (1965, 1974a), TAKADA (1971).

Development: OKADA (1963a, 1968a).

Biology: OKADA (1956).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: KANEKO and SHIMA (1962), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), OKADA (1956, 1966b, 1968a, 1974a), WAKAHAMA (1962a, 1964, 1966).

Recorded also in Southeast Asia.

***Liodrosophila bicolor* OKADA, 1956**

General features of adults: OKADA (1956, 1965, 1968d, 1974a).

Figures: OKADA (1956, 1965, 1968d, 1974a).

Keys: OKADA (1965, 1974a).

Biology: OKADA (1956).

Distribution:

JAPAN: OKADA (1956).

Recorded also on the Ryukyu Islands.

***Liodrosophila castanea* OKADA and CHUNG, 1960**

General features of adults: OKADA (1974a), OKADA and CHUNG (1960).

Figures: LEE (1964c), OKADA (1974a), OKADA and CHUNG (1960).

Keys: LEE (1964c), OKADA (1974a).

Development: LEE (1964c).

Biology: OKADA and CHUNG (1960).

Distribution:

S. KOREA: CHUNG (1959), LEE (1964c, 1966b), OKADA and CHUNG (1960).

***Liodrosophila nitida* DUDA, 1922**

General features of adults: DUDA (1922, 1926a), OKADA (1964, 1966a, 1974a).

Figures: DUDA (1924a), OKADA (1964, 1966a, 1974a).

Keys: DUDA (1922), OKADA (1966a, 1974a).

Distribution:

JAPAN: OKADA (1974a).

Recorded mainly in Southeast Asia.

Microdrosophila* MALLOCH, 1921**Microdrosophila congesta* ZETTERSTEDT, 1847**

General features of adults: BASDEN (1957b), BOHART and GRESSITT (1951), DUDA (1923, 1924c, 1926a, 1927, 1934), OKADA (1960b), WAHLGREN (1927), ZETTERSTEDT (1847).

Figures: DUDA (1924a, 1934), LAŠTOVKA and MÁCA (1977).

Keys: BOHART and GRESSITT (1951), DUDA (1924a, 1924c, 1926a, 1927, 1934), ENDERLEIN (1936), LAŠTOVKA and MÁCA (1977), WAHLGREN (1927).

Biology: BOHART and GRESSITT (1951), SCHMID (1968).

Distribution:

AUSTRIA: unpublished. — POLAND: DUDA (1924c, 1934). — SWEDEN: DUDA (1924c), WAHLGREN (1927), ZETTERSTEDT (1847). — SWITZERLAND: SCHMID (1968). — USSR: ŠTAKELBERG (1930).

Recorded also in Southeast Asia.

Comment:

Records outside of Europe may refer to other species.

***Microdrosophila cristata* OKADA, 1960**

General features of adults: KUROKAWA and HIHARA (1976), LEE and LEE (1967), OKADA (1960b, 1961a, 1966a, 1968b, 1968c).

Figures: BEPPU et al. (1977), LEE and LEE (1967), OKADA (1960b, 1968a, 1968b, 1968c).

Keys: BEPPU et al. (1977), OKADA (1960b), TAKADA (1971).

Development: OKADA (1968a).

Biology: KANEKO and TOKUMITSU (1969).

Distribution:

S. KOREA: LEE and LEE (1967). — JAPAN: KANEKO and TOKUMITSU (1969), KANEKO et al. (1968, 1969), KAWANISHI et al. (1975), OKADA (1960b, 1968a).

Recorded also in Taiwan.

***Microdrosophila fuscata* OKADA, 1960**

General features of adults: OKADA (1960b, 1968b), LEE and LEE (1967).

Figures: OKADA (1960b, 1968b).

Keys: LEE (1964c), OKADA (1960b).

Biology: OKADA (1960b).

Distribution:

S. KOREA: LEE (1964a, 1964c, 1966b). — JAPAN: KAWANISHI (1978), OKADA (1960b, 1966b).

***Microdrosophila latifrons* OKADA, 1965**

General features of adults: LEE and LEE (1967), OKADA (1965).

Figures: LEE and LEE (1967), OKADA (1965).

Key: OKADA (1965).

Distribution:

S. KOREA: LEE and LEE (1967).

Recorded also on the Ryukyu Islands.

***Microdrosophila maculata* OKADA, 1960**

General features of adults: OKADA (1960b, 1961a, 1966a, 1968b, 1968c).

Figures: OKADA (1960b, 1968b, 1968c).

Key: OKADA (1960b).

Biology: OKADA (1960).

Distribution:

JAPAN: OKADA (1960b).

***Microdrosophila matsudairai* OKADA, 1960**

General features of adults: LEE and LEE (1967), OKADA (1960b, 1968a, 1968b, 1968c).

Figures: LEE (1964a), OKADA (1960b, 1968a, 1968b).

Keys: LEE (1964c), OKADA (1960b, 1965).

Development: LEE (1964a), OKADA (1968a).

Biology: OKADA (1960b, 1968a).

Distribution:

S. KOREA: LEE (1964a, 1964c, 1966b). — JAPAN: KAWANISHI (1978), OKADA (1960b, 1968a).

Recorded also on the Ryukyu Islands.

***Microdrosophila nigripalpis* OKADA, 1966**

General features of adults: OKADA (1966a, 1968b, 1968c).

Figures: OKADA (1966a, 1968b, 1968c).

Key: OKADA (1966a).

Distribution:

JAPAN: OKADA (1968c).

Recorded also in Nepal.

***Microdrosophila pleurolineata* WHEELER and TAKADA, 1964**

General features of adults: OKADA (1965, 1968b, 1968c), WHEELER and TAKADA (1964).

Figures: OKADA (1965, 1968b, 1968c), TAKADA (1966), WHEELER and TAKADA (1964).

Keys: OKADA (1965), WHEELER and TAKADA (1964).

Distribution:

JAPAN: OKADA (1977b).

Recorded also in Southeast Asia and Micronesia.

***Microdrosophila pseudopleurolineata* OKADA, 1968**

General features of adults: OKADA (1968c).

Figures: OKADA (1968c).

Biology: OKADA (1968c).

Distribution:

JAPAN: OKADA (1968c).

Recorded also on the Ryukyu Islands.

***Microdrosophila purpurata* OKADA, 1956**

General features of adults: KUROKAWA and HIHARA (1976), OKADA (1956, 1960b, 1961a, 1966a, 1968b, 1968c).

Figures: OKADA (1956, 1968a, 1968b, 1968c).

Keys: LEE (1964c), OKADA (1956, 1960b).

Development: OKADA (1968a).

Biology: LEE (1962), OKADA (1956, 1968a).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1960a), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JA-

PAN: KAWANISHI (1978), KAWANISHI et al. (1975), OKADA (1956, 1966b, 1968a), WAKAHAMA (1966).

Recorded also in India.

***Microdrosophila urashimae* OKADA, 1960**

Other name used: *M. congesta* ZETTERSTEDT (misident.).

General features of adults: OKADA (1956, 1960b, 1961a, 1968b), OKADA and KUROKAWA (1957).

Figures: OKADA (1956, 1968a, 1968b), OKADA and KUROKAWA (1957).

Keys: LEE (1964c), OKADA (1956, 1960b).

Development: OKADA (1956, 1963a, 1968a).

Biology: OKADA (1956, 1968a), OKADA and KUROKAWA (1957).

Distribution:

S. KOREA: LEE (1964a, 1964c, 1966b). — JAPAN: OKADA (1956, 1960b, 1966b, 1968a), OKADA and KUROKAWA (1957).

Recorded also in Taiwan.

***Microdrosophila zetterstedti* WHEELER, 1959**

Other name used: *M. nigriventris* ZETTERSTEDT (syn.).

General features of adults: BASDEN (1961), DUDA (1934), OKADA (1960b), ZETTERSTEDT (1847).

Figures: BASDEN (1961), DUDA (1934).

Keys: DUDA (1934), HACKMAN (1954), ŠTAKELBERG (1970), ZETTERSTEDT (1847).

Distribution:

AUSTRIA: BASDEN (1961). — FINLAND: HACKMAN (1954). — NORWAY: unpublished. — SWEDEN: ZETTERSTEDT

(1847). — USSR: DUDA (1934), ŠTAKELBERG (1970).

