

Family SPHAEROCERIDAE

- SPHAEROCERIDAE Macquart, 1835: 561. Type genus: *Sphaerocera* Latreille, 1805. - Haliday, 1836: 315-336 [as tribe Sphaeroceridae; diagnosis, revision of British species, keys]; Richards, 1930: 261-335 [nomenclature of world genera, review of British taxa, morphology, biology, keys, illustr.]; Enderlein, 1936: 172-174 [diagnosis, key to Central European genera]; Duda, 1938: 1-182 [diagnosis, classification, review of Palaearctic species, keys, illustr.]; Hennig, 1952: 320-324 [larvae, diagnosis, general description, illustr.]; Harrison, 1959: 252-279 [review of New Zealand species, keys, illustr.]; Vanschuytbroeck, 1959b: 15-21 [description]; Richards, 1965c: 718-725 [Nearctic catalog]; Kim & Cook, 1966: 78-100 [morphology, illustr.]; Richards, 1967b: 1-28 [Neotropical catalog]; Hackman, 1969: 193-210 [classification, phylogenetic notes, zoogeography of world genera, illustr.]; Nartshuk 1970a: 336-355 [diagnosis, key to species of European part of USSR, illustr.]; Griffiths, 1972: 206-209 [diagnosis, apomorphic features, monophyly, relationships, illustr.]; Hennig, 1973: 64 [diagnosis, relationships, list of genera]; Richards, 1973: 297-396 [review of Australasian species, keys, illustr.]; Papp, 1973c: 1-76 [diagnosis, review of Hungarian species, keys, illustr.]; Hackman, 1977: 398-406 [Oriental catalog]; Richards, 1980: 614-626 [Afrotropical catalog]; Teskey, 1981: 144-147 [larvae, diagnosis in key, illustr.]; Papp, 1984: 68-107 [diagnosis, Palaearctic catalog]; K. G. V. Smith, 1986: 87-90 [diagnosis, biology, preimaginal stages of forensic important species]; Ferrar, 1987: 345-349, 833-838 [biology & habitat of preimaginal stages, economic importance, general description of all preimaginal stages, illustr.]; Marshall & Richards, 1987: 993-1004 [morphology of adults and immatures, biology, classification, key to Nearctic genera, illustr.]; Nartshuk, 1988: 559-590 [diagnosis, key to species of European part of USSR, illustr.]; Pitkin, 1988: 3-172 [review of British species, morphology, preimaginal stages, biology, keys, illustr.]; J. F. McAlpine, 1989: 1483-1484 [ground plan characters, phylogenetic relationships, species diversity, distribution]; Marshall, 1989b: 601-607 [Australasian/Oceanian catalog]; K. G. V. Smith, 1989: 99-100, 206 [preimaginal stages, larval diagnosis in key, biology, illustr.]; N. L. Evenhuis, 1994: 440 [catalog of fossil species]; Poole & Gentili, 1996: 246-250 [checklist of Nearctic species]; Roháček, 1998a: 463-492 [morphology of adults and immatures, biology, classification, distribution, key to Palaearctic genera, illustr.]; Marshall et al., 1999: 295-304 [description of amber fossils, illustr.]; Sabrosky, 1999: 285 [family-group names].
- SPHOEROCERIDAE Macquart, 1846: 345 [misspelling]; for other misspellings of this family group name see Sabrosky, 1999: 285.
- COPROMYZIDAE Stenhammar, 1855: 261 [as Copromyzinae]. Type genus: *Copromyza* Fallén, 1810. - Stenhammar, 1855: 261-442 [monograph of Scandinavian species]; Rondani, 1880: 3 [as Copromyzinae].
- BORBORIDAE Newman 1834: 379, 396 [as Borborites]. Type genus: *Borborus* Meigen, 1803. - Stenhammar, 1855: 265 [as Borboridae]; Schiner, 1864a: 319-335 [as Borborinae; diagnosis, review of Austrian species, keys]; Osten-Sacken, 1878: 212 [as Borboridae, Nearctic catalog]; Williston, 1896b: 101-102 [diagnosis, key to genera]; Aldrich, 1905: 574-576 [Nearctic catalog]; Becker, 1905: 23-37 [Palaearctic catalog]; Williston, 1908: 315-316 [diagnosis, key to genera, illustr.]; Frey, 1921: 26, 221 [diagnoses in keys]; Curran, 1933: 315-316 [diagnosis, key to genera, illustr.]; Hennig, 1958: 648-652 [diagnosis, apomorphic features, monophyly, relationships, illustr.]; Curran, 1965: 360-361 [diagnosis, key to genera, illustr.]. **Note:** Because its type genus was suppressed by ICZN, 1997: 65, Borboridae is an invalid family-group name (see Brown & Sabrosky, 1994: 313; Sabrosky, 1999: 68).
- CYPSOLIDAE Hendel 1910b: 309 [as Cypselinae]. Type genus: *Cypselia* Meigen, 1800. - Bezzi 1911: 16, 62 [as Cypselidae]; Hendel, 1928: 105, 107 [diagnosis in key]; Hendel, 1931: 5 [classification of subfamilies]; Séguéy, 1934: 444-473 [diagnosis, morphology, key to genera

and species of France, illustr.]. **Note:** Because its type genus was suppressed by ICZN, 1963: 339-342, Cypselidae is an invalid family-group name (see Sabrosky, 1999: 104).

Subfamily TUCMINAE

TUCMINAE Marshall, 1996: 285. Type genus: *Tucma* Mourgués-Schurter, 1987, original designation. - Marshall, 1996: 283-288 [diagnosis, phylogenetic notes, illustr.]; Marshall, 1997a: 279 [phylogenetic position]; Roháček & Marshall, 1998: 487 [phylogenetic notes].

Genus *Tucma* Mourgués-Schurter, 1987

Tucma Mourgués-Schurter, 1987b: 118 (feminine). Type species: *Tucma tucumana* Mourgués-Schurter, 1987, original designation. - Marshall, 1996: 285-288 [redescription, revision of world species, phylogenetic notes, illustr.].

Tucma fritzi Marshall, 1996. **Distr.:** Neotropical: Argentina.

Tucma fritzi Marshall, 1996: 287 [male, taxonomic notes, illustr.]. Type locality: Argentina, Jujuy, Cochinoca [3,700 m]. HT male (DEBU).

Tucma tucumana Mourgués-Schurter, 1987. **Distr.:** Neotropical: Argentina.

Tucma tucumana Mourgués-Schurter, 1987b: 119 [both sexes, illustr.]. Type locality: Argentina, Catamarca, 18 km N La Merced [1,000 m]. HT male (CNCD). - Marshall, 1996: 286-287 [redescription, taxonomic notes, illustr.].

Note: The original description is inaccurate and misleading, particularly as regards the female postabdomen being probably based on an *Archiborborus* species (see Marshall, 1996: 286).

Subfamily COPROMYZINAE

COPROMYZINAE Stenhammar, 1855: 261. Type genus: *Copromyza* Fallén, 1810. - Hackman, 1969b: 204-205, 207 [phylogenetic notes, taxonomic limits, biogeography]; Papp, 1973c: 3-4 [diagnosis in key]; Hackman, 1977: 399 [Oriental catalog]; Roháček, 1983e: 4 [diagnosis in key]; Papp, 1984: 72-79 [Palaeartic catalog]; Norrbom & Kim, 1985a: 183 [key to Holarctic genera]; Marshall & Richards, 1987: 995, 1004 [diagnosis, key to Nearctic genera, illustr.]; Pitkin, 1988: 30-33 [diagnosis in key, key to British genera and species]; Marshall, 1989b: 601-602 [Australasian/Oceanian catalog]; Roháček, 1998a: 473, 475-477 [diagnosis, key to Palaeartic genera, illustr.].

Further references: Duda, 1923: 35-112 [as genus *Borborus*; revision of Old World genera and species].

Tribes of Copromyzinae:

ARCHIBORBORINI Norrbom & Kim 1985a: 168. Type genus: *Archiborborus* Duda, 1921. **Note:** Archiborborini, although not diagnosed by Norrbom & Kim (1985a), is available by

indication, by bibliographic reference to the *Archiborborus* genus-group of Hackman (1969a: 196-197, 204), cf. Sabrosky (1999: 52). Hackman (1969: 196-197) diagnosed this group under the heading „*Archiborborus* Duda and allied genera“, which he termed „The *Archiborborus* group“ on p. 204.

COPROMYZINI Stenhammar, 1855. Type genus: *Copromyza* Fallén, 1810. - Norrbom & Kim, 1984: 305 [partial phylogeny]; Norrbom & Kim, 1985a: 168 [diagnosis]; Norrbom & Kim, 1985b: 332 [partial phylogeny]; Norrbom & Marshall, 1988: 19 [partial phylogeny]; Marshall & Norrbom, 1993: 153 [partial phylogeny].

Note: Because Sphaeroceridae have not yet been consistently classified into tribes, the above names, although available, are not used in the classification of this catalog. However, this might change in the future, when the phylogenetic relationships of the genera are better understood, these names may be used for valid tribes or other suprageneric taxa.

Genus *Achaetothorax* Hedicke, 1923

Achaetothorax Hedicke, 1923: 431 (masculine) [nom.n. for *Gymnothorax* Duda, 1923]. Type species: *Borborus* (*Gymnothorax*) *abyssinica* Duda, 1923, automatic. - Richards, 1930: 267 [as subgenus of *Copromyza* Fallén, 1810, list of genera]; Richards, 1938a: 403 [as subgenus of *Copromyza*, diagnosis in key]; Vanschuytbroeck, 1948: 31; Vanschuytbroeck, 1959a: 56; Vanschuytbroeck, 1959b: 36 [as subgenus of *Borborus* Meigen, 1803, diagnosis]; Richards, 1980: 615 [as subgenus of *Copromyza*; Afrotropical catalog]; Papp & Norrbom, 1992: 321-344 [as genus, redescription, revision of world species, key, phylogeny, illustr.]; Norrbom & Papp, 1994: 65-86 [as genus, taxonomic notes, additional species, key to world species, phylogeny, illustr.].

Gymnothorax Duda, 1923: 59 (masculine) [as subgenus of *Borborus* Meigen, 1803; a junior homonym of *Gymnothorax* Bloch, 1795, Pisces]. Type species: *Borborus* (*Gymnothorax*) *abyssinica* Duda, 1923, monotypy. - Hedicke, 1923: 431 [homonymy].

Femoromyza Richards, 1939: 71 (feminine) [as subgenus of *Copromyza* Fallén, 1810]. Type species: *Copromyza* (*Femoromyza*) *rhinocerotis* Richards, 1939, original designation. - Richards, 1980: 617 [as subgenus of *Copromyza*; Afrotropical catalog]; Papp & Norrbom, 1992: 322 [synonymy].

***Achaetothorax abyssinicus* (Duda, 1923). Distr.:** Afrotropical: Ethiopia.

Borborus (*Gymnothorax*) *abyssinica* Duda, 1923: 103 [incorrect name termination, both sexes, illustr.]. Type locality: Ethiopia, Marako. ST both sexes (HNHM, male apparently lost, see Papp & Norrbom, 1992: 326).

Copromyza (*Achaetothorax*) *abyssinica*. - Hackman, 1965a: 488 [generic combination; non-Ethiopian records are based on misidentifications]; Richards, 1980: 616 [Afrotropical catalog].

Achaetothorax abyssinica. - Vanschuytbroeck, 1970: 264 [incorrect name termination, generic combination].

Achaetothorax abyssinicus. - Papp & Norrbom, 1992: 326 [redescription, both sexes, illustr.]; Norrbom & Papp, 1994: 83-84 [phylogeny].

***Achaetothorax acrostichalis* Papp & Norrbom, 1992. Distr.:** Afrotropical: Uganda, Zaire.

Achaetothorax acrostichalis Papp & Norrbom, 1992: 327 [both sexes, illustr.]. Type locality: Zaire, Epulu [950 m]. HT male (CASC). - Norrbom & Papp, 1994: 67, 83, 85 [taxonomic notes, phylogeny].

- Achaetothorax achrostichalis*. - Norrbom & Papp, 1994: 83 [misspelling].
- Achaetothorax completus*** Norrbom & Papp, 1994. **Distr.:** Afrotropical: Kenya, Zaire.
Achaetothorax completus Norrbom & Papp, 1994: 67 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu, Parc Nat. Albert, Mt. Sesero, near Bitashimwa [2,000 m]. HT male (MRAC).
- Achaetothorax concavus*** Norrbom & Papp, 1994. **Distr.:** Afrotropical: Uganda, Zaire.
Achaetothorax concavus Norrbom & Papp, 1994: 69 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu, Parc National Albert, Riv. Bishakishaki, Kamatembe, Plaine lave [2,100 m]. HT male (MRAC).
- Achaetothorax coninckae*** Norrbom & Papp, 1994. **Distr.:** Afrotropical: Zaire.
Achaetothorax coninckae Norrbom & Papp, 1994: 69 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu, Rutshuru [1,285 m]. HT male (MRAC).
- Achaetothorax crypticus*** Papp & Norrbom, 1992. **Distr.:** Afrotropical: Rwanda, Tanzania, Uganda, Zaire.
Achaetothorax crypticus Papp & Norrbom, 1992: 328 [both sexes, illustr.]. Type locality: Zaire, Kivu, Parc Nat. Albert, Nyamuronge Riv., near Mugando. HT male (ISNB); Norrbom & Papp, 1994: 71, 83-84 [taxonomic notes, phylogeny].
- Borborus (Achaetothorax) abyssinicus*. - Vanschuytbroeck, 1948: 31; 1959b: 36 [partim, misidentification].
- Achaetothorax flavipes*** Papp & Norrbom, 1992. **Distr.:** Afrotropical: Uganda, Zaire.
Achaetothorax flavipes Papp & Norrbom, 1992: 329 [both sexes, illustr.]. Type locality: Zaire, Kivu, Parc Nat. Albert, S. Lake Edward, Tshambi [975 m]. HT male (MRAC); Norrbom & Papp, 1994: 83-84 [phylogeny].
- Achaetothorax grootaerti*** Norrbom & Papp, 1994. **Distr.:** Afrotropical: Uganda, Zaire.
Achaetothorax grootaerti Norrbom & Papp, 1994: 73 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Haut-Zaire, Parc National Garamba. HT male (MRAC).
- Achaetothorax malayensis*** Papp & Norrbom, 1992. **Distr.:** Oriental: Malaysia.
Achaetothorax malayensis Papp & Norrbom, 1992: 329 [female]. Type locality: Malaysia, Selangor, Kuala Lumpur, IMR Grazing Grd. HT female (USNM). - Norrbom & Papp, 1994: 83-84 [phylogeny].
- Achaetothorax medialis*** Norrbom & Papp, 1994. **Distr.:** Afrotropical: Zaire.
Achaetothorax medialis Norrbom and Papp, 1994: 74 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu, Parc National Albert, Mt. Sesero, near Bitashimwa [2,000 m]. HT male (MRAC).
- Achaetothorax pectinatus*** Norrbom & Papp, 1994. **Distr.:** Afrotropical: Zaire.
Achaetothorax pectinatus Norrbom & Papp, 1994: 72 [male, phylogeny, illustr.]. Type locality: Zaire, Eala. HT male (ISNB).
- Achaetothorax rhinocerotis*** (Richards, 1939). **Distr.:** Afrotropical: Ethiopia, Kenya, Mozambique, South Africa, Tanzania, Zaire, Zimbabwe.
Copromyza (Femoromyza) rhinocerotis Richards, 1939: 72 [both sexes]. Type locality: South Africa, Zululand, Umfolosi Riv. HT male (BMNH). - Richards, 1980: 617 [Afrotropical catalog].
Achaetothorax rhinocerotis. - Papp & Norrbom, 1992: 330-331 [generic combination, redescription, both sexes, illustr.]; Norrbom & Papp, 1994: 72, 83-84 [taxonomic notes, phylogeny, illustr.].
- Achaetothorax straeleninus*** (Richards, 1980). **Distr.:** Afrotropical: Zaire.
Copromyza (Achaetothorax) straelenina Richards, 1980: 616 [nom.n. for *Borborus (Achaetothorax) straeleni* Vanschuytbroeck, 1959; Afrotropical catalog].

