Zoologisches Museum Universität Zürich-Irchel Zürich (Schweiz)

GERHARD BÄCHLI

On the type material of Palearctic species of Drosophilidae (Diptera)

Type specimens are important zoological objects, not only as name bearers in nomenclature but also as distinct members of taxa, especially in those cases where the identity of the taxa is doubtful. During the compilation of the Drosophilidae part of the "Catalogue of Palearctic Diptera" (Bächli and Rocha Pité, in press) I therefore considered it necessary to learn more about the type material of the species in question, and to draw as many conclusions as possible.

A general inquiry was made in all museums which were thought to have appropriate type material. Two main questions were put: Do you have any extant type specimens in your collections, and how are they labelled? In addition many collections of type specimens were studied partly or wholly, and supplementary information was gained by personal notes.

It is mainly due to the increasing standardization of the rules for zoological nomenclature that in recent descriptions of species-group taxa the type material is mostly specified with all the relevant details. According to the results of the inquiry, the type material of the species described after 1955 is labelled and deposited as mentioned in the descriptions, whereas for most of the species described before this date the specification of the type material and its location are not yet fully published. Consequently the data given in Table 2 are restricted to species described before 1956.

One of the results of the inquiry was that type specimens of several species were found which formerly were considered to be lost. In addition, hitherto overlooked specimens of original type-series were identified. However, many species, especially those of uncertain status, still remain without types.

Furthermore, it was found that some authors did not specify holotypes, even though this practice went against the rules. One of the aims of this paper is to clarify the type situation for such species. Therefore lectotypes are designated on the one hand for species which have syntype specimens labelled as types by the author or by a subsequent reviser, and on the other hand in cases where a detailed revision of the syntype series was assumed unnecessary.

In Table 2 all Palearctic species of Drosophilidae described before 1956 have been listed in alphabetical order. For each species, all obtainable information about the type specimens, their sex, their location and their labelling is given, together with lectotype designations and comments. In order to shorten the list, published lectotype designations and information regarding the labels have been quoted.

Acknowledgements

This paper is based on numerous contributions by many persons. I am extremely grateful for the cooperation of the directors and curators of the museums mentioned in Table 1, as well as of some other museums. In addition, I wish to thank those persons who gave me the opportunity to study type material either on loan or during short stays as guest investigator. Furthermore I am highly indebted to Mr. E. B. BASDEN, Dr. J. MACA, Dr. M. R. WHEELER, Dr. H. BURLA, and Dr. T. OKADA for many valuable comments.

Table 1 List of Museums mentioned in Table 2, with abbrevations

AMNH
AMS
AMS
AUSTRIAN
AUSTRIAN
AUSTRIAN
AUSTRIAN
BMNH
BRITISH Museum (Natural History, Department of Entomology, New York, U.S.A.
Australian Museum (Natural History), Department of Entomology, London, England
Canterbury Museum, Christchurch, New Zealand

ZMUC

ZMZ

Table 1 (Continues)

Ehemaliges Deutsches Entomologisches Institut, Jetzt: Institut für Pflanzenschutzforschung der Akademie der Landwirtschaftswissenschaften der DDR zu Berlin, Bereich Eberswalde, Abt. Taxonomie der Insekten, DEI Eberswalde, German Democratic Republic Eberswalde, German Democratic Republic Drosophila Type and Reference Collection, University of Texas, Austin, Texas, U.S.A. Hungarian Museum of Natural History, Zoological Department, Budapest, Hungary Hokkaldo University, Department of Entomology, Sapporo, Japan Istituto di Entomologia, Università degli Studi, Bologna, Italy Institut Royal des Sciences Naturelles, Bruxelles, Belgium DTRC HNHM HU IEB IRSN Laboratory of Biology, Sapporo University, Sapporo, Japan
Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.
Musée d'Histoire naturelle, Lille, France
MARTIN-LUTHER-Universität, Sektion Biowissenschaften, Wissenschaftsbereich Zoologie, Halle, German LBSU MCZ MHNL MLUH Democratic Republic MNHN Musée National d'Histoire Naturelle, Laboratoire d'Entomologie, Paris, France Museo civico di Storia naturale, Verona, Italy Museo Zoologico de., La Specola", Università degli Studi, Firenze, Italy Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil Naturhistorisches Museum Admont, Admont, Austria MSNV MZF MZSP NMA National Museum of Ireland, Dublin, Ireland
Naturhistorisches Museum Wien, Wien, Austria
Natural Science Museum, Tokyo, Japan
Oxford University Museum, Hope Entomological Collections, Oxford, England
Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands
Naturhistoriske Rijksmuseum, Stockholm, Swaden NMI NMW NSMT OUM RNH RS RSM Naturhistoriska Riksmuseum, Stockholm, Sweden Naturhistoriaka Rikamuseum, Stockholm, Sweden
Royal Scottish Museum, Edinburgh, Scotland
Staatliches Museum für Naturkunde, Abteilung für Entomologie, Ludwigsburg, German Federal Republic
School of Public Health and Tropical Medicine, University of Sydney, Sydney, Australia
United States National Museum, Department of Entomology, Washington, D.C., U.S.A.
Zoologičeskij Institut, Akademii Nauk SSSR, Leningrad, U.S.S.R.
Zoologičeski Institut, Universität Hamburg, Hamburg, German Federal Republic
Zoological Institute, Hokkaido University, Sapporo, Japan
Universiteta Zoologiska Institution, Entomologiska Avdelningen, Lund, Sweden
Zoologische Museum der Universiteit van Amsterdam, Afd. Entomologie, Amsterdam, Netherlands
Zoologisches Museum, HUMBOLDT-Universität, Berlin, German Democratic Republic
Zoologisch Museum, Copenhagen, Denmark SMN SPHS USNM ZIAL ZIH ZIHU zilZMA ZMB ZMC Zoological Museum, Copenhagen, Denmark Zoological Museum, Helsinki, Finland ZMH ZMU Zoologiska Museet, Uppsala Universitet, Uppsala, Sweden

Table 2

List of Palearctic species of Drosophilidae described before 1956, in alphabetical order

For each species the type material, its sex and its location are specified, where known. Abbreviations used: HT = holotype, PT = paratype(s), LT = lectotype, PL = paralectotype(s), ST = syntype(s), NT = Neotype. The abbreviations of the museums are stated in Table 1. The details of each label are indicated as precisely as possible. Each label is divided from the next by a slash (I). All comments are in square brackets.

Zoological Museum, University of Cambridge, Cambridge, England Zoologisches Museum der Universität Zürich-Irchel, Zürich, Switzerland

Species	Kind of types	Sex	Deposited in	Details of labels and comments
Acletozenus FRAUENFELD, 1868 formosus LOEW, 1864 (Gitona)	LT		ZMB	Coll. H. LORW / Type / Gitona formosa LORW, Type, = ornata Mg. / Actetoxenus syrphoides Fr., det. Dr. O. DuDA
	PL		ZMB	[Lectotype, by present designation] Coll. H. LOEW / Type / Gitona formosa LOEW, Type, = ornata Mo. / Acletoxenus syrphoides FR., det. Dr. O. DUDA
syrphoides Frauenfeld, 1868		ļ	-	[not in NMW]
Amiota Loew, 1862 albilabris Roth in Zetterstedt, 1860 (Drosophila)	нт	đ	ZIL	Bök. 21.6. / Dros. albilabris ROTH, & n. sp. / Type selected by E. B. BASDEN, Jany. 1955, Drosophila albilabris RTH. / = Amiota albilabris
obscuripes STROBL, 1910 (Phortica)	LT	đ	NMA	(ROTH), det. E. B. BASDEN [BASDEN, 1961]
alboguttata WAHLBERG, 1839 (Drosophila)	ST	đ	ZIL	D. alboguttata WAHLB., Q Gusum WAHLB.
leucostoma BECKER, 1908 (Leucophenga)			-	[not in ZMB]
flavopruinosa DUDA, 1934	HT	₽	ZMB	[Máca, 1980]
lata BECKER, 1907 (Drosophila)		١.		[not in ZMB]
oldenbergi DUDA, 1924 (Phortica)	LT	\$	DEI	[ROHLFIEN and EWALD, 1972, MACA, 1977]
rujescens OLDENBERG, 1914	LT PL	ਹੈ ਹੈਹੈ	DEI	[ROHLFIEN and EWALD, 1972, MÁCA, 1980] [ROHLFIEN and EWALD, 1972, MÁCA, 1980]
	PL	00	NMW	Mehadia, 5. 7. 12, Oldenberg / Type / Phortics rufescens OBG., Type