***Mycodrosophila* OLDENBERG, 1914**

***Mycodrosophila atrithorax* OKADA, 1968**

General features of adults: OKADA (1968d).

Figures: OKADA (1968d).

Distribution:

JAPAN: OKADA (1968d).

***Mycodrosophila basalis* OKADA, 1956**

General features of adults: OKADA (1956).

Figures: OKADA (1956).

Keys: LEE (1964c), OKADA (1956).

Biology: LEE (1964), OKADA (1956).

Distribution:

S. KOREA: CHUNG (1958), KANG et al. (1959), LEE (1962, 1964c, 1966b), TAKADA and LEE (1958). — JAPAN: OKADA (1956).

***Mycodrosophila biceps* KANG, LEE and BAHNG, 1966**

General features of adults: KANG et al. (1966), OKADA (1968d).
 Figures: KANG et al. (1966), OKADA (1968d).
 Biology: KANG et al. (1966).
 Distribution:
 S. KOREA: KANG et al. (1966), LEE (1966b). — JAPAN: OKADA (1968d).

***Mycodrosophila bifibulata* TAKADA, 1968**

General features of adults: TAKADA (1968).
 Figures: TAKADA (1968).
 Keys: BEPPU et al. (1977), TAKADA (1971).
 Biology: KIMURA (1976a), KIMURA and TODA (1976), TAKADA (1968).
 Distribution:
 JAPAN: KIMURA (1976a), KIMURA and TODA (1976), TAKADA (1968).

***Mycodrosophila erecta* OKADA, 1968**

Other name used: *Mycodrosophila* sp. from Kirishimayama.
 General features of adults: LIN and TING (1971), OKADA (1956, 1968d).
 Figures: OKADA (1956, 1968d).
 Key: OKADA (1956).
 Biology: OKADA (1956).
 Distribution:
 S. KOREA: KANG et al. (1959). — JAPAN: OKADA (1956, 1968d).
 Recorded also on the Ryukyu Islands.

***Mycodrosophila gratiosa* DE MEIJERE, 1911**

Other names used: *M. fracticosta* LAMB (syn.), *M. biroï* DUDA (syn.), *M. splendida* OKADA (syn.).
 General features of adults: BURLA (1954a), DUDA (1923, 1939), GUPTA (1974b), LAMB (1914), MALLOCH (1933), DE MEIJERE (1911b), OKADA (1956, 1961a, 1965, 1971e), WHEELER and TAKADA (1964).
 Figures: BURLA (1954a), GUPTA (1974b), LAMB (1914), OKADA (1956, 1968a, 1971e), WHEELER and TAKADA (1964).
 Keys: BEPPU et al. (1977), BURLA (1954a), DUDA (1924a), LEE (1964c), MALLOCH (1934b), DE MEIJERE (1911b), WHEELER and TAKADA (1964).
 Development: OKADA (1963a, 1968a).
 Biology: BURLA (1954a), OKADA (1956, 1968a), TODA (1976), WAKAHAMA (1961, 1962b, 1964).
 Distribution:
 S. KOREA: CHUNG (1959), KANG et al. (1959), KIM (1963), LEE (1964c, 1966b). — JAPAN: OKADA (1956, 1966b, 1968a), WAKAHAMA (1961, 1962a, 1962b, 1962c, 1964, 1966).
 Recorded mainly in Old World tropics.

***Mycodrosophila japonica* OKADA, 1956**

Other name used: *Mycodrosophila* sp. I.
 General features of adults: OKADA (1956, 1961a, 1968d).
 Figures: OKADA (1956, 1968d).
 Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956), TAKADA (1971).
 Biology: KIMURA (1976b), MOMMA (1957, 1965b), OKADA (1956), SUZUKI (1955).
 Distribution:
 S. KOREA: KANG et al. (1959), LEE (1959, 1964c, 1966b). — JAPAN: KIMURA (1976b), MOMMA (1957, 1965b), OKADA (1956, 1966b, 1968d), SUZUKI (1955), WAKAHAMA (1964).

***Mycodrosophila koreana* LEE and TAKADA, 1959**

Other name used: *Mycodrosophila* sp.
 General features of adults: KANG et al. (1964a, 1965a), KIM (1962), LEE and TAKADA (1959).
 Figures: KIM (1962), LEE (1964c), LEE and TAKADA (1959).
 Key: LEE (1964c).
 Development: LEE (1964c).
 Biology: LEE (1962, 1964c), LEE and TAKADA (1959).
 Distribution:
 S. KOREA: KIM (1962, 1963), LEE (1962, 1964c, 1966b), LEE and TAKADA (1959), TAKADA and LEE (1958). — JAPAN: LEE and TAKADA (1959).

***Mycodrosophila nigropteroptera* KANG, LEE and BAHNG, 1965**

General features of adults: KANG et al. (1965a, 1966).
 Figures: KANG et al. (1965a).
 Biology: KANG et al. (1965a).
 Distribution:
 S. KOREA: KANG et al. (1965a), LEE (1966b).

***Mycodrosophila palmata* OKADA, 1956**

General features of adults: LEE and TAKADA (1959), OKADA (1956).

Figures: OKADA (1956).

Key: OKADA (1956).

Biology: OKADA (1956).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: OKADA (1956).

***Mycodrosophila planipalpis* KANG, LEE and BAHNG, 1966**

General features of adults: KANG et al. (1966), OKADA (1968d).

Figures: KANG et al. (1966), OKADA (1968d).

Biology: KANG et al. (1966).

Distribution:

S. KOREA: KANG et al. (1966), LEE (1966b). — JAPAN: OKADA (1968d).

***Mycodrosophila poecilogastra* LOEW, 1874**

Other names used: *M. johni* POKORNY (syn.), *Mycodrosophila* sp. II.

General features of adults: BADEN (1957b), DUDA (1934, 1939), HENNIG (1958), LEE and TAKADA (1959), LOEW (1874), OKADA (1953a, 1956, 1961a), OLDENBERG (1914), POKORNY (1896), SÉGUY (1934b).

Figures: DUDA (1924a, 1934), OKADA (1956, 1968a), PAPP (1973).

Keys: BEPPU et al. (1977), DUDA (1924a, 1934), ENDERLEIN (1936), LAŠTOVKA and MÁCA (1977), LEE (1964c), OKADA (1956), PAPP (1973), SÉGUY (1934b), ŠTAKELBERG (1970), TAKADA (1971).

Development: OKADA (1968a).

Biology: COE (1959), KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), MOMMA (1957, 1965b), OKADA (1954d, 1956, 1968a), STURTEVANT (1921), SUZUKI (1955).

Distribution:

AUSTRIA: unpublished. — CZECHOSLOVAKIA: unpublished. — HUNGARY: ARADI (1959), PAPP (1973). — ROMANIA: ARADI (1959), DUDA (1934), OLDENBERG (1914). — USSR: ŠTAKELBERG (1970). — YUGOSLAVIA: ARADI (1959), COE (1959), POKORNY (1896), THALHAMMER (1899). — IRAN: DUDA (1934), LOEW (1874). — S. KOREA: CHUNG (1958), KANG et al. (1958, 1959, 1964a, 1966), LEE (1964c, 1966b), PAIK (1958). — JAPAN: KIMURA (1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MOMMA (1957, 1965b), OKADA (1954d, 1956, 1966b, 1968a), SUZUKI (1955), TAKADA (1968), WAKAHAMA (1962a, 1964, 1966).

***Mycodrosophila setipalpis* OKADA, 1956**

General features of adults: OKADA (1956, 1961a).

Figures: OKADA (1956).

Key: OKADA (1956).

Biology: OKADA (1956).

Distribution:

JAPAN: OKADA (1956).

***Mycodrosophila shikokuana* OKADA, 1956**

General features of adults: OKADA (1956, 1968d).

Figures: BEPPU et al. (1977), OKADA (1956, 1968d), TAKADA (1960).

Keys: BEPPU et al. (1977), LEE (1964c), OKADA (1956), TAKADA (1971).

Biology: KIMURA (1976b), OKADA (1956), TAKADA (1960).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1964c, 1966b). — JAPAN: KIMURA (1976b), MOMMA (1965a), OKADA (1956, 1968d), TAKADA (1960), WAKAHAMA (1964).