Achaetothorax straeleninus. - Papp & Norrbom, 1992: 331-332 [partim, generic combination, redescription, both sexes, illustr.]; Norrbom & Papp, 1994: 75, 83-84 [redescription, phylogeny, illustr.].

Borborus (Achaetothorax) straeleni Vanschuytbroeck, 1959a: 57 [a primary junior homonym of *Borborus (Gymnometopina) straeleni* Vanschuytbroeck, 1948; both sexes, illustr.]. Type locality: Zaire, Haut-Zaire, Parc National Garamba. HT male (MRAC). - Richards, 1980: 616 [homonymy].

Achaetothorax straelini. - Vanschuytbroeck, 1970: 264 [misspelling, generic combination].

Achaetothorax trochanteratus Papp & Norrbom, 1992. **Distr.:** Afrotropical: Zaire.

Achaetothorax trochanteratus Papp & Norrbom, 1992: 332 [both sexes, illustr.]. Type locality: Zaire, Epulu [950 m]. HT male (CASC); Norrbom & Papp, 1994: 83 [phylogeny].

Achaetothorax vojnitzi Papp & Norrbom, 1992. **Distr.:** Afrotropical: Kenya, Zaire.

Achaetothorax vojnitzi Papp & Norrbom, 1992: 333 [both sexes, illustr.]. Type locality: N. Kenya, Marsabit. HT male (HNHM); Norrbom & Papp, 1994: 83-84 [phylogeny].

Achaetothorax whittingtoni Norrbom & Papp, 1994. **Distr.:** Afrotropical: South Africa.

Achaetothorax whittingtoni Norrbom & Papp, 1994: 75 [male, phylogeny, illustr.]. Type locality: South Africa, Natal, Kosi Bay Nat. Reserve. HT male (NMSA).

Genus *Alloborborus* Duda, 1923

Alloborborus Duda, 1923: 53 (masculine) [as subgenus of *Borborus* Meigen, 1803]. Type species: *Copromyza pallifrons* Fallén, 1820, monotypy. - Duda, 1938: 36 [as subgenus of *Borborus* Meigen, 1803]; Hackman, 1965b: 42 [as subgenus of *Copromyza* Fallén, 1810, diagnosis in key]; Papp, 1973c: 16 [as subgenus of *Copromyza*, diagnosis in key]; Papp, 1984: 77 [as subgenus of *Copromyza*; Palaearctic catalog]; Norrbom & Kim, 1985a: 181, 220-222 [as genus; redescription, revision of species, phylogeny, illustr.]; Roháček, 1998a: 477 [as genus; diagnosis in key].

Trichopoda Lioy, 1864: 1113 [as genus; a junior homonym of *Trichopoda* Berthold, 1827, Diptera, Tachinidae and of *Trichopoda* Brullé, 1835, Coleoptera]. Type species: *Copromyza pallifrons* Fallén, 1820 [as *Trichopoda pallidifrons* sic!], monotypy. - Richards, 1930: 311 [as subgenus of *Copromyza* Fallén, 1810]; Richards, 1961b: 562 [homonymy].

Alloborborus pallifrons (Fallén, 1820). **Distr.:** Palaearctic: Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Great Britain, Hungary, ?Italy, Latvia, Netherlands, Norway, Poland, Roumania, Russia (NET, WS), Slovakia, Sweden, Switzerland.

Copromyza pallifrons Fallén, 1820: 7 [both sexes]. Type locality: Sweden, probably Scania, Esperöd. LT male, designated by Norrbom & Kim, 1985a: 221 (NHRS).

Borborus pallifrons. - Meigen, 1830: 205 [generic combination].

Borborus (Alloborborus) pallifrons. - Duda, 1923: 73-75 [subgeneric combination, redescription].

Copromyza (Trichopoda) pallifrons. - Richards, 1930: 311 [subgeneric combination]

Cypselia pallifrons. - Séguy, 1934: 447, 451 [generic combination, key].

Copromyza (Alloborborus) pallifrons. - Richards, 1961b: 562 [subgeneric combination]; Papp, 1973c: 16 [key, illustr.]; Papp, 1984: 77 [Palaearctic catalog].

- Alloborborus pallifrons*. - Norrbom & Kim, 1985a: 221-222 [generic combination, redescription, phylogenetic notes, illustr.]; Pitkin, 1988: 31-32 [key, illustr.]; Roháček, 1992b: 194-195 [biology, distribution].
- Borborus pallidifrons*. - Macquart, 1835: 569 [misspelling].
- Trichopoda pallidifrons*. - Lioy, 1864: 1113 [generic combination, misspelling].
- Borborus flavipennis* Haliday, 1836: 324 [sex not stated]. Type locality: England, nr. London. LT female, designated by Norrbom & Kim, 1985a: 221 (NMID). - Stenhammar, 1855: 331 [probable synonymy]; Collin, 1914: 239 [synonymy].

Genus *Antrops* Enderlein, 1909

- Antrops* Enderlein, 1909: 225 (masculine). Type species: *Antrops truncipennis* Enderlein, 1909, monotypy. - Richards, 1931: 73 [list]; Richards, 1951a: 844, 847 [phylogenetic notes, diagnosis in key]; Richards, 1955a: 89 [diagnosis in key]; Richards, 1965a: 455 [diagnosis in key]; Richards, 1967b: 4 [Neotropical catalog].
- Anthrops*. - Hackman, 1969a: 196, 200 [misspelling; phylogenetic notes, illustr.].

Antrops truncipennis Enderlein, 1909. **Distr.:** Neotropical: Chile (Magallanes, Cape Horn), Falkland Is., South Georgia Is.

- Antrops truncipennis* Enderlein, 1909: 228 [both sexes, illustr.]. Type locality: Chile, Tierra del Fuego, Cape Horn archipelago, Orangebai. STs (MNHN). - Séguy, 1940: 244-245 [key, illustr.]; Richards, 1967b: 4 [Neotropical catalog].
- Anthrops truncipennis*. - Hackman, 1969a: 196, 200 [misspelling of genus name; male genitalia, illustr.].
- Pteremis nivalis*. - Bigot, 1888: 43 [misidentification]; Gercke, 1889a: 153 [ditto]; Enderlein, 1908b: 394, 499 [ditto]; Enderlein, 1909: 228 [synonymy].

Genus *Archiborborus* Duda, 1921

- Archiborborus* Duda, 1921: 125 (masculine). Type species: *Archiborborus submaculatus* Duda, 1921, subsequent designation by Cresson, 1923: 58. - Richards, 1930: 267 [invalid designation of type species]; Richards, 1931: 64-73 [diagnosis, revision of known species, key, illustr.]; Richards, 1961a: 57-62 [diagnosis, key, new species, illustr.]; Richards, 1967b: 2-3 [Neotropical catalog]; Hackman, 1969a: 196-198 [phylogenetic notes, illustr.]; Papp, 1977: 91-96 [review of species in HNHM].
- Huapia* Richards, 1931: 65 (feminine) [as subgenus of *Archiborborus* Duda, 1921]. Type species: *Archiborborus (Huapia) microphthalma* Richards, 1931, original designation. - Richards, 1961a: 57 [as subgenus of *Archiborborus*; diagnosis in key]; Richards, 1967b: 3 [Neotropical catalog].
- Procopromyza* Richards, 1931: 67 (feminine) [as subgenus of *Archiborborus* Duda, 1921]. Type species: *Archiborborus (Procopromyza) albicans* Richards, 1931, original designation. - Richards, 1961a: 57 [as subgenus of *Archiborborus*; diagnosis in key]; Richards, 1967b: 2-3 [Neotropical catalog]. - **syn.n.** (see p. 21).
- Note:** The supraspecific classification of *Archiborborus* needs to be revised on the basis of phylogenetic analysis. As defined by Richards (1931), the subgenus *Procopromyza* Richards is a junior synonym of *Archiborborus* s.str. because the type species of both names belong to

the same group of species, whereas the group that Richards (1931) called *Archiborborus* s.str., on the basis of his (Richards, 1930: 267) invalid type species designation, remains unnamed.

Archiborborus albicans Richards, 1931. **Distr.:** Neotropical: Argentina, Chile.

Archiborborus (Procopromyza) albicans Richards, 1931: 68 [both sexes, illustr.]. Type locality: Chile, Chiloé Is., Ancud. HT male (BMNH). - Richards, 1961a: 57, 62 [key, notes on variability]; Richards, 1967b: 2 [Neotropical catalog]; Richards, 1967b: 2 [catalog].

Borborus varipes Bigot, 1888: 42 [a primary junior homonym of *Borborus varipes* Meigen, 1830 = *Crumomyia nigra* (Meigen, 1830); both sexes]. Type locality: Chile, Cape Horn. STs (MNHN). - Richards, 1931: 68 [homonymy].

Archiborborus (Procopromyza) varipes. - Papp, 1977a: 96 [generic combination, incorrect resurrection of Bigot's name].

Note: The discussion of the validity of *Borborus varipes* Bigot by Papp (1977a: 96) is incorrect because this name is a primary junior homonym and, consequently, not valid. *Archiborborus albicans* Richards is in fact the valid name.

Archiborborus alternatus (Rondani, 1868) **comb.n.** **Distr.:** Neotropical: Argentina.

Copromyza alternata Rondani, 1868: 31 [sex not stated]. Type locality: Argentina, Buenos Aires. STs, sex not stated (MZUF). **Note:** There are 2 syntypes in MZUF [Norrbon].

Archiborborus annulatus Richards, 1963. **Distr.:** Neotropical: Chile.

Archiborborus (Procopromyza) annulatus Richards, 1963d: 232 [both sexes, illustr.]. Type locality: Chile, Nuble, 40 km E of San Carlos. HT male (CASC). - Richards, 1967b: 3 [Neotropical catalog].

Archiborborus argentinensis Papp, 1977. **Distr.:** Neotropical: Argentina.

Archiborborus (Procopromyza) argentinensis Papp, 1977a: 92 [male, illustr.]. Type locality: South Argentina, Río Negro, El Bolsón, forehill of Mt. Piltriquitrón [350 m]. HT male (HNHM).

Archiborborus calceatus Duda, 1921. **Distr.:** Neotropical: Colombia.

Archiborborus calceatus Duda, 1921: 138 [female]. Type locality: Colombia, Sierra San Lorenzo. HT female (HNHM). **Note:** Type depository was misstated as NHMW in original description (see Papp, 1977a: 93).

Archiborborus (Procopromyza) calceatus. - Richards, 1961a: 58 [key]; Richards, 1967b: 3 [Neotropical catalog]; Papp, 1977a: 93 [taxonomic notes, key].

Archiborborus chaetosus Richards, 1961. **Distr.:** Neotropical: Chile.

Archiborborus (Procopromyza) chaetosus Richards, 1961a: 60 [both sexes, illustr.]. Type locality: Chile, Chiloé I., lat. 42°S, Chepu. HT male (MEUC; apparently lost, cf. Pitkin 1989: 12). - Richards, 1967b: 3 [Neotropical catalog].

Archiborborus chilensis Richards, 1931. **Distr.:** Neotropical: Argentina, Chile.

Archiborborus (Procopromyza) chilensis Richards, 1931: 71 [both sexes, illustr.]. Type locality: Argentina, Neuquén, Lake Correntoso. HT male (BMNH). - Richards, 1961a: 58 [key]; Richards, 1963d: 231 [distribution]; Richards, 1967b: 3 [Neotropical catalog]; Papp, 1977a: 94 [variability, distribution].

Archiborborus edwardsi Richards, 1931. **Distr.:** Neotropical: Chile.

Archiborborus (Procopromyza) edwardsi Richards, 1931: 71 [male]. Type locality: Chile, Llanquihue, Puerto Montt. HT male (BMNH). - Richards, 1961a: 58 [key]; Richards, 1963d: 231 [female, distribution]; Richards, 1967b: 3 [Neotropical catalog].

Archiborborus femoralis (Blanchard, 1852). **Distr.:** Neotropical: Chile.

Borborus femoralis Blanchard, 1852: 467 [sex not stated]. Type locality: Chile, La Serena. ST(s), sex unknown (probably in MNHN).

Archiborborus (Procopromyza) femoralis. - Richards, 1967b: 3 [generic combination, Neotropical catalog].

Note: Unrecognized species; revision of type material is needed.

Archiborborus hirtipes (Macquart, 1844). **Distr.:** Neotropical: Argentina, Chile, Falkland Is., Uruguay.

Borborus hirtipes Macquart, 1844: 424 [male, illustr.]. Type locality: "Chili" [Chile]. STs, males (MNHN). - Blanchard, 1852: 467 [diagnosis]. **Note:** There are 3 probable syntypes in MNHN [Norrbon].

Archiborborus hirtipes. - Duda, 1921: 127 [generic combination; both sexes, redescription].

Archiborborus (Archiborborus) hirtipes. - Richards, 1931: 65 [diagnosis, illustr.]; Richards, 1961a: 57 [key]; Richards, 1967b: 2 [Neotropical catalog]; Papp, 1977a: 94 [distribution].