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
subtusradiata DUDA, 1934	LT PL	ರೆ ಕ	ZMH ZMB	[Máca, 1980] Wustung b. Habelschwerdt, 1. Duda / albo- guttata W., 5, d. Duda / Amiota albogutt. var- radiata n. var., Typus / Holotype of Amiota subtusradiata Duda, det. Basden, VI. 1959
pariegata FALLÉN, 1823 (Drosophila)	LT PL	Q	RS RS	[Mica, 1977, with lectotype label by Basden Drosophila parients & / Prosophila parients
	PL .	Ş	RS	FLN., syntype, det. BASDEN, '55 / Phortica varie gata (FLN.), 2, det. BASDEN, '55 D. variegata 2 / Drosophila variegata FLN., syn- type, det. BASDEN, '55 / Phortica variegata (FLN.) 2, det. BASDEN, '55
Cacoxenus LOEW, 1858 urgyreator FREY, 1932	LT	ð	ZMH	[MCALPINE, 1968]
origuus Duba 1094	PL LT	<i>હ</i>	ZMH ZMB	[MCALPINE, 1968]
xiguus DUDA, 1924	PL	33	ZMB	[MCALPINE, 1968] 6.5.23 / Wustung b. Habelschwerdt, 1. Duda
	PL	đ	ZMB	Cacozenus exiguus Duda, 3, det. Dr. O. Duda 21.5.23 / Wustung b. Habelschwerdt, 1. Duda Cacozenus exiguus Duda, det. Dr. O. Duda
	\mathbf{PL}	đ	ZMB	24. 5. 23 / Wustung b. Habelschwerdt, 1. Duda
	РL	ð	ZMB	31.5.23 / Wustung h Habelschwardt 1 Dune
indagator LOEW, 1858	LT	<i>ਹੈ</i>	ZMB	Silesia, 5. 58 / Coll. H. LOEW / Type / Cacozenu indagator m. / Lectotype 3, Cacozenus indagator LOEW, designated by D. E. HARDY, 1958
obscura Kröber, 1912	PL 		ZMB	[Lectotype, by present designation] Silesia, 5.58 / Coll. H. LORW / Type [not in ZIH]
(Paragitona) inquilinus HENDEL, 1983	HT	đ	NMW	Sammaring Tuni 1000
perspicax Knab, 1914 (Gitonides)	ĹŤ		USNM	Semmering, Juni 1923 Honolulu, Oahu, Coll. O.H.S. / ex mealybugs or sugar cape / Type No. 19070, U.S.N.M. / Gito mides perspicax KNAB
punctatus DUDA, 1924	PL LT PL	5	USNM ZMB ZMB	[Lectotype, by present designation] [variously labelled, mostly from Honolulu] [MCALPINE, 1968] Formosa, SAUTER / Takao, 1907, X. 24 / Ca cozenus punctatus, 3, det. Dr. O. DUDA / Syn
	\mathbf{PL}	ę	ZMB	Formosa, SAUTER / Apping, 1912, V / Cacarena
·	PL		ZMB	Formosa, SAUTER / Takao, 1907, X, 26 / Busch
vlasovi DUDA, 1934	LT PL PL	\$5	ZIAL ZIAL ZMB	Cacoxenus punctatus D., 2, det. Dr. O. DUDA [MCALPINE, 1968] [MCALPINE, 1968] Ashkhabad
Chymomyza Czerny, 1903	-		MC#	
amoena LOEW, 1862 (Drosophila) caudalula OLDENBERG, 1914	ST HT	đ	MCZ DEI	MCZ type No. 13416 [ROHLFIEN and EWALD, 1972]
costata Zetterstedt, 1838	ST	****	ZIL	D. costata & Asele Lapp.
(Drosophila)	ST ST	\$	ZIL ZIL	D. costata Umenãa Q
	ST	å₽	ZIL	D. costata & Asele Lapp. [black squares only]
distincta EGGER, 1862 (Drosophila)	LT	ठे	NMW	Austria, coll. EGGER / distincta, det. EGGER Chym. distincta EGG. (= fuscimana OLD. nec ZTT.). det. BASDEN. 1955
oldenbergi DUDA, 1934	LT	đ	DEI	[Lectotype, by present designation] Gernsbach, Oldenberg, 8.98 / Lamellen kur: gewimpt. / distincta EGG. / fuscimana nec distinct ta, det. Dr. O. Duda / coll. Oldenberg
	PL	ð	DEI	[Lectotype, by present designation] Berlin Grun., 24. 8. / Schatten mehr flecken
	PL	ð	DEI	Pichelsberg, 4. 6. 98, Berlin / A / coll. OLDEN
	PL	ಕೆಕೆ	DEI	BERG Berlin Gd / Fg. dunkler / A / coll. OLDEN
	PL PL	ಕೆಕೆ ಕೆಕೆ	DEI	BERG / Drosophila fuscimana ZETT. Berlin Finkenkrug, 7. 6.06 / coll. OLDENBERG Berlin Gd, 24. 8.06 / Dros. fusc. Z. / coll. OLDEN- BERG
	PL	Ş	DEI	Berlin Pichelsberg, 4, 10, 06 / Breite braune Fg Striemen / coll, OLDENBERG
	PL PL	₫ ♀	DEI NMW	Berlin P., 16, 9, 00 / phot / coll. OLDENBERG
	PL	33 33	NMW NMW	Berlin Gd., 24. 8. 06 Berlin Gd., 24. 8. 06 / Chymomyza fuscimana Z. det. Oldbnberg

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
fuscimana ZETTERSTEDT, 1838 (Drosophila) albopunctata BECKER, 1900 (Drosophila)	ST ST HT	3 5 0 2	ZIL ZIL ZMH	D. fuscimana 3 Nordanās D. fuscimana 3 Nāstansjö Insel Nikander
obscura DR MRIJERE, 1911 [Amphoroneura]	LT		ZMA	Batavia, Java, Aug. 1908, Type [Lectotype, by present designation]
procnemia WILLISTON, 1896 (Drosophila)	PL ST	:	ZMA BMNH	Batavia, Java, Aug. 1908 St. Vincent, W. I.
Dettopsomyia LAMB, 1914 nigrovittata MALLOCH, 1924 (Drosophila)	HT	đ	SPHS	Sydney, 28 August 1921
pictipes DE MRIJERE, 1911 (Drosophila)	LT		ZMA ZMA	Wonosobo, Java, Apr. 1909, Type [Lectotype, by present designation]
sumatrana DUDA, 1926	PL ST	₫ ₽	RNH	Wonosobo, Java, Apr. 1909 Fort de Kock, Sumatra, 920 m, leg. E. Jacobson, 1925
	ST	đ₽	ZMB	Fort de Kock, Sumatra, 920 m, leg. E. Jacobson, 1925 / pictipes var. sumatrana, d. DUDA
Drosophila FALLÉN, 1823 acuminata COLLIN, 1952	ST ST	ð	OUM OUM	Torcross, 12. 7. 03, Col. Y.
afer TAN, HSu and SHENG, 1949	- 51	6	-	Padstow, IX. 02, C. G. LAMB [All type specimens of species described by TAN, HSU and SHENG have been lost — pers. commu- nication of T. C. TAN to M. R. WHEELER]
alboralis Momma and Takada, 1954	LT	ð	ZIHU	Mt. Taisetsu, Hokkaido [Lectotype, by present designation]
alpina Burla, 1948 ambigua Pomini, 1940	PL HT ?	ð	LBSU ZMZ	Mt. Taisetsu, Hokkaldo D. alpina n. sp., Type, 3, Fetan, VIII. 1947 [In POMINI's collections deposited in IEB and MSNV no specimens are labelled as types in spite of POMINI's statement in the publication in 1940]
ananassae Doleschall, 1858 similis Lamb, 1914 caribea Sturtryant, 1916	ST HT PT	đ	ZMUC AMNH AMNH	[not located] Mahé, Seychelles Exp., '08-9, Cotype Hayana, Cuba, 1915
	PT PT	đ	ZMB	Havana, Cuba, 1915 Bred-plantain / Havanna, Cuba, Jan. Febr. 1915 / Paratype / Drosophila caribbea STRT. / Flügel phot. 2. 6. 25
andalusiaca STROBL, 1906 forcipata COLLIN, 1952 annulipes DUDA, 1924 virgata TAN, HSU and SHENG, 1949	HT ST ST	3 ₽ 3 ₽ 3 ₽	NMA OUM DEI	BASDEN 1961, as lectotype] Studiand, 20. 8. 06 [ROHLPIEN and EWALD, 1972] [see comments on <i>D. afer</i> TAN, HSU and SHENG]
auraria Péng, 1937 bifasciata Pomini, 1940 bizonata Kikkawa and Peng, 1938	? 8 T		- NSMT	[not in NSMT] [see comments on D. ambigua POMINI] Kyoto, Aug. '36 / N. CHINO & F. T. PENG
brevicornis DUDA, 1935	HT		ZIAL	Jakovlevka, Spas. u., Ussur. kr., 23. VI. 926, N 613, (DJAKONOV i FILIPJEV)
busckii Coquillett, 1901	LT		USNM	5577, on rotten potatoes / In Nov. 17. 92 / Type No. 5396, U.S.N.M. [Lectotype, by present designation]
rubrostriata BECKER, 1908	PL LT	Ş	USNM ZMB	[different labels] Vill. Orotava II 47105 / busckii Coqu., det. Dr. O. Dupa / Tyons
	PL		ZMB	[Lectotype, by present designation] Villa Orotava II 47105 / = busckii Coqu., det. Dr. O. Duda / Typus
plurilineata VILLENEUVE, 1911	ST		DEI	[ROHLFIEN and EWALD, 1972]
	ST		ZMB	Paris, I. 1911 / Drosophila plurilineata VILLE- NEUVE i. litt. / busckii Coqu., det. Dr. O. DUDA
buzzatii Patterson and Wheeler, 1942	ST ST	3₽	DTRC	Cordoba, Argentina Cordoba, Argentina
tigrina Buzzati-Traverso, 1943		_	-	[not located]
versicolor Mather, 1955	LT	ð	AMS	[DANIELS, 1978, as holotype. Lectotype, by present designation]
cameraria HALIDAY, 1833	PL PL LT	₹ ₹ ₽	AMS AMS NMI	[DANIELS, 1978, as allotype] [DANIELS, 1978, as paratypes] Holywood / HALIDAY, 20.2. '82 / Named by J. E. COLLIN / Lectotype designated by E. B. BASDEN, 1952 / Drosophila cameraria HAL., det.
1	PL	ೆ	NMI	E. B. BASDEN, 1952, 9 [Lectotype, by present designation] Ireland / HALIDAY, 20. 2. '82 / Lectoallotype designated by E. B. BASDEN, 1952 / Drosophilu cameraria HAL. det. E. B. BASDEN, '52, 5



Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
unistriata STROBL, 1898	LT	₫ 99	NM:A	[Basden, 1961]
latestriata BECKER, 1908	PL LT	₽ ₽ ₫	NMA ZMB	[BASDEN, 1961, as syntypes] Teneriffe, XII, 51357 / latestriata BECKER, det.
		·		Dr. O. Duda [Lectotype, by present designation]
	\mathbf{PL}	Ş.	ZMB	Teneriffe, XII, 46735 / latestriata BRCKER
fungicola VILLENEUVE, 1921 cheda TAN, HSU and SHENG, 1949	_	İ	-	[not in IRSN] [see comments on D. afer TAN, HSU and SHENG]
cilitarsis Hering, 1940	HT	đ	DEI	[ROHLFIEN and EWALD, 1972, MORGE, 1976]
confusa Staeger, 1844	LT	ð	ZMC	[FRYDENBERG, 1956]
vibrissina DUDA, 1924	PL LT] đ	ZMC DEI	[FRYDENBERG, 1956] [ROHLFIEN and EWALD, 1972. Lectotype, by pre
000,000,000	21	•	17151	sent designation, with lectotype label by FRY
	77.7	40	777	DENBERG]
	PL PL	₫º ₫	DEI ZMB	[ROHLFIEN and EWALD, 1972] Mehadia, 3. 7. 12 / histrio (Mg.), Schin. et Old.
		1		Drosophila vibrissina &♀ / Typus
	PL	₫₫	ZMB ZMB	Mehadia, 11. 6. 04 / vibrissing DUDA & / Typus
grischuna Burla, 1951	PL LT	å	ZMZ	vibrissina Duda, Ç, Hyp. gezeichnet D. grischuna n. sp., T, Braunwald, 1950
		1		[Lectotype, by present designation]
coracina KIKKAWA and PENG.	PL ST	ď₽	ZMZ	D. grischuna n. sp., Paratypen, Braunwald, 1950
1938	21		NSMT	Simoda, Nov. '35 / H. NIIYAMA & H. KATAYAMA
deflexa Duda, 1924	ST	₫₽	ZMB	Wustung b. Habelschwerdt, 1. DUDA
	ST	99	ZMB	[different collection dates]
	HT	**	ZMZ	Guhlau b. Nimptsch / 29. 8. 12 / D. deflexa Dudaş D. auvenoti n. sp., Type, Therwil, VI, 1947
guyenoti Burla, 1948	HT PT	1	ZMZ	D. guyenoti n. sp., Type, Therwil, VI. 1947 D. guyenoti n. sp., Cotypen, Therwil, VI. 1947 Drosophila fenestrarum Fln., lectotype o, selected
fenestrarum FALLEN, 1828	LT	8	RS	Drosophila fenestrarum FLN., lectotype &, selected
Theetraram Fallen, 1020		l		by E. B. BASDEN, 1956 [Lectotype, by present designation]
	PL	·	RS	D. fenestrarum & / D. fenestrarum, syntype det.
	PL	*	R.S	BASDEN '56 D. fenestrarum, syntype &, det. BASDEN '56
	ΡĽ	o f ♀	RS	D. fenestrarum \mathcal{L} / D. fenestrarum, syntype \mathcal{L} , det.
		1		Basden '56
	PL LT	<u></u>	RS NMW	D. fenestrarum, syntype 2, det. BASDEN '56 virginea, Coll. WINTH. / virginea / fenestrarum
virginea MRIGEN, 1830		 *	I I I I	FLN., det. BASDEN, 1955
				[Lectotype, by present designation] Fort de Kock, Sumatra, 920 m, leg. E. Jacobson
hirsuta Dupa, 1926	ST	4₽	RNH	Fort de Kock, Sumatra, 920 m, leg. E. JACOBSON,
,	ST	Ş	ZMB	Fort de Kock, Sumatra, 920 m, leg. E. Jacobson.
	ST	Q	ZMB	1925 / hirsuta Q, d. DUDA
ficusphile Kikkawa and Peng,	ST	¥	NSMT	fenestrarum var. hirsuta 2, d. Duda Köhu, Sept. '34 / T. Kamizawa & M. Hiraga
1938			1	
funebris FABRICIUS, 1787 (Musca) clarkii HUTTON, 1901	ST HT	\$5	ZMC CMNZ	M. funebris Christchurch, H. CLARK
atkinsoni MILLER, 1921	-		- CMINZ	[MILLER, 1950]
(Leucophenga)	***		********	
dudai Malloch, 1934	HT PT	1	USNM	Angol, Chile Angol, Chile
grandis KIKKAWA and PENG,	ŝŤ		NSMT	Kôhu, Sept. '34 / T. Kamizawa & M. Hiraga
1938 helvetica Burla, 1948	7770		77.57	
Retrettet DURLA, 1948	HT PT	δ o	ZMZ ZMZ	D. helvetica n. sp., Type J, Vitznau, VII. 1947 D. helvetica n. sp., Cotypen, Vitznau, VII. 1947
		0+	LIIL	
histrio Meigen, 1830	_	1	1 -	[A specimen in NMW labelled histrio in MEIGEN's
			1 .	handwriting, but being D. phalerata MBIGEN may not be accepted as lectotype]
	ST	3°₽	ZMB	Tyrolis, Pieve di Ledro / Drosophila confusa / Coll.
pokornyi Duda, 1924				POKORNY / Drosophila Pokornyi Duda, d. Duda /
hydei Sturtevant, 1921	HT	đ	AMNH	Typus Lakeland, Florida
setosa Dobzhansky and Pa-	HT	ð	MZSP	Mogi das Cruzes, São Paulo, IV. 943
VAN, 1943 immigrans Sturtevant, 1921	PT UT	l	MZSP	Mogi das Cruzes, São Paulo, IV. 943
brouni Hutton, 1901	HT HT	* 00	AMNH CMNZ	White Plains, N.Y., 1919 Auckland, H. SUTER
cüljemur VILLENEUVE, 1923	LT	ð	MNHN	[ROCHA PITÉ and TSACAS, 1980]
ļ	PL	₫₽	MNHN	[ROCHA PITE and TSACAS, 1980]
J	PL PL	l	ZMB ZMB	Paris, 1-1911 / Drosophila cilifemur VILLEN. Paris, 1-1911 / cilifemur VILLEN., von Dr. V. er-
Į.				halten
iri Burla, 1954	HT	3	ZMZ	D. iri, T, Adzopé, 8. 51, & / Coll. H. Burla, Côte
	NT	đ	ZMZ	d'Ivoira 1951 Bio de Janeiro, VIII. 54
kikkawai Burla, 1954		1	1	[HARDY, 1965]