***Mycodrosophila takachihonis* OKADA, 1956**

General features of adults: OKADA (1956, 1961a, 1968d).

Figures: BEPPU et al. (1977), OKADA (1956, 1968d), TAKADA (1960).

Keys: BEPPU et al. (1977), OKADA (1956), TAKADA (1971).

Biology: OKADA (1956), TAKADA (1960).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: OKADA (1956, 1964, 1968d), TAKADA (1960), WAKAHAMA (1964). Recorded also on the Ryukyu Islands.

Nesiodrosophila* WHEELER and TAKADA, 1964**Nesiodrosophila magnidentata* LEE, 1964**

General features of adults: LEE (1964a, 1964c).

Figures: LEE (1964a, 1964c).

Key: LEE (1964c).

Distribution:

S. KOREA: LEE (1964a, 1964c, 1966b).

***Nesiodrosophila quelpartiensis* KANG, LEE and BAHNG, 1967**

General features of adults: KANG et al. (1967).

Figures: KANG et al. (1967).

Distribution:

S. KOREA: KANG et al. (1967).

***Nesiodrosophila raridentata* OKADA and CHUNG, 1960**

General features of adults: LEE (1964a, 1964c), OKADA (1966a), OKADA and CHUNG (1960), TAKADA et al. (1979), WAKAHAMA et al. (1963).

Figures: BEPPU et al. (1977), LEE (1964c), OKADA (1966a), OKADA and CHUNG (1960).

Keys: BEPPU et al. (1977), LEE (1964), OKADA (1966a), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), OKADA and CHUNG (1960).

Distribution:

S. KOREA: LEE (1964c, 1966b), OKADA and CHUNG (1960). — JAPAN: KANEKO and TOKUMITSU (1969), KAWANISHI et al. (1975), WAKAHAMA (1964), WAKAHAMA et al. (1964).

Recorded also in Nepal.

***Nesiodrosophila sufflava* TAKADA, BEPPU and TODA, 1979**

Other name used: *Drosophila* sp. 8.

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Biology: MINAMI et al. (1979).

Distribution:

JAPAN: MINAMI et al. (1979), TAKADA et al. (1979).

***Nesiodrosophila surukella* OKADA, 1965**

Other name used: *N. clypeonigra* OKADA (syn.).

General features of adults: OKADA (1965, 1968d).

Figures: OKADA (1965, 1968d).

Distribution:

JAPAN: KAWANISHI et al. (1975), OKADA (1968d).

Recorded also on the Ryukyu Islands.

Paraleucophenga* HENDEL, 1914**Paraleucophenga argentosa* OKADA, 1956**

General features of adults: KIM (1962), KUROKAWA and HIHARA (1976), OKADA (1956, 1968c).

Figures: KIM (1962), OKADA (1956, 1968c).

Keys: LEE (1964c), OKADA (1956).

Biology: OKADA (1956), WAKAHAMA (1962b, 1964).

Distribution:

S. KOREA: CHUNG and RHO (1960), KANG et al. (1958, 1959), KIM (1962), LEE (1962, 1964c, 1966b), PAIK (1958), TAKADA and LEE (1958). — JAPAN: OKADA (1956), WAKAHAMA (1962a, 1962b, 1962c, 1964).

Paramycodrosophila* DUDA, 1924**Paramycodrosophila nakamurai* OKADA, 1973**

General features of adults: OKADA (1973a).

Figures: OKADA (1973a).

Distribution:

JAPAN: OKADA (1973a).

Scaptomyza* HARDY, 1849**Scaptomyza acuta* NISHIHARU, 1979**

General features of adults: NISHIHARU (1979).

Figures: NISHIHARU (1979).

Distribution:

JAPAN: NISHIHARU (1979).

***Scaptomyza amplialata* TAKADA, BEPPU and TODA, 1979**

General features of adults: TAKADA et al. (1979).

Figures: TAKADA et al. (1979).

Distribution:

JAPAN: TAKADA et al. (1979).

***Scaptomyza atlantica* HACKMAN, 1955**Other names used: *S. incana* var. *tetrasticha* BECKER (misident.), *S. tetrasticha* BECKER (misident.).

General features of adults: BASDEN (1961), FREY (1936), HACKMAN (1955).

Figures: BASDEN (1961), HACKMAN (1955).

Key: HACKMAN (1959).

Biology: FREY (1936).

Distribution:

AZORES: HACKMAN (1955). — CANARY IS.: BASDEN (1961), FREY (1936), HACKMAN (1955, 1958).

***Scaptomyza carinata* OKADA, 1973**

General features of adults: OKADA (1973c).

Figures: OKADA (1973c).

Distribution:

MONGOLIA: OKADA (1973c).

***Scaptomyza choi* KANG, LEE and BAHNG, 1965**

General features of adults: KANG et al. (1965b).

Figures: KANG et al. (1965b).

Biology: KANG et al. (1965b).

Distribution:

S. KOREA: KANG et al. (1965b), LEE (1966b).

***Scaptomyza clavata* OKADA, 1973**

General features of adults: OKADA (1973b).

Figures: OKADA (1973b).

Distribution:

JAPAN: KAWANISHI et al. (1975), OKADA (1973b).

***Scaptomyza consimilis* HACKMAN, 1955**Other names used: *S. monticola* OKADA (syn.), *Scaptomyza* sp.

General features of adults: HACKMAN (1955), KUROKAWA and HIHARA (1976), OKADA (1956, 1961a), SINGH (1976), WAKAHAMA (1956a).

Figures: BEPPU et al. (1977), HACKMAN (1955), OKADA (1956), ŠTAKELBERG (1970), WAKAHAMA (1956a).

Keys: BEPPU et al. (1977), HACKMAN (1955, 1959), OKADA (1956), ŠTAKELBERG (1970), TAKADA (1971).

Biology: HACKMAN (1955), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI et al. (1979), OKADA (1956).

Distribution:

FINLAND: HACKMAN (1955). — USSR: HACKMAN (1955, 1957), ŠTAKELBERG (1970). — JAPAN: KANEKO and TAKADA (1966), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1966, 1969), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a), OKADA (1956), TAKADA (1968), WAKAHAMA (1956a, 1964, 1966), WAKAHAMA et al. (1963).

***Scaptomyza elmoi* TAKADA, 1970**Other names used: *S. pallida* ZETTERSTEDT (misident.), *S. disticha* DUDA (misident.).

General features of adults: HARDY (1965), NISHIHARU (1977), OKADA (1956), OKADA and KUROKAWA (1957), TAKADA (1970).

Figures: HARDY (1965), NISHIHARU (1977), OKADA (1956), OKADA and KUROKAWA (1957), TAKADA (1970).

Keys: HARDY (1965), OKADA (1956).

Biology: NISHIHARU (1977).

Distribution:

JAPAN: KAWANISHI (1978), NISHIHARU (1977), OKADA (1956), OKADA and KUROKAWA (1957), TAKADA (1970).

Recorded also in Hawaii and Taiwan.

***Scaptomyza flava* FALLÉN, 1823**Other names used: *S. flaveola* MEIGEN (syn.), *S. apicalis* HALIDAY (syn.), *S. montana* WHEELER (syn.), *S. graminum* FALLÉN (misident.), *S. graminum* var. *flava* FALLÉN, *S. pisti*, *S. apicalis* var. *flava* FALLÉN.

General features of adults: BASDEN (1957a), BECKER (1902, 1908b), DE CASTRO (1953), COQUILLETT (1900), DUDA (1921, 1940), FALLÉN (1823), FRYDENBERG (1956a), GERCKE (1882), GOUREAU (1851), HACKMAN (1959, 1960, 1969a), HARDY (1849), HEEGER (1852), HENDEL (1928), HERING (1927a), HSU (1949), KJELLANDER (1943), MÁCA (1972a), MALLOCH (1915), MEIGEN (1830), DE MEIJERE (1908, 1911a, 1950), NEUHAUS (1886), OKADA (1956), OLDENBERG (1914), RICHARDS and HERFORD (1930), SÉGUY (1934a, 1934b), STEIN (1963), WAHLGREN (1927), WALKER (1853), WHEELER (1949c, 1952), ZETTERSTEDT (1847).