Borborus quinque maculatus F. Walker, 1849: 1130 [sex not stated]. Type locality: "Monte Video" [Uruguay, Montevideo]. LT male, designated by inference of holotype by Richards 1931: 65 (BMNH). - Richards, 1931: 65 [synonymy].

Archiborborus hirtus (Bigot, 1880). **Distr.:** Neotropical: Chile.

Ceroptera hirta Bigot, 1888: 41 [male]. Type locality: Chile, Cape Horn. STs, males (OXUM).

Archiborborus (Procopromyza) hirtus. - Richards, 1931: 67, 72 [generic combination, key, diagnosis, notes on types]; Richards, 1961a: 58, 61 [key]; Richards, 1967b: 3 [Neotropical catalog].

Archiborborus koenigi Duda in Holdhaus, 1932. **Distr.:** Neotropical: South Georgia Is.

Archiborborus königi Duda in Holdhaus, 1932: 175 [male; incorrect original spelling of *koenigi* Duda, automatic correction by Art. 32.5.2.1]. Type locality: South Georgia Islands. HT male (NHMW).

Archiborborus (Procopromyza) koenigi. - Richards, 1961a: 58 [subgeneric combination, key]; Richards, 1967b: 3 [Neotropical catalog].

Archiborborus maculipennis Duda, 1921. **Distr.:** Neotropical: Chile.

Archiborborus maculipennis Duda, 1921: 133 [both sexes]. Type locality: Chile, Magallanes, Punta Arenas. STs, both sexes (SMTD).

Archiborborus (Procopromyza) maculipennis. - Richards, 1931: 73 [subgeneric combination, redescription]; Richards, 1961a: 58, 61 [key, notes on types]; Richards, 1967b: 3 [Neotropical catalog].

Archiborborus maximus Richards, 1961. **Distr.:** Neotropical: Chile.

Archiborborus (Archiborborus) maximus Richards, 1961a: 59 [male, illustr.]. Type locality: Chile, Magallanes, B^a Muños Garnero, lat. 55°S. HT male (MEUC; apparently lost except for slide with wing in BMNH, cf. Pitkin 1989: 12). - Richards, 1967b: 2 [Neotropical catalog].

Archiborborus mexicanus Steyskal, 1973. **Distr.:** Neotropical: Mexico (TAM).

Archiborborus (Procopromyza) mexicanus Steyskal, 1973: 155 [female, illustr.]. Type locality: Mexico, Tamaulipas, 2 km NW Gómez Farías, Sótano de el Porvenir. HT female (USNM).

Archiborborus microphthalmus Richards, 1931. **Distr.:** Neotropical: Argentina.

Archiborborus (Huapia) microphthalma Richards, 1931: 65 [incorrect name termination, male, illustr.]. Type locality: Argentina, eastern end of Lake Nahuel Huapi. HT male (BMNH). - Richards, 1961a: 57 [key]; Richards, 1967b: 3 [Neotropical catalog].

- Archiborborus nitidicollis*** (Becker, 1920). **Distr.:** Neotropical: Bolivia, Colombia, Ecuador, Peru.
Oolina nitidicollis Becker, 1920: 184 [male]. Type locality: Ecuador, Tulcán, El Angel [3,002 m]. STs, males (MNHN).
Archiborborus nitidicollis. - Richards, 1967b: 3 [generic combination, Neotropical catalog].
Archiborborus orbitalis var. *latifrons* Duda, 1921: 143 [male]. Type locality: Peru, Cuzco. HT male (SMTD). - **syn.n.** (see p. 22).
- Archiborborus orbitalis*** Duda, 1921. **Distr.:** Neotropical: Bolivia, Chile, Peru.
Archiborborus orbitalis Duda, 1921: 141 [both sexes]. Type localities: Peru, Puno; Bolivia, Lake Titicaca, Cordillera [4,000-5,000 m]. STs, both sexes (SMTD).
Archiborborus (Procopromyza) orbitalis. - Richards, 1961a: 58 [key]; Richards, 1967: 3 [Neotropical catalog]; Papp, 1977a: 94 [taxonomic notes, distribution].
- Archiborborus quadrinotus*** (Bigot, 1888). **Distr.:** Neotropical: Chile.
Ceroptera quadrinota Bigot, 1888: 42 [both sexes]. Type locality: Chile, Cape Horn. LT male, designated by Richards 1931: 71 (OXUM).
Archiborborus (Procopromyza) quadrinotus. - Richards, 1931: 70 [generic combination, diagnosis]; Richards, 1961a: 59 [key]; Richards, 1967: 3 [Neotropical catalog].
- Archiborborus setosus*** Duda, 1921. **Distr.:** Neotropical: Bolivia.
Archiborborus setosus Duda, 1921: 135 [both sexes]. Type locality: Bolivia, Cullutincara. LT male, designated by Papp, 1977a: 94 (HNHM).
Archiborborus (Procopromyza) setosus. - Richards, 1967b: 3 [subgeneric combination, Neotropical catalog]; Papp, 1977a: 94-95 [redescription].
- Archiborborus simplicimanus*** Richards, 1931. **Distr.:** Neotropical: Argentina, Chile.
Archiborborus (Procopromyza) simplicimanus Richards, 1931: 72 [male]. Type locality: Argentina, Neuquén, Lake Correntoso. HT male (BMNH). - Richards, 1961a: 58, 61 [female, variability, key]; Richards, 1967b: 3 [Neotropical catalog].
- Archiborborus submaculatus*** Duda, 1921. **Distr.:** Neotropical: Argentina, Chile, Juan Fernández Is. (Chile).
Archiborborus submaculatus Duda, 1921: 130 [female]. Type locality: Chile, Magallanes, Punta Arenas. HT female (SMTD).
Archiborborus submaculata. - Duda, 1921: 126 [misspelling].
Archiborborus (Procopromyza) submaculatus. - Richards, 1931: 70 [both sexes, redescription, illustr.]; Richards, 1955a: 75 [variability, distribution]; Richards, 1961a: 62 [taxonomic notes, variability]; Richards, 1967b: 3 [Neotropical catalog]; Papp, 1977a: 95-96 [taxonomic notes, variability].

Genus *Borborillus* Duda, 1923

- Borborillus* Duda, 1923: 54 (masculine) [as subgenus of *Borborus* Meigen, 1803]. Type species: *Borborus (Borborillus) uncinatus* Duda, 1923, subsequent designation by Richards, 1930: 267. - Duda, 1923: 54-57, 77-91 [revision of species, key]; Spuler, 1925b: 8-12 [as subgenus of *Borborus* Meigen; review of Nearctic species (all now in *Norrbomia*)]; Richards, 1930: 313-314 [as subgenus of *Copromyza* Fallén, 1810; review of British species, key]; Duda, 1938: 51-59 [as subgenus of *Borborus* Meigen; review of Palaearctic species, key]; Hackman, 1965b: 43-45 [as subgenus of *Copromyza* Fallén; review of Finnish species, key]; Papp, 1973a: 376-379 [as subgenus of *Copromyza* Fallén; review of Mongolian species]; 1973c: 19-22 [as subgenus of *Copromyza* Fallén; diagnosis, key to Hungarian species]; Richards, 1973: 303 [as subgenus of *Copromyza* Fallén; diagnosis]; Richards, 1980: 616 [as

subgenus of *Copromyza*; Afrotropical catalog]; Papp, 1984: 75-76 [as subgenus of *Copromyza* Fallén; Palaearctic catalog]; Norrbom & Kim, 1985a: 183 [as genus, diagnosis in key]; Papp & Roháček, 1987: 83-86 [as genus; review of Israeli species, key]; Papp, 1988a: 394-395 [as genus, diagnosis, restriction of generic concept, phylogenetic notes]; Norrbom & Marshall 1988: 19 [relationships]; Roháček, 1998a: 475 [diagnosis in key, illustr.].

Borborillus uncinatus (Duda, 1923). **Distr.:** Palaearctic: Belgium, China (XIN), Czech Republic, Finland, France, Germany, Great Britain, Hungary, Latvia, Mongolia, Netherlands, Norway, Roumania, Russia (NET, SET, WS), Slovakia, Svalbard Is. (Norway), Sweden, Switzerland, Yugoslavia.

Borborus (Borborillus) uncinatus Duda, 1923: 77 [both sexes]. Type locality: Germany, Westfalen, Herten. LT male, designated by Norrbom (see p. 37) (ZMHB). - Duda, 1938: 57-58 [redescription, key].

Copromyza (Borborillus) uncinata. - Richards, 1930: 313 [generic combination, taxonomic notes]; Hackman, 1965b: 41, 43-44 [key, male genitalia illustr.]; Papp, 1973c: 20 [key]; Papp, 1984: 76 [Palaearctic catalog].

Cypselia uncinata. - Séguéy, 1934: 449, 452 [generic combination, key].

Borborillus uncinatus. - Pitkin, 1988: 31 [generic combination, key, illustr.]; Roháček, 1994a: 6-7 [biology, distribution].

Borborillus vitripennis (Meigen, 1830). **Distr.:** Palaearctic: Austria, Belgium, Bulgaria, Czech Republic, Denmark, ?Egypt, Estonia, Finland, France (incl. Corsica), Germany, Great Britain, Hungary, Iran, Ireland, Italy, Japan, Latvia, Lithuania, Netherlands, Norway, Poland, Roumania, Russia (ES, ?FE, NET, SET, WS), Slovakia, Spain, Sweden, Switzerland, Yugoslavia.

Borborus vitripennis Meigen, 1830: 206 [sex not stated]. Type locality: not stated, probably Germany, Stolberg area. LT male, designated by Norrbom (see p. 37) (NHMW). - **nomen protectum** under Art. 23.9.2. (ICZN 1999). - Morge, 1976: Pl. 163, Figs 8a,b [Meigen's original illustr.]. **Note:** Also see *Musca saniosa* entry under New nomenclatural changes (p. 35).

Copromyza vitripennis. - Zetterstedt, 1847: 2485 [generic combination].

Borborus (Borborillus) vitripennis. - Duda, 1923: 79-81 [subgeneric combination, redescription]; Duda, 1938: 58-59 [redescription, taxonomic notes].

Copromyza (Borborillus) vitripennis. - Richards, 1930: 313 [generic combination]; Hackman, 1965b: 41, 43-44 [key, male genitalia illustr.]; Papp, 1973c: 20 [key, illustr.]; Papp, 1984: 76 [Palaearctic catalog].

Cypselia vitripennis. - Bezzi 1918: 53 [generic combination]; Séguéy, 1934: 449, 452 [key].

Borborillus vitripennis. - Hayashi, 1986a: 118 [generic combination, key]; Papp & Roháček, 1987: 84 [key]; Papp, 1988a: 395 [taxonomic notes]; Pitkin, 1988: 31 [key, illustr.]; Roháček, 1994a: 7-8 [biology, distribution].

Musca saniosa Westring, 1814: 51 [adult, larva, pupa, biology, illustr.]. Type locality: Sweden. LT female, designated by Norrbom (see p. 35) (NHRS). - **syn.n., nomen oblitum** (see p. 22).

Borborus longipennis Haliday, 1836: 324 [both sexes]. Type locality: England. LT male, designated by Norrbom 1987: 50 (NMID). - Duda, 1923: 79-81 [synonymy].

Copromyza (Borborillus) longipennis. - Hackman, 1972: 85 [generic combination].

Copromyza pilosiventris Zetterstedt, 1860: 6395 [male]. Type locality: Sweden, Skåne, Lund. HT male (MZLU). - **syn.n.** (see p. 22). **Note:** Because Zetterstedt stated that he saw only one specimen, the single male in the Kompletterinsläden Diptera Scandinaviae Collection in Lund should be considered a holotype. It has a label with "Coprom."

pilosiventris Zett. n. sp. ♂ Lund 1859" in his writing, which closely matches the type data in the description "Hab. Lundae Scaniae 15 Jul. 1859 specimen unicum inveni." Although Zetterstedt contrasted this specimen with *Borborillus vitripennis*, it is in fact that species, and not *Alloborborus pallifrons* as it was interpreted by Duda (1923).

Genus *Copromyza* Fallén, 1810

- Copromyza* Fallén, 1810: 19 (feminine). Type species: *Copromyza equina* Fallén, 1820, subsequent designation by Zetterstedt, 1847: 2475. - Richards, 1930: 314-315 [as subgenus of *Copromyza* Fallén, 1810; review of British species, key]; Vanschuytbroeck, 1948: 24, 27 [as subgenus of *Borborus* Meigen, 1803; diagnosis in key]; Hackman, 1965b: 45-46 [as subgenus of *Copromyza*; review of Finnish species, key, illustr.]; Richards, 1965c: 719 [as subgenus of *Copromyza*; Nearctic species, catalog]; Papp, 1973c: 22-24 [as subgenus of *Copromyza*; Hungarian species, key, illustr.]; Richards, 1980: 616 [as subgenus of *Copromyza*; Afrotropical catalog]; Papp, 1984: 73-74 [as subgenus of *Copromyza*; Palaearctic species, catalog]; Norrbom & Kim, 1985b: 331-346 [as genus; revision of world species, key, phylogeny, illustr.]; Marshall & Richards, 1987: 1004 [as genus; diagnosis in key]; Roháček, 1998a: 475 [as genus; diagnosis in key].
- Cimbometopia* Lioy, 1864: 1114 (feminine). Type species: *Borborus stercorarius* Meigen, 1830, monotypy. - Richards, 1930: 265 [synonymy].
- Isogaster* Lioy, 1864: 1114 (feminine). Type species: *Borborus nigrifemoratus* Macquart, 1835 [= *Copromyza stercoraria* (Meigen, 1830)], monotypy. - Richards, 1930: 265 [synonymy].
- Trichiaspis* Duda, 1923: 57 (feminine) [as subgenus of *Borborus* Meigen, 1803]. Type species: *Copromyza equina* Fallén, 1820, subsequent designation by Richards, 1930: 267. - Richards, 1930: 267 [synonymy]; Duda, 1938: 59-64 [as subgenus of *Borborus*; review of Palaearctic species, key].
- Trichiapsis*. - Norrbom & Kim, 1985a: 168 [misspelling]; Norrbom & Kim, 1985b: 335 [ditto].
- Sphaerocera*. - Robineau-Desvoidy, 1830: 807 [misinterpretation].
- Borborus*. - Spuler, 1925b: 1, 12 [as subgenus of *Borborus* Meigen, 1803; misinterpretation].

Copromyza borealis Zetterstedt, 1847. **Distr.:** Palaearctic: ?Germany, Estonia, Finland, Iceland, Kazakhstan, Latvia, Norway, Russia (ES, NET), Sweden.