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
kuntzei Duda, 1924	LT	đ	ZMB	7. 10. 20 / St. Wendel, Rheinl., Duda / D. kuntzei 3. det. Dr. O. Duda / phot. / Typus
']	PL	₫₽	ZMB	[Lectotype, by present designation] St. Wendel, Rheinl., DUDA / D. kuntzei D. / Typus [different collection dates]
latifrontata FROTA-PESSOA, 1945	LT	ð	HNHM	[Bächli, 1974]
	PL	42	HNHM	[Biohli, 1974, as paratypes]
	PL	. ₫ ₽	ZMB	Formosa, SAUTER / Kosempo, 908.III / carinata, det. Dr. O. Duda
·	\mathbf{PL}	₫₽	ZMB	Formosa, SAUTER / Fuhosho, 909.VII / carinata, det. Dr. O. Duda
lebanonensis WHEELER, 1949	HT	8	DTRC	Beirut / No. 1733.1
limbata von Roser, 1840	PT LT	₹ ₹	DTRC SMN	Beirut / No. 1733.1 limbata, m. / Württemberg, v. Roser / Typus v. Roser / Dros. limbata v. Roser, lectotype (v. Ros. 7) selected by E. B. Basden, 1957
1000	PL	đ	SMN	[Lectotype, by present designation] Drosophila limbata v. R., v. ROSER / Dros. limbata v. Ros. (v. Ros. 10), syntype, det. BASDEN, '57
littoralis MEIGEN, 1830 parenti VILLENEUVE, 1921	ST	₹2	ZMB	[not located] Trescault (P. d. C.) / Drosophila PARENTI n. sp.
lugubrina DUDA, 1924	ST	8 ₽	ZMB	Wustung b. Habelschwerdt, 1. DUDA [different collection dates]
imeretensis SOKOLOV, 1948 lundstroemi DUDA, 1935 lutescens OKADA, 1975	HT	đ	ZMH	[not located] Tuovilaniaks
lutea Kikkawa and Peng, 1938	ST		NSMT	Ayabe, July '36 / H. KIKKAWA
melanogaster MEIGEN, 1830	LT	₫ 99	MNHN	[ROCHA PITÉ and TSACAS, 1980]
fasciata Meigen, 1830	PL LT	ð	MNHN NMW	[ROCHA PITÉ and TSACAS, 1980] fasciata, Coll. WINTH./ampeloph./melanogaster MG., det. BASDEN 1955
	PL	99	NMW	[Lectotype, by present designation] fasciata, Coll. WINTH. / ampeloph. / melanogaster MG., det. BASDEN 1955
nigriventris MACQUART, 1843	LT	8	MNHN	[TSACAS, 1967]
	PL	₫₽	MNHN	[TSACAS, 1967]
approximata ZETTERSTEDT, 1847	LT PL	Ŷ Ŷ	ZIL	D. approximata 2, Smoland. / Lectotype of Droso- phila approximata ZTT., selected by E. B. BASDEN 1960 [Lectotype, by present designation] Smol. / Syntype of Drosophila approximata ZETT.,
	PL	Ş	ZIL	selected by E. B. BASDEN 1960 Lund / Syntype of Drosophila approximata ZETT.,
ampelophila LOEW, 1862	ST		MCZ	selected by E. B. Basden, 1960 ampelophila m. MCZ No. 13415
	ST	1	MCZ	Cuba / MCZ No. 13415
uvarum Rondani, 1875	LT PL	₫ ₽	MZF	No. 2162 [Lectotype, by present designation] No. 2162
pilosula BECKER, 1908	LT	3	ZMB	Teneriffe, XII, 46732 / Drosophila pilosula BECK.
pwotawa DECREE, 1000		. •		det. Broker / ampelophila LORW, det. Dr. O. Du-
	PL	1	ZMB ZMB	DA/Typus [Lectotype, by present designation] Teneriffe, XII, 46627 / Typus Teneriffe, XII, 46731 / Typus
ļ	PL PL	1	ZMB	Orotava, I, 46943 / Typus
mercatorum PATTERSON and	ST		AMNH	Santa Barbara, California
Wherler, 1942	ST ST		USNM DTRC	Santa Barbara, California Santa Barbara, California
carinata GRIMSHAW, 1901	ST ST	Q Q	BMNH	Hawaii: Kona, 4000 ft Olas, Hawaii, VII. 1895, R. C. L. PERKINS [Type material of other species of <i>Drosophila</i> described by GRIMSHAW is also in RSM]
pararepleta Dobzhansky and	HT	đ	MZSP	Mogi das Cruzes, São Paulo, V-1949
PAVAN, 1943 miki DUDA, 1924	PT LT	a	MZSP NMW	Mogi das Cruzes, São Paulo, V-1949 [LASTOVKA and MÁCA, 1978]
	PL	ð	NMW	[Laštovka and Máca, 1978]
	PL	ð	NMW	Austr. inf., Wien, 28. 6. 72, MIK / Drosophila Mikin. sp. 3, det. Dr. O. Duda / Drosophila mikidud., Lectotype 3, selected by E. B. BASDEN,
	PL	đ	NMW	1956 Austr. inf., Wien, 28. 6. 72, Mik/Miki D., det. Dr. O. Duda / Drosophila miki Duda. Syntype 3, det. E. B. Basden, 1956
	PL	đ	NMW	Austr. inf., Wien, 28. 6. 72, Mik/D. Miki D. det. Dr. O. Duda
	PL		ZMB	det. Dr. O. DUDA Austr. inf., Wien, 28. 6. 72, MIK / Drosophila mik
	Σ.L.	ਰ	LMD	DUDA, &, det. DUDA

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
montana Patterson and Wheeler, 1942	ST		DTRC	Gran Teton National Park, Wyoming
nigricolor STROBL, 1898	LT	8	NMA	[BASDEN, 1961]
nigromaculata Kikkawa and Peng, 1938	PL ST	ਰੰ ਹੁ	NMA NSMT	[BASDEN, 1961, as syntype] Sapporo, Oct. '35 / S. MAKINO
rigros parsa STROBL, 1898	LT	8	NMA	[BASDEN, 1961]
nipponica KIKKAWA and PENG, 1938	PL ST	Ŷ	NMA NSMT	[BASDEN, 1961, as syntype] Ayabe, July '36 / H. Kikkawa
obscura Fallén, 1823	LT	đ	RS	D. obscura Q / Dros. obscura, lectotype, selected by E. B. Babden, 1956, v. Cain et al., 1952 [Cain et al., 1952. Lectotype, by present design ation]
meigeni DUDA, 1935	_	ŀ	l _	[not in MLUH or ZMB]
obscuroides POMINI, 1940 oldenbergi DUDA, 1924	? L T	đ	DEI	[see comments on D. ambigua POMINI] [ROHLFIEN and EWALD, 1972, BÄCHLI, 1972, a.
лисносту в БОБА, 1824	PL	0	DEI	holotype. Lectotype, by present designation] [ROHLFIEN and EWALD, 1972]
	PL	ਰੈ	ZMB	Mehadia, 13.7.12 / oldenbergi, det. Dr. O. DUDA
phalerata Mrigen, 1830	LT	ੈ ਹੈ	NMW	phalerata, Coll. WINTH. /phalerata / phalerata MEI GEN, det. Dr. O. DUDA / phalerata MG., det. BAS DEN, '55 [Lectotype, by present designation] phalerata, Coll. WINTH. / phalerata MG., det. BAS
	PL	Ş	NMW	DEN, 1955
	PL PL	đ Q	NMW	phalerata, Coll. WINTH.
picta Zetterstedt, 1847	HT	ğ	MNHN	No. 2454 [FRYDENBERG, 1955]
macularis VILLENEUVE, 1921	_	1	-	[not in IRSN]
pleurofasciata DUDA, 1924	ST ST	đ	DEI ZMB	[ROHLFIEN and EWALD, 1972] Budapest, PÁVEL / pleurofasciata &, det. DUDA Zeichn.
	ST	Ŷ	ZMB	Berlin Pichelsberg, 12. 3. 99 / mesosternalis, 2, ne funebris, det. Dr. O. Duda / macularis VILLEN. 2
polychaeta Patterson and				d. Duda.
Wheeler, 1942	ST	1	AMNH	Galveston, Texas Galveston, Texas
pulchrella TAN, HSU and SHENG, 1949	ST		DTRC -	Galveston, Texas [see comments on D. afer TAN, HSU and SHENG
pullata Tan, Hsu and Sheng, 1949	-		-	[see comments on D. afer TAN, HSU and SHENG
repleta Wollaston, 1858	LT	ļ	BMNH	[Coe, 1943]
punctulata LOEW, 1862	PL ST	'	BMNH	Funchal, Madeira
ads persa Mik, 1886	LT	క	MCZ NMW	punctulata / Cuba, Poey / MCZ No. 13422 Aschanti (RHITTER) / Drosophila adspersa Mik [Lectotype, by present designation] Austr. inf., Wien, 30. 9. 86, Mik / adspersa
	PL.	Q Q	NMW	Austr. inf., Wien, 30. 9. 86, Mrk / adspersa
prorepleta Duda, 1925	PL LT	Ŷ	HNHM	Aschanti (REITTER) / Drosophila adspersa MIK Costa Rica, Suiza de Turrialba, 29. VI. / Droso phila pararepleta ? n. sp. ?, det. Dr. O. DUDA
ļ	PL	Q.	HNHM	prorepleta 2 type, det. DUDA [Lectotype, by present designation] Costa Rica, Suiza de Turrialba, 28. VI. / para
austrorepleta Dobzhansky	HT	8	MIZED	repleta 2, det. Dr. O. DUDA
and Pavan, 1943	PT	•	MZSP	Mogi das Cruzes, São Paulo, IV. 943 Mogi das Cruzes, São Paulo, IV. 943
repletoides HSU, 1943				[see comments on D. afer TAN, HSU and SHENG
tumiditareus Tan, Hsu and Sheng, 1949	_		-	[see comments on D. afer TAN, HSU and SHENG
hayashii Okada, 1955 rufa Kikkawa and Peng, 1938	ST		-	[not located]
rufifrons LOEW, 1873	LT	ę	NSMT ZMB	Kôhu, Dec. '35 / M. HIRAGA Kasan, 20. 6. 71 [Lectotype, by present designs tion]
nitens Buzzati-Traverso, 1943	-	_	-	[not located]
scaptomyzoptera Duda, 1935 schmidti Duda, 1924	LT	đ	HNHM	[not located] Fenyofo / holotype of, TSACAS, 1978
	PL	₹2	нинм	[Lectotype, by present designation] Fenyölö
·	PL .	45	ZMB	Fenyolo, Schmidt / Drosophila Schmidti Duda
simulans Sturtevant, 1919	HT ST	8	AMNH NSMT	Lakeland, Fla. Sapporo, Sept. – Oct. '34 / S. MAKINO
sordidula Kikkawa and Peng, 1938	D.M.		110411	Support, Sopri.