Figures: CARPENTER (1911), CHITTENDEN (1902), COQUILLETT (1895), DUDA (1921), FREY (1951), GODAN (1957), GOUREAU (1851), HACKMAN (1955, 1959), HEEGER (1852), HENDEL (1928), HERING (1927a), HSU (1949), KRÄMER (1958), MÁCA (1972a), MORGE (1976c), PAPP (1973), SÉGUY (1934b), ŠTAKELBERG (1970), STEIN (1963), WHEELER and TAKADA (1966).

Keys: BASDEN (1954), BECKER (1908b), COLLIN (1953), DUDA (1924a, 1924c, 1926a, 1934), FONSECA (1965), HACKMAN (1955, 1959), MÁCA (1972a), PAPP (1973), SCHINER (1864), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), WAHLGREN (1927), WHEELER (1952), ZOERNER (1971).

Development: CARPENTER (1911), CHITTENDEN (1902), FREY (1951), GODAN (1957), HENDEL (1928), HENNIG (1952), HERING (1927a), KJELLANDER (1943), KRÄMER (1958), MÁCA (1972a), MAYER (1935), DE MEIJERE (1911a), STEIN (1963).

Biology: BASDEN (1954b, 1956, 1957a), BEUTHIN (1887), BEZZI (1918), BUHR (1933, 1937, 1941a, 1941b, 1954, 1960), CARSON (1971), CHITTENDEN (1902), COLLIN (1953), COQUILLETT (1895), DUDA (1934), FREY (1951), FROST (1924), GRONLIEN (1926), GERCKE (1882), GODAN (1957), GOUREAU (1851), GÜNTART (1949), HACKMAN (1955), HARDY (1849), HEEGER (1852), HENDEL (1928), HENNIG (1953), HERING (1926, 1927a, 1928, 1931, 1935/37, 1957), KJELLANDER (1943), KOZLOVSKY and RUNGS (1932), KRÄMER (1958), KRÖBER (1910, 1935), KÜHLHORN (1978), LEWIS (1966), LINNANEN (1913), MÁCA (1972a), MAYER (1935), DE MEIJERE (1911a, 1950), NUNBERG (1947, 1948), RICHARDS and HERFORD (1930), SCHINER (1864), SÉGUY (1934a, 1934b), STARY (1930), STEIN (1963), TIENSUU (1951), WHEELER (1952), VAN DER WULP and DE MEIJERE (1898), ZOERNER (1971), ZAVŘEL (1967).

Distribution:

ALBANIA: unpublished. — AUSTRIA: BASDEN (1961), HEEGER (1852), STROBL (1898b, 1901, 1910), THALER (1977). — BULGARIA: BUHR (1941a). — CZECHOSLOVAKIA: ARADI (1959), BASDEN (1961), ČIŽEK (1910), DOSKOČIL (1962), MÁCA (1972a, 1975), MARTINEK (1974b), SOÓS (1945), STARY (1930), STROBL (1901), VIMMER (1913), ZAVŘEL (1967). — DENMARK: FRYDENBERG (1956a), HERING (1928), ZETTERSTEDT (1847). — FINLAND: BASDEN (1956), FREY (1929), HACKMAN (1955), TIENSUU (1951), ZETTERSTEDT (1847). — FRANCE: BUHR (1941a, 1954), GOUREAU (1851). — GERMAN DEMOCRATIC REPUBLIC: BASDEN (1961), BUHR (1933, 1937, 1941b, 1954, 1960), GODAN (1957), KRAMER (1917), NEUHAUS (1886), OLDENBERG (1914), RADDATZ (1873), STEIN (1963), ZOERNER (1971). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), BUHR (1954), DAHL (1896), FREY (1951), GERCKE (1882), GODAN (1957), HERING (1928), KRÄMER (1958), KRÖBER (1910, 1935), KÜHLHORN (1978), OLDENBERG (1914), STEIN (1963). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1954b, 1957a), COLLIN (1953), CURTIS (1833), EDWARDS and COLLIN (1932), FONSECA (1965), GRIMSHAW (1904, 1916), HENDERSON (1911), LEWIS (1966), RICHARDS and HERFORD (1930), WALKER (1849, 1853). — HUNGARY: ARADI (1959), PAPP (1973), SOÓS (1943, 1945). — IRELAND: DIS 27: 81. — ITALY: BEZZI (1925), ZANGHERI (1950, 1969). — NETHERLANDS: DE MEIJERE (1911a, 1950). — NORWAY: GRONLIEN (1926). — POLAND: KARL (1936), NUNBERG (1947, 1948). — ROMANIA: ARADI (1959), SOÓS (1945), THALHAMMER (1901). — SPAIN: CZERNY and STROBL (1909), HACKMAN (1969a). — SWEDEN: BASDEN (1956), BRINCK and WINGSTRAND (1951), DUDA (1921), FALLÉN (1823), KJELLANDER (1943), LYNEBORG (1965), RINGDAHL (1941, 1951), WAHLGREN (1927), ZETTERSTEDT (1847, 1849). — SWITZERLAND: BÄCHLI (1975a, 1975b, 1977), CALLONI (1889), GÜNTART (1949). — USSR: BOBEK (1897), HACKMAN (1955, 1957), SOÓS (1945), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: BUHR (1941a), COE (1959), SOÓS (1945), STROBL (1893a, 1898a, 1900a). — AZORES: FREY (1945), HACKMAN (1960). — MADEIRA: BECKER (1908c), FREY (1949), HACKMAN (1960). — CANARY IS.: BECKER (1908b), FREY (1936), HACKMAN (1958). — MOROCCO: KOZLOVSKY and RUNGS (1932). — AFGHANISTAN: HACKMAN (1969b). — MONGOLIA: HACKMAN (1968b), OKADA (1973c).

Recorded mainly as holarctic species.

Comment:

Some records may refer to other *Scaptomyza* species.

Scaptomyza grahami HACKMAN, 1959

General features of adults: HACKMAN (1959), OKADA (1973b).

Figures: HACKMAN (1959).

Key: HACKMAN (1959).

Distribution:

CHINA: HACKMAN (1959).

Scaptomyza graminum FALLÉN, 1823

Other names used: *S. incana* MEIGEN (syn.), *S. rufipes* MEIGEN (syn.), *S. amoena* MEIGEN (syn.), *S. flavipennis* ZETTERSTEDT (syn.), *S. sordida* ZETTERSTEDT (syn.), *S. tetrasticha* BECKER (syn.), *S. graminum* var. *semiatricornis* DUDA, *S. borealis* WHEELER (syn.), *S. norica* HACKMAN (syn.), *S. pallida* ZETTERSTEDT (misident.).

General features of adults: BASDEN (1957b), BECKER (1908b), DE CASTRO (1953), COLLIN (1911), DUDA (1921, 1935), FALLÉN (1823), HACKMAN (1955, 1959), HENDEL (1928), KANG et al. (1965b), KIM (1962), KUROKAWA and HIHARA (1976), LIN and TING (1971), MÁCA (1972a), MACQUART (1835), MALLOCH (1915, 1923b), MEIGEN (1830, 1838), NATER (1950), NEUHAUS (1886), OKADA (1956, 1961a), OLDENBERG (1914), PARSHAD and DUGGAL (1966), SÉGUY (1934a, 1934b), STROBL (1893a, 1910), WALKER (1853), WHEELER (1952), WHEELER and THROCKMORTON (1960), ZETTERSTEDT (1838, 1847).

Figures: BEPPU et al. (1977), DUDA (1921, 1935), HACKMAN (1955), HENNIG (1958), KIM (1962), LAŠTOVKA and MÁCA (1977), MÁCA (1972a), MORGE (1976a, 1976c), NATER (1950), OKADA (1956, 1968a), PAPP (1973), ŠTAKELBERG (1970), WHEELER and TAKADA (1966).

Keys: BASDEN (1954b), BECKER (1908b), BEPPU et al. (1977), COLLIN (1953), DUDA (1926a, 1934, 1935), FONSECA (1965), FREY (1945), HACKMAN (1955, 1959), HENDEL (1928), LAŠTOVKA and MÁCA (1977), LEE (1964c), MÁCA (1972a), OKADA (1956), PAPP (1973), RICHARDS and HERFORD (1930), SCHINER (1864), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), STURTEVANT (1921), TAKADA (1971), WHEELER (1952).