Copromyza borealis Zetterstedt, 1847: 2481 [male]. Type locality: Sweden, Lapponia, Tornenski. LT male, designated by Kim, 1972a: 207 [attributed to Hackman] (MZLU). - Norrbom & Kim, 1985b: 342 [redescription, phylogeny, illustr.].

Borborus borealis. - Becker, 1905: 24 [generic combination, catalog].

Borborus (Trichiaspis) borealis. - Duda, 1923: 91-93 [subgeneric combination, redescription]; Duda, 1938: 60-61 [redescription].

Copromyza (Copromyza) borealis. - Hackman, 1965b: 45 [key, distribution, illustr.]; Papp, 1984: 73 [Palaearctic catalog].

Copromyza equina Fallén, 1820. **Distr.:** Afrotropical: ?Zaire; Australasian: Hawaii (USA); Nearctic: Canada (AB, BC, MB, NB, NF, NS, ON, QC, SK), USA (AK, AL, AZ, CA, CO, DC, FL, ID, IL, IN, LA, ME, MS, MT, NC, NH, NM, PA, SC, TN, TX, VA, VT); Neotropical: Costa Rica, Guatemala, Mexico (DF, MOR); Oriental: China (SIC); Palaearctic: Algeria, Austria, Azores (Portugal), Belgium, Bulgaria, Canary Is. (Spain), China (QIN, TIB, XIN), Czech Republic, Denmark, Estonia, Finland, France (incl. Corsica), Faeroe Is. (Denmark),

- Germany, Great Britain, Greece, Hungary, Iceland, Iran, Ireland, Israel, Italy (incl. Sardinia), Japan, Kirghizia, Latvia, Lithuania, Madeira (Portugal), Netherlands, North Korea, Norway, Poland, Roumania, Russia (CET, ES, FE, NET, SET, WS), Slovakia, Spain, Sweden, Switzerland, Tadjikistan, Tunisia, Ukraine, Yugoslavia.
- Copromyza equina* Fallén, 1820: 6 [both sexes]. Type locality: Sweden. LT male, designated by Kim, 1972a: 211 (NHRS). - Goddard, 1938: 252 [puparium]; Kim, 1972a: 210-214 [redescription, illustr.]; Norrbom & Kim, 1985b: 344-346 [redescription, phylogeny, illustr.]; Pitkin, 1988: 30-31 [key, illustr.]; Marshall, 1989b: 602 [Australasian/Oceanian catalog]; Roháček, 1989: 10-11 [biology, distribution].
- Borborus equinus*. - Meigen, 1830: 201 [generic combination]; Morge, 1976: Pl. 163, Figs 3a,b [Meigen's original illustr.].
- Borborus (Trichiaspis) equina*. - Duda, 1923: 93-95 [incorrect name termination, subgeneric combination, redescription].
- Borborus (Borborus) equinus*. - Spuler, 1925b: 13 [subgeneric combination, key, illustr.].
- Copromyza (Copromyza) equina*. - Richards, 1930: 311, 314 [subgeneric combination, key]; Hackman, 1965b: 45-46 [key, illustr.]; Richards, 1965c: 719 [Nearctic catalog]; Papp, 1973c: 23 [key, illustr.]; Richards, 1980: 616 [Afrotropical catalog]; Papp, 1984: 73 [Palearctic catalog].
- Cypsela equina*. - Séguy, 1934: 448, 450 [generic combination, key].
- Trichiaspis equina*. - Hammer, 1941: 260-261 [generic combination, egg, illustr.]; Hinton, 1981: 746 [egg, illustr.].
- Coprophila equina*. - Mohr, 1943: 289 [misspelling of genus name].
- Borborus (Copromyza) equina*. - Vanschuytbroeck, 1943a: 5, 7 [incorrect name termination, illustr.].
- Borborus luridus* Meigen, 1830: 203 [female]. Type locality: not stated, probably Germany, Hamburg area. LT female, designated by Norrbom (see p. 31) (NHMW). - Duda, 1923: 93 [synonymy].
- Borborus pallipes* Meigen, 1830: 204 [both sexes]. Type locality: not stated, probably Germany, Hamburg area. LT male, designated by Norrbom (see p. 33) (NHMW). - Duda, 1923: 93 [synonymy].
- Borborus rufipes* Meigen, 1830: 205 [sex not stated]. Type locality: France, "Thale Chamouny" [Haute Savoie, Chamonix Valley]. LT male, designated by Norrbom (see p. 34) (NHMW). - Duda, 1923: 93 [synonymy].
- Borborus incanus* Meigen, 1830: 206 [sex not stated]. Type locality: France, Paris region. LT male, designated by Norrbom (see p. 31) (NHMW). - Duda, 1923: 93 [synonymy].
- Mycetia vulgaris* Robineau-Desvoidy, 1830: 806 [sex not stated]. Type locality: not stated, probably France. ST(s), sex unknown (MNHN, lost). - Macquart, 1835: 566 [synonymy].
- Sphaerocera communis* Robineau-Desvoidy, 1830: 807 [both sexes]. Type locality: not given (France). STs, both sexes (MNHN, lost). - Haliday, 1836 [synonymy]. **Note:** Macquart (1835: 565) incorrectly synonymized *S. communis* with *Sphaerocera curvipes* Latreille, 1805] which was also followed by subsequent authors (see Papp, 1984: 69). *Sphaerocera* sensu Robineau-Desvoidy (1830) is identical with *Copromyza* Fallén, 1810 while his genus *Lordatia* contains species of *Sphaerocera* Latreille, 1804.
- Sphaerocera coprivora* Robineau-Desvoidy, 1830: 807 [sex not stated]. Type locality: not stated, probably France. ST(s), sex unknown (lost). - F. Walker, 1849: 1129 [synonymy].
- Sphaerocera fuliginosa* Robineau-Desvoidy, 1830: 807 [sex not stated]. Type locality: not stated, probably France. ST(s), sex unknown (lost). - F. Walker, 1849: 1129 [synonymy].

Borborus longipes Macquart, 1835: 568 [sex not stated]. Type locality: France, Bordeaux. ST(s), sex unknown (MHNLI; apparently lost, no syntypes found in MNHN or MHNLI). - Duda, 1938: 61 [synonymy].

Borborus nervosus Meigen, 1835: 72 [sex not stated]. Type locality: "Umgegend von München" [Germany, Munich vicinity]. LT female, designated by Norrbom (see p. 32) (MNHN). - Morge, 1976: Pl. 289, Figs 6a,b [Meigen's original illustr.]. - **syn.n.** (see p. 22).

Borborus nervosus Meigen, 1838: 407 [primary junior homonym of *Borborus nervosus* Meigen, 1835; sex not stated]. Type locality: "Baiern" [Germany, Bavaria]. LT female, designated by Norrbom (see p. 32) (MNHN). - **syn.n.** (see p. 22).

Saprobisus nervosus. - Rondani, 1880: 10-11 [generic combination].

Borborus infuscatus von Roser, 1840: 64 [sex not stated]. Type locality: Germany, Württemberg. LT female, designated by Norrbom & Kim, 1985b: 344 (SMNS). - Becker, 1903a: 66 [synonymy].

Copromyza equina var. *fuscinervis* Zetterstedt, 1855: 4795 [female]. Type locality: Sweden, Lund. HT female (MZLU). - Norrbom & Kim, 1985b: 344 [synonymy].

Copromyza hackarsi (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Zaire.

Borborus (*Copromyza*) *Hackarsi* Vanschuytbroeck, 1948: 27 [both sexes, illustr.]. Type locality: Zaire, Ruwenzori Mts., Mutwanga [1,000-1,300 m]. HT female (MRAC). - Vanschuytbroeck, 1959a: 45-47 [diagnosis, male genitalia, illustr., biology].

Copromyza (*Copromyza*) *hackarsi*. - Richards, 1980: 616 [generic combination, Afrotropical catalog].

Copromyza hackarsi. - Norrbom & Kim, 1985b: 340-341 [redescription, phylogeny, illustr.].

Borborus (*Copromyza*) *equina*. - Vanschuytbroeck, 1948: 27; Vanschuytbroeck, 1950a: 13 [incorrect name termination, misidentifications].

Borborus (*Copromyza*) *similis*. - Vanschuytbroeck, 1950a: 13 [misidentification].

Copromyza montana Roháček, 1992. **Distr.:** Czech Republic, Germany, Italy, Slovakia.

Copromyza montana Roháček, 1992b: 195 [both sexes, phylogenetic notes, biology, illustr.]. Type locality: Czech Republic, North Moravia, Moravskoslezské Beskydy Mts., Tanečnica Mt. env. HT male (SMOC). - Munari, 1993a: 13-14 [distribution].

Copromyza neglecta (Malloch, 1913). **Distr.:** Nearctic: Canada (AB, MB, NF, NS, NT, ON, QC, SK, YT), USA (AK, CA, CO, IA, MA, MD, MI, NC, NE, OR, PA, UT, VA, WA); Palaearctic: Czech Republic, Mongolia, Norway, Russia (ES), Slovakia, Sweden.

Borborus neglectus Malloch, 1913a: 364 [female]. Type locality: USA, Massachusetts, Beverly. HT female (USNM).

Borborus (*Borborus*) *neglectus*. - Spuler, 1925b: 14 [subgeneric combination, illustr.].

Copromyza (*Copromyza*) *neglecta*. - Richards, 1965c: 719 [generic combination, Nearctic catalog].

Copromyza neglecta. - Norrbom & Kim, 1985b: 339-340 [redescription, both sexes, phylogeny, biology, illustr.]; Roháček, 1989: 7-8 [biology, parthenogenesis, distribution].

Borborus (*Borborus*) *calcitrans* Spuler, 1925b: 14 [female, illustr.]. Type locality: USA, Washington, Pullman. HT female (USNM). - Norrbom & Kim, 1985b: 339 [synonymy].

Copromyza (*Copromyza*) *calcitrans*. - Richards, 1965c: 719 [generic combination, catalog].

Copromyza (*Copromyza*) *parastercoraria* Papp, 1973a: 379 [male, phylogenetic notes, illustr.]. Type locality: Mongolia, Uvs aimak, Mogoin arschaan, N shore of Chjargas nuur lake, 48 km ESE from Somon Naranbulag [1,100-1,200 m]. HT male (HNHM). - Papp, 1984: 74 [Palaearctic catalog]; Roháček, 1989: 7 [synonymy].

Copromyza parastercoraria. - Norrbom & Kim, 1985b: 338-339 [redescription, phylogeny, illustr.].

Copromyza nigrina (Gimmerthal, 1847). **Distr.:** Palaearctic: Austria, Belgium, Bosnia, Czech Republic, Denmark, Estonia, Faeroe Is. (Denmark), Finland, France, Germany, Great Britain, Hungary, Iceland, Latvia, Netherlands, Norway, Poland, Roumania, Russia (CET, ES, NET, WS), Slovakia, Spain, Sweden, Switzerland, Yugoslavia.

Borborus nigrinus Gimmerthal, 1847: 206 [male]. Type locality: Latvia. LT male, designated by Kuznetzova, 1987b: 78 (NMRL).

Copromyza (*Copromyza*) *nigrina*. - Kuznetzova, 1987b: 77 [generic combination].

Copromyza nigrina. - Roháček, 1989: 9-10 [biology, distribution].

Borborus similis Collin, 1930: 18 [both sexes]. Type locality: Great Britain, England, Cambridgeshire, Dullingham. LT male, designated by Norrbom & Kim, 1985b: 342 [OXUM]. - Kuznetzova, 1987b: 77 [synonymy].

Copromyza (*Copromyza*) *similis*. - Richards, 1930: 314 [generic combination]; Hackman, 1965b: 45-46 [key, illustr.]; Papp, 1973c: 24 [key, illustr.]; Papp, 1984: 74 [Palaearctic catalog]; Skidmore, 1993: 7, 13 [puparium, illustr.].

Cypsela similis. - Séguy, 1934: 448, 451 [generic combination, key].

Borborus (*Trichiaspis*) *similis*. - Duda, 1938: 62 [redescription, subgeneric combination].

Borborus (*Copromyza*) *similis*. - Vanschuytbroeck, 1943a: 5, 7 [subgeneric combination, illustr.].

Copromyza similis. - Norrbom & Kim, 1985b: 342-344 [redescription, phylogeny, illustr.]; Pitkin, 1988: 31 [key, illustr.].

Borborus (*Copromyza*) *intermedia* Vanschuytbroeck, 1943a: 6 [incorrect name termination, male, illustr.]. Type locality: Belgium, Duzo-Moûpas. HT male (ISNB). - Papp, 1984: 74 [synonymy]; Norrbom & Kim, 1985b: 342 [synonymy].

Borborus (*Trichiaspis*) *pallipes*. - Duda, 1923: 95-97 [misidentification; redescription].

Copromyza (*Copromyza*) *stenhammari*. - Richards, 1980: 616 [misidentification, Afrotropical catalog].

Copromyza pappi Norrbom & Kim, 1985. **Distr.:** Oriental: China (SIC).

Copromyza pappi Norrbom & Kim, 1985b: 338 [male, phylogeny, illustr.]. Type locality: China, Szechwan (= Sichuan) [600 m]. HT male (USNM).

Copromyza pedipicta Richards, 1959. **Distr.:** Afrotropical: Ethiopia.

Copromyza (*Copromyza*) *pedipicta* Richards, 1959: 181 [both sexes]. Type locality: Ethiopia, Simien, near Mindigabsa [over 10,000 ft]. HT male (BMNH). - Richards, 1980: 616 [Afrotropical catalog].

Copromyza pedipicta. - Norrbom & Kim, 1985b: 339-340 [redescription, phylogeny, illustr.].

Copromyza pseudostercoraria Papp, 1976. **Distr.:** Palaearctic: France, Hungary, Iran, Italy, Israel, Spain, Switzerland.

Copromyza (*Copromyza*) *pseudostercoraria* Papp, 1976a: 77 [both sexes, illustr.]. Type locality: Hungary, Szaporca. HT male (HNHM). - Papp, 1984: 74 [Palaearctic catalog.].

Copromyza pseudostercoraria. - Norrbom & Kim, 1985b: 338 [redescription, illustr.]; Roháček, 1992b: 199-200 [key, male genitalia, illustr.].

Copromyza stercoraria (Meigen, 1830). **Distr.:** Nearctic: Canada (AB, NT, YT), USA (AK, CA, CO, NH, NM, OR, SD, WA, WY); Palaearctic: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Hungary, Italy, Latvia, Mongolia, Netherlands, Norway, Poland, Russia (CET, ES, NET), Slovakia, Spain, Sweden, Switzerland, Yugoslavia.