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
subobscura Collin in Gordon,	ST	ಕ ಕ	оим	P. V. Kirtling, 11. 12. 98
1936	ST	l ಕೆಕ	OUM	P. V. Kirtling, 11. 12. 98 Sevenoaks, 5. 7. 31
	ST	ಕ್ಷಕ	OUM	Bred Kew diseased Iris, X. 18
1	ST ST	φ φφ	OUM	Bred Kew diseased Iris root, X. 18 Raylands, Newmarket, window, 3. 7. 31
subsilvestris HARDY and	D-	7*	0011	and animal transmission, will dow, or viola
KANESHIRO, 1968		ነ	1	
silvestris Banden, 1954	HT	₽.	BMNH	Lugton Bogs Wood, Dalkeith (Midlothian), at
	PT	₫ ₽	BMNH	apple bait [different localities]
1	ΡT	₫Ģ	RSM	[different localities]
subtilis Kikkawa and Peng, 1938	ST		NSMT	Kyoto, July '36 / H. KIKKAWA
suzukii Matsumura, 1931	ST		HU	Aomori, 11 X 1916, NISHIYA coll.
(Leucophenga) akahashii Sturtevant, 1927	нт		AMNH	Taibaku Farmasa Marah 1094
STURTEVARI, 1924	PT		AMNH	Taihoku, Formosa, March, 1924 Taihoku, Formosa, March, 1924
estacea von Roser, 1840	ĹŤ	ð	SMN	testacea m. / Drosophila flava FLL., det. BECKER /
,	PL	ð		lestacea v. ROSER nec flava F., det. Dr. O. DUDA /
				Typus v. Roser / Dros. testacea v. Ros., syntype
				(top) and lectotype (v. Ros. Nos. 1, 2), selected
1				by E. B. BASDEN, 1957 [Lectotype, by present designation]
1	PL	ď₽	SMN	Drosophila flava FLL., det. BECKER / Dr. testacea
1		"		V. ROSER, det. Dr. O. DUDA / Dros. testacea, 3 syn-
İ		1	:	types (v. Ros. Nos. 3 (top), 4, 5), det. E. B. Bas-
				DRN, '57
nigrithorax STROBL, 1894 selosa VILLENEUVE, 1921	_	1	\ -	[BASDEN, 1961]
transversa Fallén, 1823	LT	ਰ	RS	[not in IRSN] Drosophila transversa FLN., lectotype 5, selected
Total Parties, 1020		1		by E. B. BASDEN, 1956 / Right wing to slide,
		1		E. B. BASDEN '56
	***		Da .	[Lectotype, by present designation]
	PL	₽	RS	D. transversa & / D. transversa, syntype Q, det.
	PL	Q	R.S	E. B. BASDEN '56 D. transpersa, S. / D. transpersa, Syntyne S. det.
		"		D. transversa ? / D. transversa, syntype ?, det. E. B. BASDEN '56
	PL	99	RS	D. transversa, syntype Q. det. Basden '56
laeta Zetterstedt, 1847	LT	P	ZIL	var. b. <i>laeta</i> ♀, Paradislyckan / Lectotype of
		1	1	Drosophila lasta ZETT., selected by E.B. BASDEN,
		ļ	}	1960 [Lectotype, by present designation]
	PL	φ.	ZIL	Ostrog. / Syntype of Drosophila lasta ZTT., selec-
		'		Ostrog. / Syntype of Drosophila lasta ZTI., selected by E. B. BASDEN, 1960
subquinaria SPENCER, 1942	_			WHEELER, 1900; Holotype lost
tristis Fallen, 1823 spurca Zetterstedt, 1847	LT HT	đ	ZIL	[CAIN et al., 1952, BASDEN 1958]
tinctipennis STROBL, 1901	ÏÏ	1 %	NMA	[FRYDENBERG, 1955] [BASDEN, 1961]
The composition of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contrac	Ρ̈́L	đ đ	NMA	[Basden, 1961, as syntype]
trivittata STROBL, 1893		1	l	[BASDEN, 1961, as syntype] [BASDEN, 1961]
	\mathbf{ST}	₫₽	ZIAL	Tigrovaja, Suchan ri., Uss. kr., 9. V1. 927,
ussurica DUDA, 1935	LT	3	ZMZ	(STAKELBERG)
tsigana Burla and Gloor, 1952	TI	0	ZMZ	Oloron [Lectotype, by present designation]
	PL		ZMZ	Oloron
unimaculata STROBL, 1893	LT	·	NMA	[BASDEN, 1961]
unipectinata Duda, 1924	ST	4₽	DEI	[ROHLFIEN and EWALD, 1972]
virilis STURTEVANT, 1916	HT PT	ਰ	AMNH	New York, N.Y.
	**	<u> </u>	AMNH	New York, N.Y.
Gitona MEIGEN, 1830	-			
beckeri Duda, 1924	LT	Q	ZMB	Turkestan / Gitona Beckeri n. sp., det. Dr. O. Duda
aganguianaia Dyun . 2004	***		73617	[Lectotype, by present designation]
canariensis DUDA, 1934 distans BEZZI, 1924	HT HT	\$0.00 to	ZMH BMNH	Las Palmas, Gran Canaria, R. FREY
distigma MEIGEN, 1830	î.T	, t	MNHN	Cyprus, from figs [TSACAS and DESMIER DE CHENON, 1976]
,,	PL	8	NMW	Grenoble / distigma, coll. WINTH.
'	PL	8	NMW	Anion / Gitona distiama / distiama, coll. WINTH.
missoshasta Odorum 1041	PL	33	NMW	distigma, Coll. WINTH.
microchaeta Skguy, 1941	HT	ð	MNHN	Agadir
Hypselothyrea DE MRIJERE, 1906				
breviscutellata DUDA, 1928	-	1	1 -	[not in HNHM]
Leucophenga MIK, 1886		T		}
bellula Bergroth, 1894 (Droso-	_	1	1 -	[not located]
phila)				
guttiventris DE MEIJERE,	HT	₽	ZMA	Java, II. III. '06, Semarang, JACOBSON / Droso-
1908 (Drosophila) interrupta DUDA, 1924	LT	ę	DEI	phila guttiventris, det. DE MEIJERE, Type / 4545 [ROHLFIEN and EWALD, 1972, as holotype. Lecto-
moorapis Duba, 1821	111) *	Der	type, by present designation]
	PL	ð	DEI	[ROHLFIEN and EWALD, 1972]
	•		, –	•