Development: MÁCA (1972a), OKADA (1963a, 1968a), VIMMER (1931).

Biology: BÄCHLI (1977), BASDEN (1954b, 1956), BEZZI (1918), BRISCHKE (1881), BUHR (1933, 1937, 1941a, 1941b, 1954, 1960), BUXTON (1960), COLLIN (1953), COLYER and HAMMOND (1951), COQUILLETT (1895), FALCOZ (1927), FREY (1936, 1954), FRIEND (1927), GRONLIEN (1926), GÜNTART (1949), HACKMAN (1955, 1969b), HADORN et al. (1952), HARDY (1849), HENDEL (1928), HENNIG (1953), HERING (1927a, 1927b, 1931, 1935/37, 1957), KANEKO and TOKUMITSU (1969), KAWANISHI et al. (1976), KIMURA (1976a), KIMURA and TODA (1976), KÜHLHORN (1978), LEWIS and TAYLOR (1964), LINDROTH (1931), LINDROTH et al. (1973), MÁCA (1972a), MAYER (1935), MINAMI et al. (1979), NASWATY (1959), NUNBERG (1948), OKADA (1956, 1968a), OKADA and SASAKAWA (1956), PARSHAD and DUGGAL (1966), PIPKIN (1952), RICHARDS and HERFORD (1930), ROCHA PITTÉ (1979), SAITO et al. (1962), SCHMID (1968), SÉGUY (1934a, 1934b, 1950), SEIDEL (1957), STARY (1930), TAKADA (1958), VIMMER (1931), WAKAHAMA (1962b, 1964), WALKER (1853), ZAVŘEL (1967), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: ARADI (1959), BASDEN (1961), HACKMAN (1955), STROBL (1880, 1894, 1901), THALER (1977), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), BRANČÍK (1910), ČIŽEK (1906), DALLA TORRE (1878), DOSKOČIL (1962), DOSKOČIL and HURKA (1962), LAŠTOVKA and MÁCA (1977), MÁCA (1972a, 1975), MARTINEK (1974a, 1974b), SEIDEL (1957), SKUHRAVÝ et al. (1959), STARY (1930), STROBL (1901), VIMMER (1913, 1931), ZAVŘEL (1967), ZUSKA and LAŠTOVKA (1969). — DENMARK: FRYDENBERG (1956a), ZETTERSTEDT (1847). — FINLAND: BASDEN (1956), FREY (1917, 1929, 1950), HACKMAN (1955), ZETTERSTEDT (1847, 1860). — FRANCE: BUHR (1954), FALCOZ (1927), HADORN et al. (1952), KUNTZE (1913). — GERMAN DEMOCRATIC REPUBLIC: BUHR (1933, 1937, 1941b, 1954, 1960), NEUHAUS (1886), KRAMER (1917), RAD-

DATZ (1873). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), FISCHER (1936), KRÖBER (1910, 1935), KÜHLHORN (1978), MEIGEN (1838), NASWATY (1959), VON ROSER (1840), ZETTERSTEDT (1847). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1954b), BUXTON (1960), COLLIN (1911, 1953), CURTIS (1833), EDWARDS (1934), EDWARDS and COLLIN (1953), FONSECA (1965), FRIEND (1927), GRIMSHAW (1905, 1906, 1907, 1916), HALIDAY (1833), HENDERSON (1911), LEWIS and TAYLOR (1964), RICHARDS and HERFORD (1930), WALKER (1849, 1853), WHEELER and TAKADA (1966), YERBURY (1913). — HUNGARY: ARADI (1959), PAPP (1973), SOÓS (1943), THALHAMMER (1899). — ICELAND: LINDROTH (1931), LINDROTH et al. (1973), NIELSEN et al. (1954). — IRELAND: DIS 27: 81. — ITALY: BEZZI (1891, 1892a, 1892b, 1925), BEZZI and DE STEFANI-PEREZ (1897), KOCH (1872), OLDENBERG (1914), ZANGHERI (1950, 1969). — NETHERLANDS: MCGILLAVRY (1914), DE MEIJERE (1916b, 1935). — NORWAY: BASDEN (1956), GRØNLIN (1926), ZETTERSTEDT (1847). — POLAND: BECKER (1908b), BOBEK (1890), BRISCHKE (1881), KARL (1936), NUNBERG (1948). — PORTUGAL: ROCHA PITE (1972, 1975b, 1979). — ROMANIA: ARADI (1959), DRAGHIA (1972), STROBL (1897), THALHAMMER (1899). — SPAIN: CZERNY and STROBL (1909), HACKMAN (1969a), STROBL (1900b, 1906). — SWEDEN: FALLÉN (1823), LYNEBORG (1965), RINGDAHL (1951), ZETTERSTEDT (1838, 1847). — SWITZERLAND: BÄCHLI (1972c, 1973a, 1973c, 1974c, 1975a, 1975b, 1977, 1979), GÜNTARD (1949), SCHMID (1968). — USSR: ARADI (1959), BOBEK (1897), DUDA (1935), EVERSMAAN (1834), HACKMAN (1955, 1957), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: ARADI (1959), BUHR (1941a), COE (1959), STROBL (1898a, 1900a, 1904). — AZORES: FREY (1945). — MADEIRA: BECKER (1908c), FREY (1949). — CANARY IS.: BECKER (1908b), FREY (1936), HERING (1927b), MONCLÚS (1976), SÉGUY (1934a, 1934b). — TUNISIA: BECKER (1907a). — LIBYA: BEZZI (1924b). — LEBANON: PIPKIN (1952). — IRAN: unpublished. — AFGHANISTAN: HACKMAN (1969b). — S. KOREA: CHUNG (1958), CHUNG and RHO (1960), KIM (1962, 1963), LEE (1964c, 1966b). — JAPAN: KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KAWANISHI et al. (1975), KIMURA (1976a), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1957, 1965a), OKADA (1956, 1968a), SAITO et al. (1962), TAKADA (1958, 1968), WAKAHAMA (1962a, 1962b, 1962c, 1964), WAKAHAMA et al. (1963).
Recorded mainly as holarctic species.

Comment:

Some records may refer to other *Scaptomyza* species.

***Scaptomyza griseola* ZETTERSTEDT, 1847**

Other names used: *S. griseceus* DUDA (syn.), *S. griseceus* DUDA (lapsus).

General features of adults: DUDA (1921, 1935), HACKMAN (1955), MÁCA (1972a), OLDENBERG (1914), ZETTERSTEDT (1847).

Figures: HACKMAN (1955), MÁCA (1972a), PAPP (1973), ŠTAKELBERG (1970).

Keys: BASDEN (1954b), COLLIN (1953), DUDA (1924a, 1924c, 1934), FONSECA (1965), HACKMAN (1955, 1959), MÁCA (1972a), PAPP (1973), SCHINER (1864), ZETTERSTEDT (1847).

Development: MAYER (1935).

Biology: BEUTHIN (1887), HACKMAN (1955), KRÖBER (1910), MÁCA (1972a), MAYER (1935).

Distribution:

? AUSTRIA: STROBL (1880, 1894, 1901, 1910). — CZECHOSLOVAKIA: MÁCA (1972a), PAPP (1973), VIMMER (1913). — FINLAND: HACKMAN (1955). — ? GERMAN DEMOCRATIC REPUBLIC: KRAMER (1917), OLDENBERG (1914). — ? GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), KRÖBER (1910). — GREAT BRITAIN: BASDEN (1954b), COLLIN (1953), FONSECA (1965). — HUNGARY: THALHAMMER (1899). — NORWAY: unpublished. — ? POLAND: BOBEK (1890), KARL (1936). — ? ROMANIA: STROBL (1897), THALHAMMER (1899, 1901). — ? SPAIN: STROBL (1900b, 1906). — SWEDEN: ZETTERSTEDT (1847, 1860). — USSR: HACKMAN (1955, 1957), ŠTAKELBERG (1970). — ? YUGOSLAVIA: STROBL (1894, 1898a, 1900a, 1904).

Comment:

Some records may refer to other *Scaptomyza* species.