- Borborus stercorarius* Meigen, 1830: 202 [sex not stated]. Type locality: not stated, probably Germany, Stolberg area. LT male, designated by Norrbom (see p. 35) (MNHN). - Morge, 1976: Pl. 276, Figs 12a,b [Meigen's original illustr.].
- Cimbometopia stercoraria*. - Lioy, 1864: 1114 [generic combination].
- Copromyza (Copromyza) stercoraria*. - Richards, 1930: 315 [generic combination]; Richards, 1965c: 719 [Nearctic catalog]; Hackman, 1965b: 45-46 [key, illustr.]; Papp, 1973c: 22 [key, illustr.]; Papp, 1984: 74 [Palaeartic catalog].
- Cypsela stercoraria*. - Séguy, 1934: 451 [generic combination].
- Borborus (Trichiaspis) stercoraria*. - Duda, 1938: 63-64 [incorrect name termination, subgeneric combination, redescription, illustr.].
- Borborus (Copromyza) stercoraria*. - Vanschuytbroeck, 1943a: 6-7 [incorrect name termination, subgeneric combination, illustr.].
- Copromyza stercoraria*. - Goddard, 1938: 252-254 [puparium, illustr.]; Norrbom and Kim, 1985b: 336-338 [redescription, nomenclature, phylogeny, illustr.]; Pitkin, 1988: 30 [key, illustr.]; Roháček, 1989: 5-7 [biology, distribution]; Roháček, 1992b: 198-201 [key, genitalia, illustr.]; Woodward, 1994: 239-243 [pupal parasitoid *Zygosia urticeti*, Figitidae, Hymenoptera]; Marshall 1997d: 672 [distribution].
- Borborus nigrifemoratus* Macquart, 1835: 567 [both sexes]. Type locality: France. STs, both sexes (MHNLI; apparently lost, no syntypes found in MNHN or MHNLI). - Collin, 1914: 238 [synonymy].
- Isogaster nigrifemoratus*. - Lioy, 1864: 1114 [incorrect name termination, generic combination].
- Borborus nigrofemoratus*. - Meigen, 1838: 407 [misspelling].
- Borborus (Trichiaspis) nigrofemorata*. - Duda, 1923: 97-99 [misspelling; subgeneric combination, redescription].
- Borborus (Borborus) nigrofemoratus*. - Spuler, 1925b: 15 [misspelling, subgeneric combination, illustr.].
- Copromyza tibialis* Zetterstedt, 1847: 2484 [both sexes]. Type locality: Denmark. LT male, designated by Norrbom & Kim, 1985b: 336 (MZLU). - Collin, 1914: 238 [synonymy].
- Borborus tibialis*. - Van der Wulp & de Meijere, 1898: 135 [generic combination].
- Copromyza pallipes* Stenhammar, 1855: 346 [a secondary junior homonym of *Borborus pallipes* Meigen, 1830 (= *Copromyza equina* Fallén, 1820); both sexes]. Type locality: Sweden, Bahusia [= Bohuslän]. LT female, designated by Norrbom & Kim, 1985b: 336 (NHRS). - Collin, 1930: 18 [synonymy, homonymy].
- Cypsela zetterstedti* Wahlgren, 1918: 1 [nom.n. for *Copromyza tibialis* Zetterstedt, 1847, a secondary junior homonym of *Mycetia tibialis* Robineau-Desvoidy, 1830].
- Cypsela stenhammari* Wahlgren, 1918: 1 [nom.n. for *Copromyza pallipes* Stenhammar, 1855, a secondary junior homonym of *Borborus pallipes* Meigen, 1830].
- Copromyza zhongensis*** Norrbom & Kim, 1985. **Distr.:** Oriental: China (SIC, ZHE); Palaeartic: Japan.
- Copromyza zhongensis* Norrbom & Kim, 1985b: 341 [female, phylogeny, illustr.]. Type locality: China, Szechwan (= Sichuan) [600 m]. HT female (USNM). - Hayashi, 1991a: 565-567 [both sexes, redescription, illustr.].

Genus *Crumomyia* Macquart, 1835

- Crumomyia* Macquart, 1835: 569 (feminine). Type species: *Borborus glacialis* Meigen, 1830, monotypy. - Duda, 1923: 54-55 [as subgenus of *Borborus* Meigen, 1803, partim; revision of species, key]; Spuler, 1925b: 4-5 [as subgenus of *Borborus*, partim; review of Nearctic

- species]; Richards, 1930: 312 [as subgenus of *Copromyza* Fallén, 1810, partim; British species]; Hackman, 1965b: 34-42 [as subgenus of *Copromyza*, partim; diagnosis, key to world species, illustr.]; Richards, 1965c: 720 [as subgenus of *Copromyza*, partim; Nearctic catalog]; Roháček, 1976: 113-121 [as subgenus of *Copromyza*, partim; review of Czechoslovakian species, key, illustr.]; Hackman, 1977: 399 [as subgenus of *Copromyza*, partim; Oriental catalog]; Papp, 1984: 78-79 [as subgenus of *Copromyza*; Palaearctic catalog]; Norrbom & Kim, 1985a: 167-220 [as genus; reclassification, redescription, phylogeny, revision of world species, key, illustr.]; Marshall & Richards, 1987: 1004 [as genus; diagnosis in key, illustr.]; Kuznetzova, 1989a: 199-208 [as genus; diagnosis, review of Russian species, key, illustr.]; Roháček, 1991a: 1-23 [as genus; review of Czechoslovakian species, biology, distribution]; Roháček, 1998a: 477 [diagnosis in key, illustr.]; Roháček & Papp, 2000: 225-227 [cavernicolous species, origin of troglobiont species].
- Apterina* Macquart, 1835: 573 (feminine). Type species: *Borborus pedestris* Meigen, 1830, monotypy. - Schiner, 1864a: 321 [key]; Duda, 1923: 49, 54, 75 [as subgenus of *Borborus* Meigen, 1803; illustr.]; Richards, 1930: 311 [as subgenus of *Copromyza* Fallén, 1810]; Duda, 1938: 21, 39 [as subgenus of *Borborus*; diagnosis, taxonomic notes]; Hackman, 1965b: 43 [as subgenus of *Copromyza*]; Norrbom & Kim, 1985a: 185 [synonymy].
- Eriosoma* Liroy, 1864: 1113 (neuter) [a junior homonym of *Eriosoma* Leach, 1818, Homoptera: Aphididae]. Type species: *Borborus niger* Meigen, 1830, monotypy. - Richards, 1930: 265 [homonymy, synonymy].
- Fungobia* Liroy, 1864: 1114 (feminine). Type species: *Borborus nitidus* Meigen, 1830, monotypy. - Richards, 1930: 311-312 [as subgenus of *Copromyza* Fallén, 1810; British species]; Richards, 1965c: 720 [as subgenus of *Copromyza*; Nearctic catalog]; Hackman, 1965b: 40, 42-43 [as subgenus of *Copromyza*; review of Finnish species, key, illustr.]; Papp, 1973c: 17-19 [as subgenus of *Copromyza*; key to Hungarian species, illustr.]; Papp, 1979e: 267 [as subgenus of *Copromyza*; taxonomic notes]; Papp, 1984: 77-78 [as subgenus of *Copromyza*; Palaearctic catalog]; Norrbom & Kim, 1985a: 185 [synonymy].
- Saprobium* Rondani, 1880: 10 (masculine). Type species: *Borborus nitidus* Meigen, 1830, subsequent designation by Norrbom & Kim, 1985a: 185. - Richards, 1930: 265 [synonymy].
- Speomyia* Bezzi, 1914c: 505 (feminine). Type species: *Speomyia absoloni* Bezzi, 1914, monotypy. - Duda, 1923: 54 [as subgenus of *Borborus* Meigen, 1803]; Duda, 1938: 37-38 [as genus; redescription]; Papp, 1973c: 24 [as genus, diagnosis]; Papp, 1979e: 365 [as subgenus of *Copromyza* Fallén, 1810; taxonomic notes]; Papp, 1984: 78 [as subgenus of *Copromyza*; Palaearctic catalog]; Norrbom & Kim, 1985a: 185 [synonymy].
- Stratioborborus* Duda, 1923: 54 (masculine) [as subgenus of *Borborus* Meigen, 1803]. Type species: *Borborus nitidus* Meigen, 1830, subsequent designation by Richards, 1930: 267. - Spuler, 1925b: 5-7 [as subgenus of *Borborus*; review of Nearctic species, key]; Richards, 1930: 267 [synonymy]; Duda, 1938: 45-51 [as subgenus of *Borborus*; taxonomic notes, review of Palaearctic species, key].
- Paraspeomyia* Duda, 1938: 38 (feminine) [as subgenus of *Speomyia* Bezzi, 1914]. Type species: *Speomyia (Paraspeomyia) hungarica* Duda, 1938, monotypy. - Papp, 1979e: 366 [synonymy with *Speomyia* Bezzi, 1914].

***Crumomyia absoloni* (Bezzi, 1914). Distr.:** Palaearctic: Bosnia (Herzegovina).

Speomyia Absoloni Bezzi, 1914: 506 [male, illustr.]. Type locality: Bosnia, NE Herzegovina, Mušica ponor cave nr. Bašić at Gachopolje [900 m] (labelled "Jazenik, Herzegov."). HT male (MSNM). - Duda, 1938: 38 [redescription, male]; Bayer & Absolon, 1944: 177-194 [both sexes, morphology, anatomy, biology, illustr.]; Séguy, 1963: 223-224 [diagnosis, illustr.].

Borborus (Speomyia) absoloni. - Duda, 1923: 71-73 [generic combination, female, redescription].

Copromyza (Speomyia) absoloni. Papp, 1979e: 363-365 [generic combination, male, redescription, illustr.]; Papp, 1984: 78 [Palearctic catalog].

Crumomyia absoloni. - Norrbom & Kim, 1985a: 214-215 [generic combination, both sexes, redescription, phylogeny, illustr.].

Crumomyia annulus (F. Walker, 1849). **Distr.:** Nearctic: Canada (AB, MB, ON, QC), USA (AK); Oriental: Pakistan; Palearctic: Japan, Russia (FE).

Borborus annulus F. Walker, 1849: 1129 [both sexes]. Type locality: Canada, Hudson Bay. LT male, designated by Norrbom & Kim, 1985a: 194 (BMNH).

Borborus (Stratioborborus) annulus. - Spuler, 1925b: 5 [subgeneric combination, illustr.].

Copromyza (Crumomyia) annulus. - Richards, 1965c: 720 [generic combination, Nearctic catalog]; Papp, 1984: 78-79 [Palearctic catalog].

Copromyza (Crumomyia) annulus ssp. *annulus*. - Hackman, 1965b: 35-37 [taxonomic notes, key, illustr.].

Crumomyia annulus. - Norrbom & Kim, 1985a: 194-196 [generic combination, redescription, phylogeny, biology, illustr.]; Kuznetzova, 1989a: 201 [key, illustr.]; Hayashi & Tuno, 1998: 357 [breeding record from fungi].

Borborus (Crumomyia) glacialis var. *rufoannulata* Duda, 1935: 12 [female]. Type locality: Russia, Kamchatka, Petropavlovsk. LT female, designated by Norrbom & Kim, 1985a: 194 (NHRS). - Duda, 1938: 43 [redescription]; Hackman, 1965b: 37 [synonymy].

Borborus (Stratioborborus) annulipes Duda, 1938: 46 [both sexes]. Type locality: Russia, shore of "Gawan-See" [= ? Gavan Anuchina Bay, Sakhalin]. LT male, designated by Norrbom & Kim, 1985a: 194 (ZISP). - Norrbom & Kim, 1985a: 194 [synonymy].

Copromyza (Fungobia) annulipes. - Hackman, 1965b: 40 [generic combination]; Papp, 1984: 77 [Palearctic catalog].

Crumomyia cavernicola* ssp. *cavernicola (Papp & Roháček, 1983). **Distr.:** France.

Copromyza (Crumomyia) parentela ssp. *cavernicola* Papp & Roháček, 1983: 757 [both sexes, phylogenetic notes, illustr.]. Type locality: France, Alpes de Haute-Provence, Mélan, Grotte de St. Vincent. HT male (MHNG).

Crumomyia cavernicola ssp. *cavernicola*. - Roháček & Papp, 2000: 222-223 [generic combination, new status, key].

Crumomyia cavernicola* ssp. *oculea Roháček & Papp, 2000. **Distr.:** Austria.

Crumomyia cavernicola ssp. *oculea* Roháček & Papp, 2000: 223 [both sexes, phylogenetic notes, key]. Type locality: Austria: Osttirol, Karnische Alpen, Obstans Tropfsteinhöhle [2,320 m]. HT male (HNHM).

Crumomyia deemingi (Hackman, 1965). **Distr.:** Oriental: India (Sikkim).

Copromyza (Crumomyia) deemingi Hackman, 1965b: 37 [male, phylogenetic notes, illustr.]. Type locality: India, Sikkim, Gnatang [12,000 ft]. HT male (BMNH). - Hackman, 1977: 399 [Oriental catalog].

Crumomyia deemingi. - Norrbom & Kim, 1985a: 203-204 [generic combination, redescription, phylogeny, illustr.].

Crumomyia fimetaria (Meigen, 1830). **Distr.:** Palearctic: Austria, Belgium, Bulgaria, Czech Republic, Estonia, Finland, France, Germany, Great Britain, Hungary, Iceland, Israel, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Roumania, Russia (CET, NET, WS), Slovakia, Spain (incl. Balearic Is.), Sweden, Switzerland, Ukraine, Yugoslavia.

Borborus fimetarius Meigen, 1830: 202 [sex not stated]. Type locality: Poland, Wustung, near Habelschwerdt [= Bystrzyca Kłodzka]. Neotype male, designated by Norrbom (see p. 30) (USNM). - Morge, 1976: Pl. 163, Figs 5a,b [Meigen's original illustr.].