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
maculata DUFOUR, 1839 (Droso- phila)			_	[not in MNHN]
ornata WHEBLER, 1959 ornatipennis DE MEIJERE, 1914 (Drosophila)	HT	ð	ZMA	Java, 1911, Nongkodjadjar, JACOBSON / Droso-
quadripunctata DE MEIJERE, 1908 (Drosophila)	LT	Ş.	ZMA	phila ornatipennia, det. DE MEIJERE, Type / 4585 Java, II. III. '06, Semarang, JACOBSON / Droso- phila 4-punctata DE MEIJ., Type / 4544 Lactatives by recent desirestinal
	PL PL	ರ ಕ	ZMA RNH	[Lectotype, by present designation] Java, II. III. '06, Semarang, JACOBSON / 4539 Java, I. '06, Semarang, JACOBSON / Drosophila quadripunctata, DE MEIJERE det. / Museum Lei- den / 4278
uinquemaculata STROBL, 1893 marginalis OLDENBERG, 1914 (Paraleucophenga)	HT	ೆ	DEI	[BASDEN, 1961] Macugnaga, OLDENBERG, 25. 7. 00 / Type / Typus / coll. OLDENBERG / Neoleucophenga 5maculata STR. var. marginalis m., OLD., Type/Leucophenga 5-maculata STROBL nov. var. (BEZZI) / Neoleuco- phenga OLD./4303
stackelbergi DUDA, 1934	нт	ę	ZMB	Pw Rjabokon, ju Chanka, Ussur. kr., ŠTAKEL- BERG, 16. VII. 927 / 604 / Leucophenga Stackel-
nubpollinosa DE MEIJERE, 1914 (Drosophila)	LT	9	ZMA	bergi n. sp., det. Dr. O. DUDA, Typus, 2? [BÄCHLI, 1971, as holotype. Lectotype, by present designation]
	PL	Ş	ZMA	[Bachli, 1971, as paratype]
Liodrosophila Duda, 1922 nitida Duda, 1922	LT	Ŷ.	NMW	FRUHSTORFER, Mittel-Annam / Liodrosophila nitida 3, det. Dr. O. Duda [Lectotype, by present designation]
	PL	₫9	NMW	FRUHSTORFER, Mittel-Annam / Liodrosophila nilida, det. Dr. O. Duda
	PL PL	₫ ₽	DEI ZMB	[ROHLFIEN and EWALD, 1972] FRUHSTORFER, Mittel-Annam / Liodrosophila nitida, det. Dr. O. Duda / Wien. M.
Microdrosophila MALLOCH, 1921 congesta ZETTERSTEDT, 1847 (Drosophila)	LT	đ	ZIL	D. congesta 3, Lärketorp / Lectotype of Droso- phila congesta ZTT., selected by E. B. BASDEN, 1960 [Lectotype, by present designation]
zetterstedti WHEBLER, 1959 nigriventris ZETTERSTEDT, 1847 (Drosophila)	LT	đ	ZIL	D. nigriventris & Smol. / Lectotype of Drosophila
	PL	P	ZIL	[Lectotype, by present designation] D. nigriventris 2, Smol. / Syntype of Drosophila nigriventris ZTT., selected by E. B. BASDEN, 1960
Mycodrosophila Oldenberg,				
1914 gratiosa DE MRIJERE, 1911 (Drosophila)	LT		ZMA	Java, Batavia, dec. 1908, type [Lectotype, by present designation]
fracticosta LAMB, 1914 (Dro-	PL ST	9	ZMA BMNH	[Lectotype, by present designation] Java, Batavia, dec. 1908 Mahé, Sevenelles Exp., '08 – 9
sophila)	ST		ZMUC	Mahé, Seychelles Exp., '08 – 9 Mahé, Seychelles Exp., '08 – 9, paratype
biroi Duda, 1923	ST ST	ਰ	HNHM ZMB	Singapore, Biró 1898 Singapore, Biró, 1898 / Mycodrosophila Biros Duda, J., det. Dr. O. Duda
poecilogastra LOEW, 1874 (Amiota)	-	1	-	[not in ZMB]
johni Pokorny, 1896 (Droso- phila)	нт	\$	нинм	Slavon., JOHN / Drosophila Johni Pok. / Type
Scaptomyza HARDY, 1849 flava FALLÉN, 1828 (Drosophila)	LT PL	Ş.	ZIL	[LAŠTOVKA and MÁCA, 1978, now destroyed] [LAŠTOVKA and MÁCA, 1978]
flaveola Mrigén, 1830 (Notiphila)	-		-	[not in MNHN or NMW]
apicalis HARDY, 1849 montana WHEELER, 1949 graminum FALLEN, 1823 (Drosophila)	HT LT	* 004	DTRC RS	[BASDEN, 1962] No. 1763.9 D. graminum & / Lectotype in accord. with HARDY, 1849 / Scapt. graminum (FLN.), 2, det. BASDEN, 1956, lectotype of Drosophila graminum FLN.
	ΡĻ	Ş	RS	[Lectotype, by present designation] Drosophila graminum Q / Drosophila graminum ELN syntype det Basnen 1955 / Scantomuzz
incana MEIGEN, 1830 (Drosophila)	LT	đ	NMW	graminum (Fln.), det. BASDEN, 1956 incana, Coll. WINTH. / incana / tetrasticha, det Dr. O. DUDA / Scap. graminum (Fln.), det BASDEN, 1955 [Lectotype, by present designation]

Table 2 (Continued)

Table 2 (Continueu)	1	1	1	
Species	Kind of types	Sex	Deposited in	Details of labels and comments
rufipes Meigen, 1830	LT	ð	MNHN	No. 2462
(Drosophila)	PL	Q.	NMW	[Lectotype, by present designation] rulipes, Coll. WINTH. / rulipes / tetrasticha BECK., det. Dr. O. DUDA / Scap. graminum (FLN.), det. BASDEN, 1955
amoena MRIGEN, 1838 (Hydrellia)	LT	đ	MNHN	No. 2444 [Lectotype, by present designation]
flavipennis ZETTERSTEDT, 1838 (Drosophila)	LT	đ	ZIL	D. flavipennis &, Wühelm. / D. Graminum var. c, ZETT. / Lectotype of Drosophila flavipennis ZTT., selected by E. B. BASDEN, 1960
	PL	P	ZIL	[Lectotype, by present designation] D. flavipennis 2, Wilh. / Syntype of Drosophila flavipennis ZTT., selected by E. B. BASDEN, 1960
sordida ZETTERSTEDT, 1838 (Drosophila)	LT	đ	ZIL	D. sordida 3, Wilhelmina / D. Graminum var. b, ZETT. / Lectotype of Drosophila sordida ZETT., selected by E. B. BASDEN. 1960
	PL	Ş	ZIL	Lectotype, by present designation D. sordida Q. Dowre, Boh. / Syntype of Drosophila sordida ZTT., selected by E. B. BASDEN, 1960
tetrasticha Becker, 1908	ST ST ST ST ST ST ST ST		ZMB ZMB ZMB ZMB ZMB ZMB ZMB ZMB ZMB ZMB	Teneriffe, XII, 46734 Pelst, 26. 9., 21419 Moisdorf, 9., 33338 Oderwald, 14. 5., 30834 Charlottenbrunn, 8. 7., 32271 Oderwald, 2. 7., 31976 Moisdorf, 9. 10., 33.485 Fürstenstein, 5., 31229 Llegnitz, 8., 38024 Hummel, 2. 10., 29902
semiatricornis Duda, 1935	HT	ρ	ZIAL	Jakovlevka, Spass. u., Uss. kr., 30. VI. 927, N 612,
(Drosophila) borealis Wheeler, 1952	нт	đ	DTRC	(STAKELBERG) Ossipee, New Hampshire, Aug. 4, 1950, A. H.
griscola ZETTERSTEDT, 1847 (Drosophila)	-		-	STURTEVANT [not located]
grisescens DUDA, 1921	ST	đ	ZMB	2. 4. 16 / Sinsen, Westf., Duda / S. grisescens D.,
(Drosophila)	ST	8	ZMB	29. 3. 08 / Nimptsch, Schls., Duda / gracilis WALK., 3 / S. grisescens D., 3
	sT	4 5	ZMB	Illeid, SHarz, DUDA / S. grisescens D.
	sT	3	ZMB	[different collection dates] 1. 6. 20 / St. Wendel, Rheinl., DUDA / gracilis WALK., J, det. Dr. O. DUDA / S. grisescens D., J
impunctata FREY, 1945 (Scaptomyzella)	LT	₹	ZMH	Azores: S. Miguel: Lagoa do Congro, Type / Nr. 8293
pallida ZETTERSTEDT, 1847 (Drosophila)	PL PL LT		ZMH ZMH ZIL	[Lectotype, by present designation] Azores: S. Miguel Azores: S. Jorge D. pallida Z., graminum FALL. var d, d, Esp. / Lectotype of Drosophila pallida ZTT., selected by E. B. BASDEN, 1960
•	PL		ZIL	[Lectotype, by present designation] Syntype of Drosophila pallida ZTT., selected by
disticha DUDA, 1921 (Drosophila)	LT	đ	ZMB	E. B. BASDEN, 1960 22. 9. 19/St. Wendel, Rheinl., DUDA / disticha
(S. O.O. P. Man)	PL	99	ZMB	D., & [Lectotype, by present designation] 18. 3. 21 / Wustung b. Habelschwerdt, 1. Duda / disticha D., \$2
•	PL	3 5	ZMB	Nimptsch, Schls., DUDA [different collection dates]
	PL PL	₫₫ ₫₫	ZMB ZMB	1. 6. 12 / Ilfeld, S. Harz, Duda / disticha D., 3 14. 7. 12 / Strachau b. Nimptsch / P. disticha
	PL.	22	ZMB	DUDA, &, d. DUDA 8. 10. 12/Pangelberg bei Nimptsch/disticha D., ?
	PL	99	ZMB	10. 6. 20/St. Wendel, Rheinl., Duda/disticha D.,
	PL	Q Q	ZMB	22. 7. 12 / Kl. Eliguth bei Nimptsch / disticha D.,
subsplendens Duda, 1935	PL PL HT	99 99 8	ZMB ZMB ZIAL	21. 8. 13 / Guhlau b. Nimptsch / disticha D., 2 6. 10. 06 / Wölfelsgrund / disticha D., 2 Jakovlevka, Spass. u., Uss. kr., 30. VI. 927, N 611,
(Drosophila) trochanterata COLLIN, 1953 unipunctum ZETTERSTEDT, 1847 (Geomyza)	ST ST ST	5 ♀ 5	OUM OUM ZIL	(ŠTAKELBERG) Kinrara, 9, 7, 36 Nairn, 25, 5, 04, Col. Y. Arbrá