***Scaptomyza impunctata* FREY, 1945**

Other names used: *S. gracilis* (misident.), *S. clavigera* FREY (syn.).

General features of adults: FREY (1945), HACKMAN (1955), SÉGUY (1934a, 1934b, 1936).

Figures: FREY (1954), HACKMAN (1955).

Keys: FREY (1945, 1954), HACKMAN (1959), SÉGUY (1934a, 1934b).

Distribution:

AZORES: FREY (1945, 1954), HACKMAN (1960), SÉGUY (1936).

***Scaptomyza okadai* HACKMAN, 1959**

Other names used: *S. unipunctum* ZETTERSTEDT (misident.), *Scaptomyza* sp.

General features of adults: HACKMAN (1959), OKADA (1956, 1961a).

Figures: HACKMAN (1959), OKADA (1956).

Keys: BEPPU et al. (1977), HACKMAN (1959), OKADA (1956), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), MOMMA (1965b), SUZUKI (1955).

Distribution:

USSR: HACKMAN (1955, 1959). — JAPAN: KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1968, 1969), KIMURA (1976a), KIMURA and TODA (1976), KIMURA et al. (1977), MOMMA (1957, 1965b), OKADA (1956), SUZUKI (1955), TAKADA (1968), WAKAHAMA (1964), WAKAHAMA et al. (1963).

***Scaptomyza pallida* ZETTERSTEDT, 1847**

Other names used: *S. disticha* DUDA (syn.), *S. graminum* FALLÉN (misident.).

General features of adults: BASDEN (1957b), BOCK (1977a), DUDA (1921, 1934, 1940), FREY (1921), GUPTA (1970), HARRISON (1959), HERING (1927a), HSU (1949), KIM (1962), KUROKAWA and HIHARA (1976), LEE (1966a), MÁCA (1972a), NATER (1953), NISHIHARU (1977), OKADA (1956, 1961a, 1963a), OKADA and KUROKAWA (1957), PARSHAD and DUGGAL (1966), PATTERSON (1943), SÉGUY (1934a, 1934b), STALKER (1945), TAKADA (1970), WAHLGREN (1927), WHEELER and TAKADA (1964), ZETTERSTEDT (1847).

Figures: BOCK (1977), DUDA (1921, 1934), FREY (1954), GUPTA (1970), HACKMAN (1955), HARRISON (1959), HERING (1927a), HSU (1949), KIM (1962), MÁCA (1972a), MALLOCH (1934a), NATER (1953), NISHIHARU (1977), OKADA (1956, 1968a),

OKADA and KUROKAWA (1957), PAPP (1973), PATTERSON (1943), SÉGUY (1934b), TAKADA (1970), THROCKMORTON (1962, 1966), WHEELER and TAKADA (1964, 1966).

Keys: BASDEN (1954b), BEPPU et al. (1977), BOCK (1977), COLLIN (1953), DUDA (1924a, 1924c, 1927, 1934), ENDERLEIN (1936), FONSECA (1965), HACKMAN (1959), HARRISON (1959), LAŠTOVKA and MÁČA (1977), LEE (1964c), MÁČA (1972a), MALLOCH (1934a), MALLOCH and MCATEE (1924), OKADA (1956, 1966a), PAPP (1973), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), TAKADA (1971), WAHLGREN (1927), WHEELER (1949b), WHEELER and TAKADA (1964), ZETTERSTEDT (1847).

Development: HENNIG (1952), MÁČA (1972a), OKADA (1968a).

Biology: ARADI and MIHÁLYI (1971), BÄCHLI (1977, 1979), BASDEN (1954b), BICKLEY (1956), CARSON (1971), COLLIN (1953), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), HACKMAN (1955, 1959, 1971), HACKMAN and MEINANDER (1979), HEED (1968), HENNIG (1953), HERING (1927a, 1957), KANEKO and TOKUMITSU (1969), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), KÖNIG (1965), KÜHLHORN (1964, 1978, 1979), LEACH (1927), LEE (1962, 1964c), LEWIS and TAYLOR (1964), LINDROTH et al. (1973), LUMME et al. (1979), MÁČA (1972a), MALLOCH and MCATEE (1924), MINAMI et al. (1979), MOMMA (1965b), NASWATY (1959), NISHIHARU (1977), OKADA (1956, 1962, 1968a), OKADA and KUROKAWA (1957), PAPP (1976, 1979), PARSHAD and DUGGAL (1966), POND (1956), ROCHA PITÉ (1979), SABATH (1974), SCHATZMANN (1977), SCHMID (1968), SÉGUY (1934a, 1934b), SKUHRAVÝ et al. (1959), STALKER (1945), TAKADA (1958), TAKADA and TOYOFUKU (1960), TODA (1976), TODA and KIMURA (1978), WAKAHAMA (1957a, 1961, 1964, 1966), ZUSKA and LAŠTOVKA (1969).

Distribution:

AUSTRIA: BASDEN (1961), THALER (1977). — BELGIUM: unpublished. — CZECHOSLOVAKIA: ARADI (1959), DOSKOČIL (1962), DOSKOČIL and HURKA (1962), LAŠTOVKA and MÁČA (1977), MÁČA (1972a, 1975), MARTINEK (1973, 1974b), SKUHRAVÝ et al. (1959), ZUSKA and LAŠTOVKA (1969). — DENMARK: FRYDENBERG (1956a). — FINLAND: BASDEN (1956), FREY (1921, 1929, 1950), HACKMAN (1955, 1971), HACKMAN and MEINANDER (1979), LUMME et al. (1978, 1979). — FRANCE: ROCHA PITÉ and TSACAS (1979). — GERMAN DEMOCRATIC REPUBLIC: HERING (1927a). — GERMAN FEDERAL REPUBLIC: KÖNIG (1965), KRÖBER (1935), KÜHLHORN (1964, 1978, 1979), NASWATY (1959). — GREAT BRITAIN: AUDCENT (1950), BASDEN (1952, 1953, 1954b), COLLIN (1953), EDWARDS (1934), FONSECA (1965), LEWIS and TAYLOR (1964), SMITH (1960), YERBURY (1913). — GREECE: DIS 37: 135–136. — HUNGARY: ARADI (1959), ARADI and MIHÁLYI (1971), BASDEN (1961), DELY-DRASKOVITS and BABOS (1976), DELY-DRASKOVITS and PAPP (1973), PAPP (1973, 1976). — ICELAND: LINDROTH (1931), LINDROTH et al. (1973), NIELSEN et al. (1954). — IRELAND: BASDEN (1956). — ITALY: BASDEN (1961), NIGRO (1979), STROBL (1910), ZANGHERI (1969). — NETHERLANDS: DE MEIJERE (1939b). — NORWAY: BASDEN (1956), ZETTERSTEDT (1855). — POLAND: KARL (1936). — PORTUGAL: ROCHA PITÉ (1972, 1975b, 1977b, 1979). — ROMANIA: ARADI (1959). — SPAIN: BASDEN (1961), HACKMAN (1969a), ORTIZ (1968). — SWEDEN: BASDEN (1956), LYNEBORG (1965), RINGDAHL (1941), WAHLGREN (1927), ZETTERSTEDT (1847, 1860). — SWITZERLAND: BÄBLER (1910), BÄCHLI (1972b, 1972c, 1973a, 1973c, 1974b, 1974c, 1975a, 1975b, 1977, 1979), BURJA (1951a), NATER (1953), SCHATZMANN (1977), SCHMID (1968). — TURKEY: unpublished. — USSR: ARADI (1959), HACKMAN (1955, 1957), PAPP (1979), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: ARADI (1959), BASDEN (1961), COE (1959). — AZORES: FREY (1945), HACKMAN (1960), SÉGUY (1936). — MADEIRA: FREY (1949). — CANARY IS.: BECKER (1908b), FREY (1936, 1958), HACKMAN (1958), MONCLÚS (1976). — TUNISIA: BEZZI (1922), PAPP (1978). — ISRAEL: unpublished. — AFGHANISTAN: HACKMAN (1969b). — MONGOLIA: HACKMAN (1968b), OKADA (1973c). — N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1953, 1960a), CHUNG and RHO (1959, 1960), KANG et al. (1958, 1959, 1964a), KIM (1962), LEE (1962, 1964c, 1966a, 1966b), PAIK (1958), TAKADA (1970), TAKADA and LEE (1958). — JAPAN: KANEKO (1960), KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1963, 1969), KANEKO et al. (1968, 1969), KAWANISHI (1978), KAWANISHI and WATANABE (1977), KAWANISHI et al. (1975), KIMURA (1976a, 1976b), KIMURA and TODA (1976), KIMURA et al. (1977), MINAMI (1979), MINAMI et al. (1979), MOMMA (1957, 1965a, 1965b), NISHIHARU (1977), OKADA (1956, 1966b, 1968a), OKADA and KUROKAWA (1957), SAITO et al. (1962), TAKADA (1957, 1958, 1968, 1970), TAKADA and OKADA (1960), TAKADA and TOYOFUKU (1960), TODA and KIMURA (1978), TOYOFUKU and KIMURA (1960, 1961), WAKAHAMA (1957a, 1961, 1962a, 1962b, 1962c, 1964, 1966), WAKAHAMA et al. (1963).