- Borborus (Stratioborborus) fimetarius*. - Duda, 1938: 47-48 [subgeneric combination, redescription].
- Copromyza (Fungobia) fimetaria*. - Hackman, 1965b: 43 [generic combination, key, illustr.]; Papp, 1973b: 18 [key, illustr.]; Papp, 1984: 77 [Palaeartic catalog].
- Copromyza (Fungobia) fimetarius*. - Okely, 1974: 45-46 [puparium, illustr.].
- Crumomyia fimetaria*. - Norrbom & Kim, 1985a: 207-209 [generic combination, redescription, phylogeny, biology, illustr.]; Pitkin, 1988: 32 [key, illustr.]; Kuznetzova, 1989a: 202 [key, illustr.]; Roháček, 1991a: 11-13 [biology, distribution].
- Borborus suillorum* Haliday, 1836: 322 [both sexes]. Type locality: Ireland. LT male, designated by Norrbom, 1987: 48 (NMID). - Duda, 1938: 47 [synonymy].
- Borborus (Stratioborborus) suillorum*. - Duda, 1923: 59-60 [subgeneric combination, redescription].
- Copromyza (Fungobia) suillorum*. - Richards, 1930: 311 [generic combination].
- Cypsela suillorum*. - Séguy, 1934: 448, 452 [generic combination, key].
- Borborus costatus* Meigen, 1838: 408 [sex not stated]. Type locality: not stated, probably Germany, Stolberg area. ST(s), sex unknown, presumably lost (not found in MNHN nor NHMW). - Duda, 1923: 59 [synonymy].
- Copromyza umbripennis* Zetterstedt, 1847: 2482 [nomen nudum, published in synonymy of *Copromyza fuscipennis*, not subsequently validated]. Type locality: Denmark, "Hafnia Danorum" [Copenhagen]. ST male (MZLU).
- Crumomyia gelida*** (Hackman, 1965). **Distr.:** Nearctic: Canada (NT, YT), USA (AK); Palaeartic: Finland, Mongolia.
- Copromyza (Crumomyia) gelida* Hackman, 1965b: 38 [both sexes, taxonomic notes, illustr.]. Type locality: Finland, Utsjoki, Kevo. HT male (MZHF). - Troger & Roháček, 1980: 25-26 [phylogenetic notes, male genitalia, illustr.]; Papp, 1984: 79 [Palaeartic catalog].
- Crumomyia gelida*. - Norrbom & Kim, 1985a: 205-207 [generic combination, redescription, phylogeny, biology, illustr.]; Kuznetzova 1989a: 202 [key, illustr.]; Marshall 1997d: 672 [distribution].
- Crumomyia glabrifrons*** (Meigen, 1830). **Distr.:** Palaeartic: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Finland, France, Germany, Hungary, Israel, Italy, Netherlands, Norway, Poland, Roumania, Russia (CET, SET), Slovakia, Spain, Sweden, Switzerland, Tadjikistan, Turkey, Ukraine, Yugoslavia.
- Borborus glabrifrons* Meigen, 1830: 202 [sex not stated]. Type locality: not stated, probably Germany, Stolberg area. LT female, designated by Norrbom (see p. 31) (MNHN).
- Borborus (Crumomyia) glabrifrons*. - Duda, 1923: 69-71 [subgeneric combination, redescription]; Duda, 1938: 42-43 [redescription].
- Copromyza (Crumomyia) glabrifrons*. - Hackman, 1965b: 35, 42 [generic combination, key, illustr.]; Papp, 1973a: 17 [key, illustr.]; Roháček, 1976: 116-117 [diagnosis, male genitalia, illustr.]; Papp, 1984: 79 [Palaeartic catalog].
- Crumomyia glabrifrons*. - Norrbom & Kim, 1985a: 211-212 [redescription, phylogeny, biology, illustr.]; Kuznetzova, 1989a: 205 [key, illustr.]; Roháček, 1991a: 15-17 [biology, distribution]; Perry, 1989: 236 [swarming].
- Copromyza fuscipennis* Zetterstedt, 1847: 2481 [both sexes]. Type locality: Sweden, "Lapponia Umensi". LT male, designated by Norrbom (see p. 30) (MZLU). - **syn.n.** (see p. 22).
- Copromyza rufiventris* Costa, 1854: 88 [sex not stated]. Type locality: Italy, Napoli. LT male, designated by Norrbom & Kim, 1986: 35 (IZUN). - Norrbom & Kim, 1986: 35 [synonymy].
- Borborus limbinervis* Rondani, 1880: 12 [both sexes]. Type locality: Italy. LT male, designated by Norrbom & Kim, 1986: 34 (MZUF). - Duda, 1923: 69 [synonymy].

Crumomyia glacialis ssp. glacialis (Meigen, 1830). **Distr.:** Palaearctic: France, Italy, Switzerland, Ukraine.

Borborus glacialis Meigen, 1830: 204 [male]. Type locality: France, Haute Savoie, Mont Blanc, Mer de glace. LT male, designated by inference of holotype by Becker, 1902: 347 (NHMW). - Morge, 1976: Pl. 214, Figs 17a,b [Meigen's original illustr.].

Crumomyia glacialis. - Macquart, 1835: 570 [generic combination]; Bezzi 1918: 53 [genus name misspelled]; Norrbom & Kim, 1985a: 212-214 [both sexes, redescription, phylogeny, biology, illustr.]; Kuznetzova, 1989a: 205 [key, distribution, illustr.].

Borborus (Crumomyia) glacialis. - Duda, 1923: 67-69 [partim, type data]; Duda, 1938: 43 [partim].

Copromyza (Crumomyia) glacialis. - Papp, 1984: 79 [partim; Palaearctic catalog].

Crumomyia glacialis ssp. gallica (Papp & Roháček, 1983). **Distr.:** Palaearctic: France.

Copromyza (Crumomyia) glacialis ssp. gallica Papp & Roháček, 1983: 752 [both sexes]. Type locality: France, Alpes de Haute-Provence, Mélan, Grotte de St. Vincent. HT male (MHNG).

Crumomyia hentscheli (Duda, 1938). **Distr.:** Palaearctic: Norway.

Borborus (Stratioborborus) Hentscheli Duda, 1938: 48 [female]. Type locality: Norway, Tromsø. HT female (SMNS; apparently lost).

Copromyza (Fungobia) hentscheli. - Hackman, 1965b: 40 [generic combination]; Papp, 1984: 77 [Palaearctic catalog].

Crumomyia hentscheli. - Norrbom & Kim, 1985a: 219 [generic combination, female, diagnosis].

Note: Unrecognized species.

Crumomyia hissarica Kuznetzova, 1993. **Distr.:** Palaearctic: Tadjikistan.

Crumomyia hissarica Kuznetzova, 1993b: 237 [both sexes, taxonomic notes, illustr.]. Type locality: Tadjikistan, Hissar mountain ridge, Anzob mountain pass. HT male (ZISP).

Crumomyia hungarica (Duda, 1938). **Distr.:** Palaearctic: Roumania.

Speomyia (Paraspeomyia) hungarica Duda, 1938: 38 [female]. Type locality: Roumania, Comitat Bihar. HT female (HNHM).

Speomyia hungarica. - Papp, 1973c: 24 [diagnosis].

Paraspeomyia hungarica. - Papp, 1979e: 365-366 [generic combination, redescription, female, phylogenetic notes, illustr.].

Copromyza (Speomyia) hungarica. - Papp, 1979e: 366 [generic combination]; Papp, 1984: 78 [Palaearctic catalog].

Crumomyia hungarica. - Norrbom & Kim, 1985a: 219 [generic combination, diagnosis, female].

Borborus (Speomyia) absoloni. - Duda, 1923: 71-73 [misidentification].

Crumomyia immensa (Spuler, 1925). **Distr.:** Nearctic: Canada (NB), USA (MA, ME, MI, NH, NY).

Borborus (Crumomyia) immensus Spuler, 1925b: 4 [female, illustr.]. Type locality: USA, New Hampshire, Hampton. HT female (USNM).

Copromyza (Crumomyia) immensa. - Richards, 1965c: 720 [generic combination, Nearctic catalog].

Crumomyia immensa. - Norrbom & Kim, 1985a: 190-191 [generic combination, redescription, both sexes, phylogeny, biology, illustr.].

Crumomyia longiptera Kuznetzova, 1989. **Distr.:** Palaearctic: Tadjikistan, Kirghizia.

Crumomyia longiptera Kuznetzova, 1989a: 208 [male, taxonomic notes, illustr.]. Type locality: Tadjikistan, Pamir, near Rang-Kulja. HT male (ZISP).

Note: The record from Kirghizia based on specimens in ZMUM.

Crumomyia maculipennis (Spuler, 1925). **Distr.:** Nearctic: Canada (AB, BC), USA (AK, CA, ID, OR, WA).

Borborus (Stratioborborus) maculipennis Spuler, 1925b: 6 [male, illustr.]. Type locality: USA, Washington, Dewatto. HT male (USNM).

Copromyza (Fungobia) maculipennis. - Richards, 1965c: 720 [generic combination, Nearctic catalog].

Crumomyia maculipennis. - Norrbom & Kim, 1985a: 191-193 [generic combination, both sexes, redescription, phylogeny, biology, illustr.].

Crumomyia microps Roháček & Papp, 2000. **Distr.:** Palaearctic: Austria.

Crumomyia microps Roháček & Papp, 2000: 216 [both sexes, phylogenetic notes, illustr.]. Type locality: Austria: Osttirol, Karnische Alpen, Obstans Tropfsteinhöhle [2,320 m]. HT male (HNHM).

Crumomyia nartshukae Kuznetzova, 1989. **Distr.:** Palaearctic: Russia (FE).

Crumomyia nartshukae Kuznetzova, 1989a: 206 [male, taxonomic notes, illustr.]. Type locality: Russia, Sakhalin, Pravda, 12 km N Cholmsk. HT male (ZISP).

Crumomyia nigra (Meigen, 1830). **Distr.:** Nearctic: Greenland; Palaearctic: Afghanistan, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Faeroe Is. (Denmark), Germany, Great Britain, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Roumania, Russia (CET, NET, SET), Slovakia, Spain, Sweden, Switzerland, Tadjikistan, Turkmenistan, Ukraine, Yugoslavia.

Borborus niger Meigen, 1830: 201 [sex not stated]. Type locality: not stated, probably Germany, Stolberg area. LT male, designated by Norrbom (see p. 32) (MNHN). - Morge, 1976: Pl. 163, Figs 4a-c [Meigen's original illustr.].

Eriosoma nigra. - Lioy, 1864: 1113-1114 [incorrect name termination, generic combination].

Borborus (Crumomyia) nigra. - Duda, 1923: 50, 64-67 [incorrect name termination, subgeneric combination, both sexes, redescription, illustr.]; Duda, 1938: 44-45 [redescription].

Copromyza (Crumomyia) nigra. - Richards, 1930: 312 [generic combination]; Richards, 1965c: 720 [Nearctic catalog]; Hackman, 1965b: 34, 42 [key, illustr.]; Papp, 1973c: 16-17 [key, illustr.]; Okely, 1974: 46 [puparium]; Roháček, 1976: 115-116 [diagnosis, key, male genitalia, illustr.]; Papp, 1984: 79 [Palaearctic catalog].

Cypsela nigra. - Séguéy, 1934: 448, 450 [generic combination].

Crumomyia nigra. - Norrbom & Kim, 1985a: 199-201 [generic combination, redescription, phylogeny, biology, illustr.]; Pitkin, 1988: 32 [key, illustr.]; Kuznetzova, 1989a: 206 [key, illustr.]; Roháček, 1991a: 7-9 [biology, distribution].

Borborus varipes Meigen, 1830: 202 [sex not stated]. Type locality: not stated, probably Germany, Stolberg area. LT male, designated by Norrbom (see p. 37) (MNHN). - Séguéy 1934: 450 [synonymy].

Crumomyia tuxeni Collin, 1954: 607 [male]. Type locality: Iceland, Horn, Pan Tunet. HT male (ZMUC). - Norrbom & Kim, 1985a: 200 [synonymy].

Copromyza (Crumomyia) tuxeni. - Hackman, 1965b: 36 [generic combination, taxonomic notes, illustr.].

Crumomyia nipponica (Richards, 1964). **Distr.:** Palaearctic: China (province not given), Japan.

Copromyza (Crumomyia) nipponica Richards, 1964a: 617 [both sexes, illustr.]. Type locality: Japan, Kyoto, Ohara. HT male (CASC). - Hackman, 1965b: 35, 40 [key, taxonomic notes]; Papp, 1984: 79 [Palaearctic catalog]; Nishijima & Yamazaki, 1984: 77-78 [diagnosis, illustr.].

Crumomyia nipponica. - Norrbom & Kim, 1985a: 196-197 [generic combination, redescription, phylogeny, illustr.]; Hayashi & Tuno, 1998: 357 [breeding record from fungi].

Crumomyia nitida (Meigen, 1830). **Distr.:** Palaearctic: Albania, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France (incl. Corsica), Faeroe Is. (Denmark), Great Britain, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Roumania, Russia (CET, NET, SET), Slovakia, Spain, Sweden, Switzerland, Yugoslavia.

Borborus nitidus Meigen, 1830: 201 [sex not stated, illustr.]. Type locality: not stated, probably Germany, Stolberg area. LT male, designated by Norrbom & Kim, 1985a: 209 (NHMW). - Morge, 1976: Pl. 163, Figs 2a-d [Meigen's original illustr.]. **Note:** In an addendum note, Norrbom & Kim (1985a: 223) suggested their lectotype designation was invalid because Meigen did not list Winthem as the collector, but because Meigen and Winthem could have exchanged specimens after the description of the species and the lectotype has a label with "nitidus" in Meigen's writing, we regard it as a valid type.

Copromyza nitida. - Zetterstedt, 1847: 2476 [generic combination].

Fungobia nitida. - Lioy, 1864: 1114 [generic combination].

Saprobius nitidus. - Rondani, 1880: 10-11 [generic combination].

Borborus (Stratioborborus) nitidus. - Duda, 1923: 60-63 [subgeneric combination, redescription, illustr.]; Duda, 1938: 49-50 [redescription].

Copromyza (Fungobia) nitida. - Richards, 1930: 311 [subgeneric combination]; Hackman, 1965b: 42-43 [key, illustr.]; Papp, 1973c: 18 [key, illustr.]; Papp, 1984: 78 [Palaearctic catalog].

Cypsela nitida. - Séguy, 1934: 448, 451 [generic combination].

Crumomyia nitida. - Norrbom & Kim, 1985a: 209-211 [generic combination, redescription, phylogeny, biology, illustr.]; Pitkin, 1988: 32 [key, illustr.]; Kuznetzova, 1989a: 200 [key, illustr.]; Roháček, 1991a: 13-15 [biology, distribution].

Borborus hamatus Haliday, 1833: 17 [both sexes]. Type locality: Ireland, County Down, Hollywood. LT male, designated by Norrbom, 1987: 48 (MVMA). - Haliday, 1836: 312 [synonymy].

Borborus nigriceps Rondani, 1880: 10 [both sexes]. Type locality: Italy, "appenino Italiae superioris". LT male, designated by Norrbom & Kim, 1986: 34 (MZUF). - Duda, 1923: 60 [synonymy].

Saprobius nigriceps. - Rondani, 1880: 10-11 [generic combination].