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
Soederbomia HENDEL, 1938 flava HENDEL, 1938	нт	ç	RS	S. W. Mongolei / 5. Juli, leg. Söderbom / Sven Hedin Exp. Centr. Asien / Söderbomia flavo HEND., det. HENDEL
Stegana MEIGEN, 1830 colcoptrata SCOPOLI, 1763 (Musca)	_			[not located]
hypoleuca Meigen, 1830	ST	ç	ZMC	S. hypoleuca Meig. / Sielland / July 1824 / 9 Mus. Westerm.
annulata HALIDAY, 1833	ST	₽ P	NMW -	hypoleuca, Coll. WINTH., Copenhagen [not in NMI]
nigrithorax STROBL, 1898	LT	of Q	NMA	[Basden, 1961]
furta Linné, 1766 (Musca)	PL LT	ð	NMA ZMU	[BASDEN, 1961, as syntype] furta [Lectotype, by present designation]
curvipennis FALLEN, 1823 (Drosophila)	PL LT	đ	ZMU RS	furta Drosophila curvipennis Fln. 3, lectotype selectet by E. B. BASDEN, 1955 / Protostegana furta (L.) 3 det. BASDEN, 1960
	PL	· P	RS	[Lectotype, by present designation] Drosophila curvipennis 3 / Drosophila curvipenni Flm., 2 syntype, det. BASDEN, '55 / Protostegani furta (L.), 2, det. BASDEN, 1960
	PL	ļ ,\$	RS	D. curvipennis ? / Drosophila curvipennis Fln. ? syntype, det. BASDEN, '55 / Protostegana furti (L.), ?, det. BASDEN, 1960
ı	PL	99	RS	Drosophila curvipennis Fl.N., 2 syntype, selected by E. B. Basden, '55 / Protostegana furta (L.), 2 det. Basden, 1960
nigra MEIGEN, 1830	ST ST	\$\$ \$	MNHN NMW	No. 2452 Kiel, coll. Winth. / pulicaria, det. Wied. pulicaria Wied., Kiel / nigra / Protostegam curvipennia (Fin.), E. B. Basden, 1955
mehadiae DUDA, 1924	HT	\$	HNHM	Mehadia, KERTESZ, 1904 VI. 11 / Stegana Meha
nigrifrons DE MEIJERE, 1911	LT		ZMA	diae n. var. D., DUDA / Typus Batavia, Java, Aug, 1908, Type [Lectotype, by present designation]
nigripennis HENDEL, 1914 (Orthostegana)	ST ST	ð	DEI ZMB	[ROHLFIEN and EWALD, 1972] Formosa, SAUTER / Kosempo, 908. VI / Oxunh
poeciloptera DUDA, 1926 (Chaetocnema)	ST		ZMB	poeciloptera, J. det. Dr. O. DUDA Formosa, SAUTER / Kosempo, 908. VI / Ozy phortica poeciloptera, det. Dr. O. DUDA / Ung
	ST	ਰ	ZMB	Nat. Mus. Formosa, SAUTER / Koshun, 909. III / O. poe ciloptera, 3, det. Dr. O. DUDA Formosa, SAUTER / Tapani, 1911. III / Oxyphor
	ST	₽	ZMB	Formosa, SAUTER / Tapani, 1911. III / Oxyphor tica poeciloptera, 2, det. Dr. O. Duda
B	ST	· P	ZMB	Formosa, Toyenmongai / Oxyphortica poeci loptera, 2, det. Dr. O. Duda
sibirica DUDA, 1934 (Protostegana)	_	.	- ,	[not located]
stroblii MIK, 1898	LT	₽	NMA	[Basden, 1961]
Species incertae aceti KOLLAR in HEEGER, 1851 (Drosophila)	_		-	[not in NMW]
analis MACQUART, 1843 (Droso- phila)	_		-	[not in MNHN or MHNL]
balteata BERGROTH, 1894 (Droso- phila)	-		-	[not located]
cellariz LINNE, 1758 (Musca) cellaris OKEN, 1815 (Mosillus)	-	1	-	[not located]
cellarum ROBINBAU-DESVOIDY, 1830 (Bachis)	=		-	[not located] [not located]
chopardi Skauy, 1936 (Scaptomyza)	нт	ð	MNHN	San Miguel: Furnas
cinerella FALLEN, 1823 (Droso- phila)	LT	Ş	ZIL	D. cinerella 2, e museo FALLÉN
claripennis MACQUART, 1885 (Diastata)	ST		MNHN	[Lectotype, by present designation] [no number]
emulata RAY-CHAUDHURI and MUKHERJEE, 1941 (Drosophila)	-		-	[not located]
erythrophthalma PANZER, 1794 (Musca)	-		-	[not located]
flavipennis MEIGEN, 1830 (Opomyza)	-		-	[not in MNHN or NMW]
gracilis WALKER, 1853 (Droso- phila)	-		-	[not in BMNH]
gracilis FRRY, 1945 (Scaptomyza)	нт	₹ 2	ZMH	Azores: Terceira, Fonduros, 10. VI.

Table 2 (Continued)

Species	Kind of types	Sex	Deposited in	Details of labels and comments
imparata WALKER, 1859 (Droso-	_		_	[not in BMNH]
phila) ingrata HALIDAY, 1833 (Droso-	нт		NMI	Holywood / HALIDAY, 20. 2. '82 / Type / ingrata / Named by J. E. COLLIN
phila) esonica MATSUMURA, 1931 (Drosophila)	_		_	[not in HU]
lacteoguttata Portschinsky, 1892 (Drosophila)	_		-	[not located]
litorella MEIGEN, 1838 (Hydrellia) maculiventris VAN DER WULP, 1897 (Drosophila)	_		_	[not located] [not in HNHM or ZMA or RNH]
marmoria HUTTON, 1901 (Droso- phila)	HT	Ş	CMNZ	Auckland, H. SUTER
macquarti WHEELER, 1981 melanogaster MACQUART, 1843 (Drosophila)	-		_	[not in MNHN or MHNL]
mycethophila Gourrau, 1865 (Drosophila)	-	1	1	[not located]
nigriceps MEIGEN, 1838 (Droso- phila)	-		-	[not in MNHN or NMW]
nigrimana MEIGEN, 1830 (Droso- phila)	-		-	[not in MNHN or NMW]
nigrita CURTIS, 1833 (Drosophila) nigropunctata VAN DER WULP,	_		-	[not located] [not in RNH or ZMA]
1892 (Drosophila) nitidapex BIGOT, 1891 (Droso-	нт	Q.	OUM	Canaria / Type DIP: 468
phila) nilidiventris MACQUART, 1835 (Drosophila)			-	[not in MNHN or MHNL]
penopola Scopoli, 1763 (Musca) pallipes DUFOUR, 1846 (Droso- phila) perrisi WHEELER and HAMILTON,	-		_	[not located] [not in MNHN]
1972 fasciata Perris in Dufour,	-		-	[not located]
1839 (Drosophila) pruinosa BIGOT, 1888 (Gitona) reaumurii DUFOUR, 1845 (Droso-	_		_	[not in OUM] [not located]
phila) ruficeps von Rosen, 1840 (Dro-	LT		SMN	Scaptomyza rufipes MEIG. v. ROSER / appendicula
sophila)				ta, ruficeps / Scapt. flava Fn., det. Dr. O. Duda [Lectotype, by present designation]
ruficornis MEIGEN, 1838 (Hydrel- lia)	_		-	[not in MNHN]
testacens WHEELER, 1981 testacea Gourrau, 1865	_		-	[not located]
(Drosophila) variopicta BECKER, 1908 (Drosophila)	ST	Ş.	ZMB	Teneriffe, XII, 46599 / 2, variopicta B., = fene strarum FALL.
(21080 pauu)	ST	φ	ZMB	Laguna, IV, 47615 / Q, variopieta Beck., = fe nestrarum F.
varipes MACQUART, 1835 (Droso- phila)	ST	Ş	ZMB -	Laguna, IV, 47615 / fenestrarum FALL, det. Dr. O. DUDA [not in MNHN or MHNL]

Summary

The type material of all Palearctic species of Drosophilidae described before 1956, the places where it is kept and its labelling are listed. Lectotypes are established as far as that is appropriate.