Recorded as virtually cosmopolitan species.

Scaptomyza polygonia OKADA, 1956

Other name used: *Scaptomyza* sp. VII

General features of adults: KIM (1962), OKADA (1956), TAKADA (1959).

Figures: KIM (1962), OKADA (1956), TAKADA (1959).

Keys: BEPPU et al. (1977), HACKMAN (1959), OKADA (1956), TAKADA (1971).

Biology: KANEKO and TOKUMITSU (1969), KANEKO et al. (1966), KIMURA (1976a), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1965b), OKADA (1956), SUZUKI (1955), TAKADA (1958).

Distribution:

N. KOREA: OKADA (1974b). — S. KOREA: CHUNG (1958), KIM (1962), LEE (1966b). — JAPAN: KANEKO and SHIMA (1962), KANEKO and TOKUMITSU (1969), KANEKO et al. (1966, 1968), KAWANISHI et al. (1975), KIMURA (1976a), KIMURA and TODA (1976), MINAMI et al. (1979), MOMMA (1957, 1963, 1965b), OKADA (1956, 1965), SUZUKI (1955), TAKADA (1958, 1959, 1968), WAKAHAMA (1964, 1966).

Recorded also on the Ryukyu Islands.

Scaptomyza subsplendens DUDA, 1935

General features of adults: DUDA (1935), HACKMAN (1959), OKADA (1966a).

Keys: DUDA (1934), HACKMAN (1955, 1959).

Distribution:

USSR: DUDA (1935).

Scaptomyza teinoptera HACKMAN, 1955

General features of adults: HACKMAN (1955), TAKADA et al. (1979).

Figures: ŠTAKELBERG (1970), WHEELER and TAKADA (1966).

Keys: HACKMAN (1955, 1959), ŠTAKELBERG (1970).

Biology: HACKMAN (1955).

Distribution:

FINLAND: HACKMAN (1955), LUMME et al. (1978). — USSR: HACKMAN (1955, 1957), ŠTAKELBERG (1970).

Recorded also in North America.

Scaptomyza trochanterata COLLIN, 1953

General features of adults: COLLIN (1953), HACKMAN (1959), OKADA (1973c), WHEELER and TAKADA (1966).

Figures: HACKMAN (1955, 1959), WHEELER and TAKADA (1966).

Keys: BASDEN (1954), COLLIN (1953), FONSECA (1965), HACKMAN (1955, 1959).

Distribution:

FINLAND: BASDEN (1956), HACKMAN (1955), LUMME et al. (1978). — GREAT BRITAIN: BASDEN (1954b), COLLIN (1953), FONSECA (1965).

Recorded also in North America.

Scaptomyza unipunctum ZETTERSTEDT, 1847

Other names used: *S. unipunctum boharensis* HACKMAN, *Scaptomyza* sp.

General features of adults: BASDEN (1957b), CZERNY (1903b), DUDA (1927, 1935), HACKMAN (1959), ZETTERSTEDT (1847).

Figures: DUDA (1935), HACKMAN (1955, 1959), OKADA (1973c), WHEELER and TAKADA (1966).

Keys: DUDA (1934), FREY (1945), HACKMAN (1955, 1959), ŠTAKELBERG (1970).

Distribution:

FINLAND: DUDA (1935), FREY (1929), HACKMAN (1955). — SWEDEN: ZETTERSTEDT (1847). — USSR: DUDA (1935), HACKMAN (1957, 1959), ŠTAKELBERG (1930, 1970). — MONGOLIA: HACKMAN (1968b), OKADA (1973c).

Recorded also in North America.

Soederbomia HENDEL, 1938

Soederbomia flava HENDEL, 1938

General features of adults: HENDEL (1938).

Distribution:

CHINA: HENDEL (1938).

Stegana MEIGEN, 1830

Stegana coleoptrata SCOPOLI, 1763

Other names used: *S. hypoleuca* MEIGEN (syn.), *S. annulata* HALIDAY (syn.), *S. coleoptrata* var. *nigrithorax* STROBL, *Stegana* sp.

General features of adults: BASDEN (1957b), DUDA (1934), HALIDAY (1833), HENNIG (1958), MACQUART (1835), MALLOCH (1924d), MEIGEN (1830), MIK (1898), NEUHAUS (1886), OLDENBERG (1914), SCOPOLI (1763), SÉGUY (1934a, 1934b), STROBL (1898b, 1910), TAKADA (1968), WAHLGREN (1927), WHEELER (1954), ZETTERSTEDT (1838, 1847, 1860).

Figures: DUDA (1934), HENNIG (1952), MORGE (1956), PAPP (1973), ŠTAKELBERG (1970).

Keys: BEPPU et al. (1977), DUDA (1924a, 1925, 1927, 1934), FONSECA (1965), LAŠTOVKA and MÁCA (1977), MALLOCH (1924c), MALLOCH and MCATEE (1924), PAPP (1973), SCHINER (1864), SÉGUY (1934a, 1934b), ŠTAKELBERG (1970), STURTEVANT (1921), TAKADA (1971), WAHLGREN (1927), WHEELER (1952).

Development: HENNIG (1952), MORGE (1956), OKADA (1968a).

Biology: KIMURA (1976b), MORGE (1956), PERRIS (1877), SCHMID (1968), SÉGUY (1934a, 1934b), STORÁ (1957), TESKEY (1976).

Distribution:

AUSTRIA: BASDEN (1961), DUDA (1934), OLDENBERG (1914), STROBL (1898b, 1910). — CZECHOSLOVAKIA: LAŠTOVKA and MÁCA (1977). — DENMARK: unpublished. — FINLAND: STORÁ (1957). — FRANCE: PERRIS (1877), SÉGUY (1934a, 1934b). — GERMAN DEMOCRATIC REPUBLIC: MORGE (1956), NEUHAUS (1886), OLDENBERG (1914). — GERMAN FEDERAL REPUBLIC: DUDA (1934), MEIGEN (1830), OLDENBERG (1914), ZETTERSTEDT (1838). — GREAT BRITAIN: AUDCENT (1950), FONSECA (1965), HALIDAY (1833). — HUNGARY: ARADI (1959), PAPP (1973), Soós (1943, 1945). — NETHERLANDS: DE MEJERE (1928, 1939b), VAN DER WULP and DE MEJERE (1898). — POLAND: DUDA (1934), KARL (1936). — ROMANIA: ARADI (1959), DUDA (1934), OLDENBERG (1914). — SWEDEN: BASDEN (1956), RINGDAHL (1949, 1951), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1852, 1855, 1860). — SWITZERLAND: BÄCHLI (1972b, 1973a, 1973c, 1975a, 1975b), SCHMID (1968). — USSR: ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: SCOPOLI (1763). — JAPAN: KIMURA (1976b).

Recorded also in North America.

Comment:

Some European records may refer to *S. mehadiae* DUDA or *S. stroblii* MIK.

Stegana ctenaria NISHIHARU, 1979

General features of adults: NISHIHARU (1979).

Figures: NISHIHARU (1979).

Distribution:

JAPAN: NISHIHARU (1979).

Stegana excavata OKADA, 1971

General features of adults: OKADA (1971c).

Figures: OKADA (1971c).

Key: OKADA (1971c).