Cypsela nigriceps. - Bezzi, 1918: 53 [generic combination].

Saprobius nervosus. - Rondani, 1880: 10-11 [misidentification; generic combination, key].

Crumomyia notabilis (Collin, 1902). **Distr.:** Palaearctic: ?Belgium, Czech Republic, Finland, France, Germany, Great Britain, Hungary, Italy, Netherlands, Norway, Roumania, Russia (NET, WS), Slovakia, Sweden, Switzerland, Ukraine.

Borborus notabilis Collin, 1902: 55 [male]. Type locality: England, Suffolk, Bradley Park. HT male (OXUM).

Copromyza (Crumomyia) notabilis. - Roháček, 1976: 119-120 [generic combination, both sexes, redescription, illustr.]; Papp, 1984: 79 [Palaearctic catalog].

Crumomyia notabilis. - Norrbom & Kim, 1985a: 215-217 [generic combination, redescription, phylogeny, biology, illustr.]; Kuznetzova, 1989a: 201 [key, illustr.]; Roháček, 1991a: 17-19 [biology, distribution].

Borborus (Crumomyia) glacialis. - Duda, 1923: 67-69 [partim; misidentification]; Duda, 1938: 43-44 [partim; misidentification].

Copromyza (Crumomyia) glacialis. - Richards, 1930: 312 [misidentification]; Hackman, 1965b: 34, 37, 42 [misidentification, key, illustr.].

Copromyza glacialis. - Goddard, 1938: 251-252 [misidentification, puparium, cephalopharyngeal skeleton, illustr.].

Crumomyia parentela* ssp. *alpicola (Roháček in Troger & Roháček, 1980). **Distr.:** Austria, Italy, Slovakia, Switzerland.

Copromyza (*Crumomyia*) *alpicola* Roháček in Troger & Roháček, 1980: 22 [male, taxonomic notes, illustr.]. Type locality: Austria, Tirol, Obergurgl Mt. [1,980 m]. HT male (SMOC). - Papp, 1984: 78 [Palaeartic catalog].

Copromyza (*Crumomyia*) *parentela* ssp. *alpicola*. - Papp & Roháček, 1983: 759 [subspecific status].

Crumomyia parentela ssp. *alpicola*. - Roháček, 1991a: 9-11 [biology, distribution]; Roháček & Papp, 2000: 222-223 [key, phylogenetic notes].

Crumomyia parentela. - Norrbom & Kim, 1985a: 201-203 [partim; generic combination, both sexes, redescription, phylogeny, illustr.].

Crumomyia parentela* ssp. *parentela (Séguy, 1963). **Distr.:** Yugoslavia (Serbia).

Speomyia parentela Séguy, 1963: 224 [both sexes, illustr.] Type locality: Yugoslavia, Serbia, distr. Novi Pazar, cave 24, Špela Maja Hajne, southwest side of lesser peak of Mount Topola, near Sjenica [1,340 m]. HT male (MNHN).

Copromyza (*Crumomyia*) *parentela* ssp. *parentela*. - Papp & Roháček, 1983: 759 [subgeneric combination, phylogenetic notes].

Copromyza (*Speomyia*) *parentela*. - Papp, 1984: 78 [generic combination, Palaeartic catalog].

Crumomyia parentela. - Norrbom & Kim, 1985a: 201-203 [partim; generic combination, both sexes, redescription, phylogeny, illustr.].

Crumomyia parentela ssp. *parentela*. - Roháček & Papp, 2000: 222-223 [key, phylogenetic notes].

Crumomyia pedestris (Meigen, 1830). **Distr.:** Oriental: China (FUJ, SIC); Palaeartic: Austria, Belgium, China (XIN), Czech Republic, Denmark, France, Germany, Great Britain, Hungary, Italy, Latvia, Netherlands, Norway, Poland, Roumania, Russia (ES, NET, WS), Sweden, Switzerland.

Borborus pedestris Meigen, 1830: 209 [both sexes, illustr.]. Type locality: Germany, Hamburg. LT female, designated by Norrbom (see p. 34) (NHMW). - Morge, 1976: Pl. 214, Figs 19a-d [Meigen's original illustr.].

Apterina pedestris. - Macquart, 1835: 573 [generic combination]; Rondani, 1880: 43 [diagnosis]; Guibé, 1939: 3-112 [morphology, anatomy, biology, genetics, preimaginal stages, wing polymorphism, illustr.]

Limosina pedestris. - Zetterstedt, 1847: 2506-2507 [generic combination, diagnosis].

Copromyza pedestris. - Stenhammar, 1855: 335-337 [generic combination, redescription].

Borborus (*Apterina*) *pedestris*. - Duda, 1923: 49, 75-77 [subgeneric combination, both sexes, redescription, illustr.]; Duda, 1938: 39-40 [redescription, illustr.].

Copromyza (*Apterina*) *pedestris*. - Richards, 1930: 312 [subgeneric combination]; Hackman, 1965b: 43 [list]; Deeming & Knutson, 1966: 108-112 [preimaginal stages, biology, illustr.]; Papp, 1973c: 14 [key]; Roháček, 1975b: 196 [wing polymorphism].

Cypsela pedestris. - Séguy, 1934: 447, 451 [generic combination].

Copromyza (*Fungobia*) *pedestris*. - Papp, 1979e: 366 [subgeneric combination]; Papp, 1984: 78 [Palaeartic catalog].

Crumomyia pedestris. - Norrbom & Kim, 1985a: 189-190 [generic combination, redescription, phylogeny, biology, illustr.]; Pitkin, 1988: 32 [key]; Kuznetzova, 1989a: 206-207 [key, illustr.]; Roháček, 1991a: 2-5 [wing polymorphism, biology, distribution, illustr.]; Buck, 1997a: 146 [biology].

Crumomyia peishulensis Kuznetzova, 1989. **Distr.:** Palaeartic: Russia (FE).

- Crumomyia peishulensis* Kuznetzova, 1989a: 207 [male, phylogenetic notes, illustr.]. Type locality: Russia, S. Primorye, Shkotovskij distr., Maiche, Peishula. HT male (ZISP).
- Crumomyia pilosa*** Norrbom & Kim, 1985. **Distr.:** Nearctic: Canada (AB, BC), USA (AK).
- Crumomyia pilosa* Norrbom & Kim, 1985a: 198 [both sexes, phylogeny, biology, illustr.]. Type locality: USA, Alaska, Matanuska. HT male (USNM).
- Crumomyia pollinodorsata*** (Papp, 1974). **Distr.:** Nearctic: Canada (YT); Palaearctic: Mongolia, Russia (FE).
- Copromyza* (*Crumomyia*) *pollinodorsata* Papp, 1974d: 253 [both sexes, taxonomic notes, illustr.]. Type locality: Mongolia, Archangaj aimak, 10 km NNE from Egijn Davaa, Khangai. HT male (ZISP). - Papp, 1984: 79 [Palaearctic catalog].
- Crumomyia pollinodorsata*. - Norrbom & Kim, 1985a: 203-204 [generic combination, male, redescription, phylogeny, illustr.]; Marshall 1997d: 672 [distribution].
- Crumomyia promethei*** (Nartshuk, 1970). **Distr.:** Palaearctic: Georgia (Abkhasia).
- Copromyza* (*Crumomyia*) *promethei* Nartshuk, 1970b: 1093 [both sexes, illustr.]. Type locality: Georgia, Abkhasia, Caucasus Mts., Blizkij khrebet, Avadkhare. HT male (ZISP). - Papp, 1984: 79 [Palaearctic catalog].
- Crumomyia promethei*. - Norrbom & Kim, 1985a: 220 [generic combination, redescription]; Kuznetzova, 1989a: 206 [key, illustr.].
- Crumomyia pruinosa*** (Richards, 1932). **Distr.:** Nearctic: Canada (BC), USA (AK, UT); Palaearctic: Austria, Czech Republic, Finland, Great Britain (Hebrides), Mongolia, Norway, Russia (ES, FE), Slovakia, Switzerland, Sweden.
- Copromyza glacialis* var. *pruinosa* Richards, 1932a: 262 [both sexes]. Type locality: Great Britain, Scotland, Hebrides, St. Kilda, Dun. HT male (BMNH).
- Borborus* (*Crumomyia*) *glacialis* var. *pruinosa*; Duda, 1938: 43 [incorrect name termination, generic combination, redescription].
- Copromyza* (*Crumomyia*) *annulus* ssp. *pruinosa*; Hackman, 1965b: 36-37, 42 [subgeneric combination, subspecific status, key, illustr.]; Troger & Roháček, 1980: 20-21 [redescription, both sexes, genitalia, egg, illustr.].
- Crumomyia pruinosa*. - Norrbom & Kim, 1985a: 193-195 [generic combination, specific status, redescription, phylogeny, biology, illustr.]; Pitkin, 1988: 33 [key, illustr.]; Kuznetzova, 1989a: 204 [key, illustr.]; Roháček, 1991a: 5-6 [biology, distribution].
- Crumomyia rohaceki*** Norrbom & Kim, 1985. **Distr.:** Palaearctic: Austria, Czech Republic, Germany, France, Hungary, Israel, Italy, Moldavia, Poland, ?Roumania, Spain, Switzerland, Ukraine, ?Yugoslavia.
- Crumomyia rohaceki* Norrbom & Kim, 1985a: 217 [both sexes, phylogeny, biology, illustr.]. Type locality: Czech Republic, Moravia, Hrubý Jeseník Mts., peat-bog Skřítek. HT male (SMOC). - Kuznetzova, 1989a: 201 [key, illustr.]; Roháček, 1991a: 19-21 [biology, distribution].
- Borborus* (*Crumomyia*) *glacialis*. - Duda, 1923: 67-69 [partim; misidentification, redescription]; Duda, 1938: 43-44 [partim; redescription, illustr.].
- Copromyza* (*Crumomyia*) *glacialis*. - Roháček, 1976: 117-118 [misidentification, description, genitalia, illustr.]; Papp, 1984: 79 [partim; Palaearctic catalog].
- Crumomyia roserii*** (Rondani, 1880). **Distr.:** Palaearctic: Belgium, Bulgaria, Denmark, France, Germany, Greece, Great Britain, Hungary, Israel, Italy, Latvia, Netherlands, Norway, Roumania, Russia (NET), Spain, Sweden, Switzerland, ?Yugoslavia.
- Borborus Roserii* Rondani, 1880: 12 [male]. Type locality: Germany. HT male (MZUF, see Norrbom & Kim, 1986: 34).

Borborus (Stratioborborus) Roserii. - Duda, 1923: 63-64 [subgeneric combination, redescription].

Copromyza (Fungobia) roserii. - Richards, 1930: 312 [generic combination].

Cypsela Roserii. - Séguy, 1934: 451 [generic combination].

Crumomyia roserii. - Norrbom & Kim, 1985a: 207-208 [generic combination, redescription, phylogeny, biology, illustr.]; Pitkin, 1988: 32 [key, illustr.]; Kuznetzova, 1989a: 202 [key, illustr.].

Borborus (Stratioborborus) Roseri. - Duda, 1938: 50-51 [misspelling, redescription].

Copromyza (Fungobia) Roseri. - Papp, 1973c: 19 [misspelling, key, illustr.].

Copromyza (Fungobia) roseri. - Papp, 1984: 78 [misspelling, Palaeartic catalog].

Copromyza roseri. - Nartshuk, 1988: 584 [misspelling].

Copromyza (Fungobia) rosery. - Kuznetzova, 1986a: 11 [misspelling].

Crumomyia setitibialis (Spuler, 1925). **Distr.:** Nearctic: Canada (AB, BC, NB, NS, NT, ON, QC, YT), USA (AK, NH); Palaeartic: Finland, France, Italy, Mongolia, Norway, Russia (WS), Sweden, Slovakia, Switzerland.

Borborus (Stratioborborus) setitibialis Spuler, 1925b: 6 [male, illustr.]. Type locality: USA, New Hampshire, Mt Washington. HT male (USNM).

Copromyza (Fungobia) setitibialis. - Richards, 1965c: 720 [generic combination, Nearctic catalog].

Crumomyia setitibialis. - Norrbom & Kim, 1985a: 196-198 [generic combination, redescription, both sexes, phylogeny, biology, illustr.]; Kuznetzova, 1989a: 204 [key, illustr.]; Roháček, 1991a: 6-7 [biology, distribution]; Marshall 1997d: 672 [distribution]; Munari et al. 1997: 253 [distribution].

Copromyza (Crumomyia) freyi Hackman, 1965b: 39 [both sexes, taxonomic notes, key, illustr.]. Type locality: Finland, Tavastia, Hattula. HT male (MZHF). - Papp, 1984: 79 [Palaeartic catalog]; Norrbom & Kim, 1985a: 197 [synonymy].

Crumomyia subaptera (Malloch, 1923). **Distr.:** Nearctic: Canada (MB, NF, NT, YT), USA (AK); Palaeartic: North Korea, Russia (FE).

Borborus subapterus Malloch, 1923: 211 [both sexes]. Type locality: USA, Alaska, Pribilof Is., St. George I. HT female (USNM).

Copromyza (Copromyza) subaptera. - Richards, 1965c: 719 [generic combination, Nearctic catalog].

Crumomyia subaptera. - Norrbom & Kim, 1985a: 204-206 [generic combination, redescription, phylogeny, biology, illustr.]; Kuznetzova & Kozánek, 1993: 96 [distribution]; Kuznetzova, 1995: 27 [distribution]; Marshall 1997d: 673 [distribution].

Crumomyia tyrphophila Roháček, 1999. **Distr.:** Palaeartic: Austria, Czech Republic.

Crumomyia tyrphophila Roháček, 1999b: 2 [both sexes, phylogenetic notes, biology, illustr.]. Type locality: Czech Republic, Bohemia, Šumava Mts., Horská Kvilda, Jezerní slat' peatbog. HT male (SMOC). - Roháček & Papp, 2000: 216 [distribution].

Crumomyia zlobini Kuznetzova, 1995. **Distr.:** Palaeartic: Russia (FE).

Crumomyia zlobini Kuznetzova, 1995: 25 [male, taxonomic notes, illustr.]. Type locality: Russia, Kamchatka, Zhupanovo. HT male (ZISP).

Crumomyia zuskai (Roháček, 1976). **Distr.:** Palaeartic: Austria, Bulgaria, Czech Republic, France, Slovakia, Spain, Switzerland.

Copromyza (Crumomyia) zuskai Roháček, 1976: 120 [male, phylogenetic notes, illustr.]. Type locality: Czech Republic, Krkonoše Mts., Kotelné jámy. HT male (NMPC). - Troger & Roháček, 1980: 21-23 [female, illustr.]; Papp, 1984: 79 [Palaeartic catalog].