Zusammenfassung

Für alle vor 1956 beschriebenen palaearktischen Drosophilidae-Arten ist das Typenmaterial, sein Aufbewahrungsort und seine Bezettelung aufgelistet. Lectotypen sind festgelegt, soweit das zweckmäßig ist.

Резиме

Для всех описанных до 1956 г. палеаритических видов Drosophilidae был составлен перечень с указанием типов, места их хранения и данных этикеток. В случае целесообразности были установлены лекто-

References

Bächli, G. Leucophenga und Paraleucophenga (Diptera Brachycera), Fam. Drosophilidae. Exploration du Parc National de l'Upemba. Mission G. F. DE Witte, Fasc. 71, 192 pp., 38 plates. Bruxelles, 1971. Biometrische Studie zur Unterscheidung von Drosophila (Hirlodrosophila) oldenbergi Duda und D. (H.) lundstroemi Duda (Diptera, Drosophilidae). Mitt. schweiz. ent. Ges. 45, 43-48; 1972.

- -- Bevision der von Duda beschriebenen südostasiatischen Arten des Drosophila-Subgenus Hirtodrosophila (Diptera: Drosophilidae). Mitt. zool. Mus. Berlin 49, 267-315; 1974.
- Blohli, G. & Rocha Pitts, M. T. Family Drosophilidae. In: Soos et al., (eds.), Catalogue of Palearctic Diptera. Budapest. [In press.]
- BASDEN, E. B. An examination of the evidence concerning the identity of Drosophila tristis FALLEN (Dipt., Drosophilidae). Ent. month. Mag. 94, 198-202; 1958.
- Type collections of Drosophilidae (Diptera). 1. The STROBL collection. Beitr. Ent. 11, 160 224; 1961.
- JAMES HARDY's entomological notebooks. Journ. Soc. Bibliogr. nat. Hist. 4, 44—47, 1962.

 CAIN, A. J., COLLIN, J. B. & DEMERRO, V. B. Correct application of the name Drosophila obscura Fallen and notes on the type of D. trivinite Fallen (Dipt., Drosophildae). Ent. month. Mag. 8, 193—196; 1962.

 COE, R. L. Drosophila replets Wollaston (Dipt., Drosophildae) new to Britain, with notes on the species and some ac-
- count of its breeding-habits. Ent. month. Mag. 79, 204—207; 1943.

 DARKELS, G. A catalogue of the type specimens of Diptera in the Australian Museum. Rec. aust. Mus. 31, 411—471; 1978.

 FRYDENERG, O. On the types of Drosophila picta ZETT. and D. spurca ZETT. (Drosophilidae, Dipt.) and a new description of the former. Ent. Medd. 27, 104—112; 1955.

 The synonymy, relationship, and distribution of Drosophila confusa STAEGER, 1844 (Dipt.). Ent. Medd. 27, 295—308;
- HARDY, D. E. Family Drosophilidae. In: Insects of Hawaii. Vol. 12, Diptera: Cyclorrhapha II, Series Schizophora, Section Acalypterae I. Univ. Hawaii Press, Honolulu, 814 pp.; 1966. STOVKA, P. & MÁCA, J. European species of the *Drosophila* subgenus *Lordiphosa* (Diptera, Drosophilidae). Acta ent.
- bohemoslov. 75, 404 420; 1978.
- MACA, J. Revision of Palearctic species of Amiota subg. Phortica (Diptera, Drosophilidae). Acta ent. bohemoslov. 74, 115-130; 1977.
- European species of the subgenus Amiota s. str. (Diptera, Drosophilidae). Acta ent. bohemoslov. 77, 328-346; 1980. MCALPINE, J. F. An annotated key to drosophilid genera with bare or micropubescent aristae and a revision of Paracacoxenus (Diptera: Drosophilidae). Can. Ent. 100, 514-532; 1968.
- MILLER, D. Catalogue of the Diptera of the New Zealand subregion. Bull. Dept. sci. industr. Res. New Zealand 160, 1 194; 1950.
- MORGE, G. Beiträge zur Kenntnis von Typen-Exemplaren und wenig bekannten Dipteren-Arten. II. Beitr, Ent. 26. 489-530; 1976.
- BOCHA PITE, M. T. & TSACAS, L. Catalogue of the European species of the genus Drosophila. Bolm. Soc. port. Cienc. nat. 19, 37 - 47; 1980.
- ROHLFIEN, K. & EWALD, B. Katalog der in den Sammlungen des ehemaligen Deutschen Entomologischen Institutes auf-bewahrten Typen VIII. (Diptera: Cyclorrhapha: Schlzophora: Acalyptrate). Beltr. Ent. 22, 407–409; 1972. TSACAS, L. Drosophila nigriventrie MACQUARY, 1843, nouveau synonyme de D. melanogaster MEIGER, 1830 (Dipt. Droso-
- philidae). Bull. Mus. natn. Hist. nat. 39, 158—159; 1967.

 TSACAS, L. & DESMIER DE CHENON, R. Taxinomie et biogéographie des "genres" Cacazenus Paracacozenus Gitonides Gitona (Dipt., Drosophilidae) et biologie d'une nouvelle espèce africaine commensale d'Apoidea (Hymenoptera). Ann. Soc. ent. France, N. S., 12, 491-507; 1976.
- WHEELER, M. R., New species of the quinaria group of Drosophila (Diptera, Drosophilidae). Southw. Nat. 5, 160-164;

Besprechungen

Dierl, W. Schmetterlinge. Unsere Tag- und Nachtfalter nach Farbfotos bestimmen. BLV Naturführer 120. BLV Verlagsgesellschaft, München-Wien-Zürich. 1981: 11.7×17.9 cm: 127 S., 149 Farbabb. Preis 9.80 DM.

An Hand der technisch hervorragenden Farbphotos, die nicht nur ästhetisch ansprechen, sondern auch die Mannigfaltigkeit in Farbe und Form unserer heimischen Schmetterlinge darstellen sollen, werden dem Leser Kenntnisse über die Namen und die Lebensweise dieser Tiere vermittelt. Die Auswahl umfaßt häufige und leicht kenntliche Arten der wichtigsten Familien, dabei auch einige markante Vertreter der sogenannten Kleinschmetterlinge. In der Einleitung findet der Benutzer, der im Sinne eines Naturführers sehen und verstehen will, auch die notwendigen Informationen über Körperbau und Entwicklung der Schmetterlinge.

Forster, W. & Wohlfahrt, Th. A. Die Schmetterlinge Mitteleuropas. Band V: Spanner (Geometridae). Franck' sche Verlagshandlung, Stuttgart. 1981; 19 × 26,4 cm; X + 312 S., 265 Abb., 893 Farbabb. auf 26 Taf. Preis 198.00 DM.

Mit vorliegendem Band ist die Bearbeitung der mitteleuropäischen "Großschmetterlinge" abgeschlossen. Der Aufbau und die Darstellung der einzelnen Taxa wurde schon bei der Besprechung der einzelnen Lieferungen beschrieben. Hervorzuheben ist, daß bei allen Taxa, deren Bestimmung allein nach der Flügelzeichnung Schwierigkeiten bereitet, Zeichnungen des Genitalapparates angeführt werden, so daß in Kombinationen mit den Farbtafeln eine Determination möglich wird. Für das behandelte Gebiet sind 528 Arten nachgewiesen. Ergänzungen und Berichtigungen sowie ein Register der behandelten Taxa beschließen den Textteil des Bandes, dem sich die 26 Tafeln mit den Farbabbildungen der Falter anschließen. Der vorliegende Band wird zusammen mit den vier anderen zur Standardliteratur der Entomologen gehören.

GARDIKE

Wetzel, Th. Pflanzenschädlinge. Bekämpfung - Probleme - Lösungen. URANIA-Verlag Leipzig, Jena, Berlin. 1981; 12.2×20.2 cm; 147 S., 46 Abb. (31 im Text und 15 auf Tafeln). Preis 4,00 M.

Das in dritter Auflage vorliegende Heft der Schriftenreihe "Wir und die Natur" vermittelt dem interessierten Leser einen Einblick in Probleme, deren Bedeutung für die menschliche Gesellschaft schneller wächst als das trotz verantwortungsbewußter Darstellungen in den Medien von der großen Mehrheit der Bevölkerung wahrgenommen und verstanden wird. So ist das Bemühen ein Gebot der Stunde, breite Kreise der Öffentlichkeit über Schädlinge, deren Aussehen, Lebensweise, Massenwechsel, die Ertragsverluste und deren mögliches Vermeiden durch die verschiedenen Methoden der Schädlingsbekämpfung zu informieren. Der flüssig geschriebene Text erfüllt diese Forderung unter Wahrung sowohl der Wissenschaftlichkeit und Aktualität der Aussage als auch der Aligemeinverständlichkeit. PRIKRARN