Distribution:

S. KOREA: OKADA (1971c). — JAPAN: OKADA (1971c).

***Stegana furta* LINNÉ, 1767**

Other names used: *S. curvipennis* FALLÉN (syn.), *S. nigra* MEIGEN (syn.).

General features of adults: BASDEN (1956), DUDA (1934), FALLÉN (1823), FREY (1921), HENNIG (1958), LINNÉ (1767), LIOY (1895), MEIGEN (1830), NEUHAUS (1886), OKADA (1956, 1971c), OLDENBERG (1914), SÉGUY (1934b), WAHLGREN (1927), ZETTERSTEDT (1838, 1847).

Figures: DUDA (1924a, 1934), FREY (1921), LIOY (1895), MEIGEN (1830), PAPP (1973), SÉGUY (1934b).

Keys: DUDA (1924a, 1927, 1934), ENDERLEIN (1936), FONSECA (1965), LAŠTOVKA and MÁČA (1977), MALLOCH (1924c), OKADA (1971c), PAPP (1973), SCHINER (1864), SÉGUY (1934b), ŠTAKELBERG (1970), WAHLGREN (1927).

Biology: BAER (1914), JUDEICH and NITSCHÉ (1895), ZETTERSTEDT (1947).

Distribution:

AUSTRIA: ARADI (1959), BASDEN (1961), STROBL (1880, 1894, 1898b, 1910), TIEF (1888). — CZECHOSLOVAKIA: ARADI (1959), LAŠTOVKA and MÁČA (1977), MARTINEK (1973). — DENMARK: ZETTERSTEDT (1847). — FINLAND: FREY (1917, 1921), ZETTERSTEDT (1847, 1860). — FRANCE: MACQUART (1835), SÉGUY (1934b). — GERMAN DEMOCRATIC REPUBLIC: BAER (1914), KARL (1936), KRAMER (1917), NEUHAUS (1886), OLDENBERG (1914), RADDAZ (1873), SÉGUY (1934b), ZETTERSTEDT (1855). — GERMAN FEDERAL REPUBLIC: BEUTHIN (1887), KRÖBER (1910, 1935). — GREAT BRITAIN: COLLIN (1911), FONSECA (1965). — HUNGARY: ARADI (1959), PAPP (1973), SOÓS (1943), THALHAMMER (1899). — ITALY: LIOY (1895). — NETHERLANDS: DE MEIJERE (1916b, 1928, 1939b), VAN DER WULP and DE MEIJERE (1898). — NORWAY: ZETTERSTEDT (1847). — POLAND: KARL (1936). — ROMANIA: ARADI (1959), THALHAMMER (1899). — SWEDEN: BASDEN (1956), FALLÉN (1823), LINNÉ (1767), POPPIUS et al. (1916), RINGDAHL (1951), WAHLGREN (1927), ZETTERSTEDT (1838, 1847, 1849, 1852, 1855, 1860). — SWITZERLAND: BÄCHLI (1974c). — USSR: DUDA (1934), ŠTAKELBERG (1930, 1970). — YUGOSLAVIA: STROBL (1898a, 1900a, 1910).

***Stegana longifibula* TAKADA, 1968**

Other name used: *S. coleoprata* SCOPOLI (misident.).

General features of adults: OKADA (1971c), TAKADA (1968).

Figures: OKADA (1971c), TAKADA (1968).

Keys: BEPPU et al. (1977), OKADA (1971c), TAKADA (1968, 1971).

Distribution:

JAPAN: OKADA (1956, 1971c), TAKADA (1968).

***Stegana mehadiae* DUDA, 1924**

General features of adults: DUDA (1934), OKADA (1956).

Keys: DUDA (1924a, 1925, 1934), PAPP (1973).

Distribution:

CZECHOSLOVAKIA: unpublished. — FINLAND: DUDA (1934). — ROMANIA: ARADI (1959), DUDA (1924), SOÓS (1945). — USSR: DUDA (1934).

***Stegana nigrifrons* DE MEIJERE, 1911**

Other names used: *S. coleoprata* SCOPOLI (misident.), *Stegana* sp.

General features of adults: DUDA (1926a, 1939), DE MEIJERE (1911b), OKADA (1953a, 1956, 1966a, 1971c).

Figures: DUDA (1924a), DE MEIJERE (1911b), OKADA (1956, 1966a, 1971c).

Keys: DUDA (1924a), DE MEIJERE (1911b), OKADA (1956, 1966a, 1971c).

Biology: DE MEIJERE (1911b).

Distribution:

JAPAN: OKADA (1953a, 1956, 1971c).

Recorded mainly in South Asia.

***Stegana nigripennis* HENDEL, 1914**

Other names used: *S. poeciloptera* DUDA (syn.), *L. kanoi* OKADA (syn.).

General features of adults: DUDA (1926b), HENDEL (1914), OKADA (1956, 1971c).

Figures: OKADA (1956).

Keys: OKADA (1956, 1971c).

Biology: OKADA (1956).

Distribution:

S. KOREA: KANG et al. (1959), LEE (1966b). — JAPAN: OKADA (1956, 1968c, 1971c).

Recorded also on the Ryukyu Islands and in Taiwan.

***Stegana sibirica* DUDA, 1934**

General features of adults: DUDA (1934), OKADA (1956).

Key: DUDA (1934).

Distribution:

USSR: DUDA (1934).

***Stegana stroblii* MIK, 1898**

Other name used: *S. coleoprata* SCOPOLI (misident.).

General features of adults: BASDEN (1954b), MIK (1898), OLDENBERG (1914), RINGDAHL (1949), SÉGUY (1934b), WAHLBERG (1927).

Figures: HENNIG (1958).

Keys: DUDA (1924a, 1925, 1934), PAPP (1973), SÉGUY (1934a, 1934b), WAHLGREN (1927).

Biology: BASDEN (1954b), RINGDAHL (1949).

Distribution:

AUSTRIA: unpublished. — CZECHOSLOVAKIA: unpublished. — DENMARK: MEIGEN (1830), MIK (1898), ZETTERSTEDT (1847). — FINLAND: FREY (1929). — FRANCE: SÉGUY (1934b). — GERMAN FEDERAL REPUBLIC: DUDA (1934), OLDENBERG (1922). — GREAT BRITAIN: BASDEN (1954b). — HUNGARY: ARADI (1959), PAPP (1973). — ROMANIA: ARADI (1959), BASDEN (1961), DUDA (1934), MIK (1898), OLDENBERG (1914), PAPP (1973), SOÓS (1945). — SWEDEN: RINGDAHL (1949), SÉGUY (1934b), WAHLGREN (1927). — USSR: ŠTAKELBERG (1930).

Stegana taba OKADA, 1971

Other name used: *Protostegana* sp. from Taba.

General features of adults: OKADA (1956, 1971c).

Figures: OKADA (1956, 1971c).

Key: OKADA (1971c).

Distribution:

S. KOREA: KANG et al. (1959). — JAPAN: OKADA (1956, 1971c).

Stegana unidentata TAKADA, 1968

General features of adults: OKADA (1971c), TAKADA (1968).

Figures: OKADA (1971c), TAKADA (1968).

Keys: BEPPU et al. (1977), OKADA (1971c), TAKADA (1968, 1971).

Biology: KIMURA (1976b).

Distribution:

JAPAN: KIMURA (1976b), OKADA (1971c), TAKADA (1968).

Zaprionus COQUILLETT, 1901

Zaprionus sp.

Other name used: *Z. vittiger* (misid.).

Distribution:

CANARY IS.: MONCLÚS (1976).

Summary

The literature on the Palearctic species of Drosophilidae was critically analysed. For each species quotations are given to the following subjects: descriptions, illustrations, keys, development, biology and distribution.

Zusammenfassung

Die Literatur über die palaearktischen Arten der Drosophilidae wurde kritisch analysiert. Für jede Art sind Zitate zu folgenden Stichworten gegeben: Beschreibungen, Abbildungen, Bestimmungsschlüssel, Entwicklung, Biologie und Verbreitung.

Резюме

Критически анализируется литература о палеарктических видах Drosophilidae. Для каждого вида приводятся цитаты по следующим ключевым словам: описания, рисунки, определительные таблицы, развитие, биология и распространение.

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