Crumomyia zuskai. - Norrbom & Kim, 1985a: 179-181, 218-219 [generic combination, redescription, both sexes, phylogeny, illustr.]; Roháček, 1991a: 21 [biology, distribution].

Note: The record from Bulgaria based on male in ZMHB.

Genus *Dudaia* Hedicke, 1923

- Dudaia* Hedicke, 1923: 431 (feminine) [nom.n. for *Dolichocera* Duda, 1923]. Type species: *Borborus (Dolichocera) flavocincta* Duda, 1923, automatic. - Richards, 1930: 267 [as subgenus of *Copromyza* Fallén, 1810; list of genera]; Richards, 1938a: 402 [as subgenus of *Copromyza*; diagnosis in key]; Vanschuytbroeck, 1948: 24 [as subgenus of *Borborus* Meigen, 1803; diagnosis in key]; Vanschuytbroeck, 1950a: 12 [as subgenus of *Borborus* Meigen; diagnosis in key]; Vanschuytbroeck, 1951a: 7 [as subgenus of *Borborus*; diagnosis in key]; Vanschuytbroeck, 1959a: 44, 60 [as subgenus of *Borborus*; diagnosis, review of species]; Vanschuytbroeck, 1959b: 37 [as subgenus of *Borborus*; diagnosis]; Richards, 1980: 616-617 [as subgenus of *Copromyza*; Afrotropical catalog]; Norrbom & Kim, 1985d: 17 [as genus].
- Dolichocera* Duda, 1923: 58 (feminine) [as subgenus of *Borborus* Meigen, 1803; a junior homonym of *Dolichocera* Latreille, 1829, Diptera, Sciomyzidae (cf. Hedicke, 1923: 431) and *Dolichocera* Gray, 1832, Coleoptera (cf. Richards, 1930: 267)]. Type species: *Borborus (Dolichocera) flavocincta* Duda, 1923, monotypy. - Hedicke, 1923: 431 [homonymy].
- Afroborborus* Curran, 1931: 9 (masculine). Type species: *Afroborborus tumidus* Curran, 1931, original designation. - Richards, 1980: 614 [Afrotropical catalog]. - **syn.n.** (see p. 21).
- Dudaia congoensis*** (Vanschuytbroeck, 1950) **comb.n. Distr.:** Afrotropical: Zaire.
Borborus (Dudaia) congoensis Vanschuytbroeck, 1950b: 5 [female]. Type locality: Zaire, Tshikay. HT female (ISNB). - Vanschuytbroeck, 1959a: 64 [diagnosis, male].
Copromyza (Dudaia) congoensis. - Richards, 1980: 616 [generic combination, Afrotropical catalog].
- Dudaia flavocincta*** (Duda, 1923). **Distr.:** Afrotropical: Tanzania, Zaire.
Borborus (Dolichocera) flavocincta Duda, 1923: 102 [incorrect name termination, male, illustr.]. Type locality: Tanzania, Arusha-Ju. HT male (HNHM).
Borborus (Dudaia) flavocincta. - Vanschuytbroeck, 1948: 29 [incorrect name termination, diagnosis, male genitalia, illustr.]; Vanschuytbroeck, 1950b: 5 [diagnosis]; Vanschuytbroeck, 1959a: 65 [diagnosis]; Vanschuytbroeck, 1959b: 38 [diagnosis].
Copromyza (Dudaia) flavocincta. - Richards, 1930: 267 [generic combination]; Richards, 1980: 616 [Afrotropical catalog].
Dudaia flavocincta. - Norrbom & Kim, 1985d: 19 [generic combination].
- Dudaia humeralis*** (Hackman, 1965). **Distr.:** Afrotropical: South Africa.
Copromyza (Gymnometopina) humeralis Hackman, 1965a: 488 [male, illustr.]. Type locality: South Africa, Cape Prov., Groot River Pass near Plettenbergbaai. HT male (NMSA). - Richards, 1980: 617 [Afrotropical catalog].
Dudaia humeralis. - Norrbom & Kim, 1987: 480 [generic combination].
- Dudaia jeanneli*** (Richards, 1938). **Distr.:** Afrotropical: Kenya.
Copromyza (Gymnometopina) Jeanneli Richards, 1938a: 403 [female]. Type locality: Kenya, east side Mount Elgon, Suam fishing hut [2,400 m]. HT female (MNHN). - Richards, 1980: 617 [Afrotropical catalog].
Borborus (Gymnometopina) Jeanneli. - Vanschuytbroeck, 1948: 33 [generic combination].
Gymnometopina jeanneli. - Vanschuytbroeck, 1962a: 469 [generic combination].
Dudaia jeanneli. - Norrbom & Kim, 1987: 480 [generic combination].
- Dudaia keiseri*** (Hackman, 1967). **Distr.:** Afrotropical: Madagascar.

Copromyza (Gymnometopina) keiseri Hackman, 1967b: 27 [both sexes, illustr.]. Type locality: Madagascar, eastern Madagascar, Ranomafana. HT male (NHMB). - Richards, 1980: 617 [Afrotropical catalog].

Dudaia keiseri. - Norrbom & Kim, 1987: 480 [generic combination].

Dudaia minima (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Zaire.

Borborus (Gymnometopina) minima Vanschuytbroeck, 1959b: 41 [incorrect name termination, both sexes, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Munoi, bif. Lupiala [890 m]. HT male (MRAC).

Gymnometopina minima. - Vanschuytbroeck, 1962a: 470 [generic combination].

Copromyza (Gymnometopina) minima. - Richards, 1980: 617 [generic combination; Afrotropical catalog].

Dudaia minima. - Norrbom & Kim, 1987: 480 [generic combination].

Dudaia simulatilis (Richards, 1980) **comb.n. Distr.:** Afrotropical: Zaire.

Copromyza (Dudaia) simulatilis Richards, 1980: 617 [nom.n. for *Borborus (Dudaia) similis* Vanschuytbroeck, 1948; Afrotropical catalog].

Borborus (Dudaia) similis Vanschuytbroeck, 1948: 30 [a primary junior homonym of *Borborus similis* Collin, 1930; both sexes, taxonomic notes, illustr.]. Type localities: Zaire, Parc National Albert, Burunga, Mokoto [2,000 m]; P.N.A., Tshamugussa, Bweza [2,250 m]; P.N.A., lac Kanyamenoni, vers volcan Musule [2,300 m]; P.N.A., Mayumbu, volcan Nyamuragira [2,100 m]; P.N.A., Shamuheru, volcan Nyamuragira [1,843 m]. STs, both sexes (MRAC). - Vanschuytbroeck, 1959b: 39 [diagnosis].

Dudaia straeleni (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Madagascar, Zaire.

Borborus (Gymnometopina) Straeleni Vanschuytbroeck, 1948: 33 [both sexes, illustr.]. Type locality: Zaire, Parc National Albert, Kanyabayongo, Kabasha [1,760 m]. HT male (MRAC). - Vanschuytbroeck, 1959b: 40 [diagnosis].

Copromyza (Gymnometopina) straeleni. - Hackman, 1967b: 29 [generic combination; Richards, 1980: 617 [Afrotropical catalog].

Dudaia straeleni. - Norrbom & Kim, 1987: 480 [generic combination].

Dudaia trispinosa (Vanschuytbroeck, 1959) **comb.n. Distr.:** Afrotropical: Zaire.

Borborus (Dudaia) trispinosa Vanschuytbroeck, 1959a: 63 [incorrect name termination, both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba. HT male (MRAC).

Copromyza (Dudaia) trispinosa. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Dudaia tumida (Curran, 1931) **comb.n. Distr.:** Afrotropical: Cameroon.

Afroboborus tumidus Curran, 1931: 9 [both sexes]. Type locality: Cameroon. HT male (AMNH). - Richards, 1980: 614 [Afrotropical catalog].

Dudaia uelensis (Vanschuytbroeck, 1959) **comb.n. Distr.:** Afrotropical: Zaire.

Borborus (Dudaia) uelensis Vanschuytbroeck, 1959a: 60 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba. HT male (MRAC).

Copromyza (Dudaia) uelensis. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Dudaia upembaensis (Vanschuytbroeck, 1959) **comb.n. Distr.:** Afrotropical: Zaire.

Borborus (Dudaia) upembaensis Vanschuytbroeck, 1959b: 37 [both sexes, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Ganza, près riv. Kamandula, affl. dr. Lukoka [860 m]. HT male (MRAC).

Copromyza (Dudaia) upembaensis. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Genus *Frutillaria* Richards, 1961

Frutillaria Richards, 1961a: 63 (feminine). Type species: *Frutillaria kuscheli* Richards, 1961, original designation. - Richards, 1961a: 63-67 [description, review of species, illustr.]; Richards, 1964c: 44-46 [additional species, key, illustr.]; Richards, 1967b: 4 [Neotropical catalog].

Frutillaria calceata Richards, 1961. **Distr.:** Neotropical: Chile.

Frutillaria calceata Richards, 1961a: 67 [male, illustr.]. Type locality: Chile, Los Riscos [450 m]. HT male (MEUC; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog; incorrect type locality].

Frutillaria chepuensis Richards, 1961. **Distr.:** Neotropical: Chile.

Frutillaria chepuensis Richards, 1961a: 66 [male, illustr.]. Type locality: Chile, Chiloé I., lat. 42°S, Chepu. HT male (MEUC; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Frutillaria edenensis Richards, 1961. **Distr.:** Neotropical: Chile.

Frutillaria edenensis Richards, 1961a: 67 [male, illustr.]. Type locality: Chile, Chiloé I., lat. 42°S, San Pedro [650 m]. HT male (MEUC; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Frutillaria kuscheli Richards, 1961. **Distr.:** Neotropical: Chile.

Frutillaria kuscheli Richards, 1961a: 66 [male, illustr.]. Type locality: Chile, Chiloé I., lat. 42°S, Chepu. HT male (MEUC; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Frutillaria propinqua Richards, 1964. **Distr.:** Neotropical: Chile.

Frutillaria propinqua Richards, 1964c: 44 [both sexes, illustr.]. Type locality: Chile, Aysén, Lago de Bueno Aires, Río Murta, about 46°S. HT male (BMNH; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Frutillaria stenoptera Richards, 1961. **Distr.:** Neotropical: Chile.

Frutillaria stenoptera Richards, 1961a: 67 [male, illustr.]. Type locality: Chile, Llanquihue Prov., lat. 41°12' S, Frutillar. HT male (MEUC; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Frutillaria tenuiforceps Richards, 1964. **Distr.:** Neotropical: Chile.

Frutillaria tenuiforceps Richards, 1964c: 44 [male, illustr.]. Type locality: Chile, Aconcagua, Zapallar, about 33°S. HT male (BMNH; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Frutillaria triangularis Richards, 1961. **Distr.:** Neotropical: Chile.

Frutillaria triangularis Richards, 1964c: 44 [male, illustr.]. Type locality: Chile, Concepción, Oca de Bío-Bío, about 37°S. HT male (BMNH; apparently lost, see Pitkin, 1989: 16). - Richards, 1967b: 4 [Neotropical catalog].

Genus *Gymnometopina* Hedicke, 1923

Gymnometopina Hedicke, 1923: 431 (feminine) [nom.n for *Gymnometopa* Duda, 1923; as subgenus of *Borborus* Meigen, 1803]. Type species: *Borborus (Gymnometopa) clunicrus* Duda, 1923, automatic. - Richards, 1930: 267 [partim; as subgenus of *Copromyza* Fallén, 1810; list of genera]; Richards, 1938a: 403 [partim; as subgenus of *Copromyza*; diagnosis in key]; Vanschuytbroeck, 1948: 25, 32 [partim; as subgenus of *Borborus*; diagnosis, key,

review of species]; Vanschuytbroeck, 1950a: 12 [partim; as subgenus of *Borborus*; diagnosis in key]; Vanschuytbroeck, 1951a: 8 [partim; as subgenus of *Borborus*; diagnosis]; Vanschuytbroeck, 1959a: 50 [partim; as subgenus of *Borborus*; diagnosis, list of species]; Vanschuytbroeck, 1959b: 39 [partim; as subgenus of *Borborus*; diagnosis]; Hackman, 1961: 1 [partim; as genus]; Hackman, 1965a: 487-488 [partim, as subgenus of *Copromyza*; South African species]; Hackman, 1967b: 27-30 [partim, as subgenus of *Copromyza*; species in Madagascar]; Vanschuytbroeck, 1970: 263 [as genus]; Richards, 1980: 617 [as subgenus of *Copromyza*; Afrotropical catalog]; Norrbom & Kim, 1987: 479-504 [as genus, redescription, key, revision of world species, phylogeny, distribution, illustr.].

Gymnometopa Duda, 1923: 59 (feminine) [as subgenus of *Borborus* Meigen, 1803; a junior homonym of *Gymnometopa* Coquillett, 1905, Diptera: Culicidae (cf. Hedicke, 1923: 431; Norrbom & Kim, 1987: 486)]. Type species: *Borborus (Gymnometopa) clunicrus* Duda, 1923, monotypy. - Hedicke, 1923: 431 [homonymy].

Gymnometopina apta (Curran, 1931). **Distr.:** Afrotropical: Cameroon, Ethiopia, Nigeria, Rwanda, Uganda, Zaire.

Borborus aptus Curran, 1931: 8 [both sexes]. Type locality: Cameroon. HT male (AMNH).

Borborus (Gymnometopina) aptus. - Vanschuytbroeck, 1948: 32 [diagnosis]; Vanschuytbroeck, 1959a: 50 [list].

Gymnometopina aptus. - Vanschuytbroeck, 1970: 263 [incorrect name termination, generic combination].

Copromyza (Gymnometopina) apta. - Richards, 1980: 617 [generic combination; Afrotropical catalog].

Gymnometopina apta. - Norrbom & Kim, 1987: 494-496 [redescription, phylogeny, biology, illustr.].

Borborus (Gymnometopina) setosa Vanschuytbroeck, 1948: 34 [incorrect name termination, both sexes, illustr.]. Type locality: Zaire, Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. HT male (MRAC). - Vanschuytbroeck, 1959b: 39 [diagnosis, distribution]; Norrbom & Kim, 1987: 494 [synonymy].

Copromyza (Gymnometopina) setosa. - Richards, 1980: 617 [generic combination; Afrotropical catalog].

Gymnometopina clunicrus (Duda, 1923). **Distr.:** Afrotropical: Ethiopia, Ghana, Madagascar, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zaire, Zimbabwe.

Borborus (Gymnometopa) clunicrus Duda, 1923: 105 [both sexes, illustr.]. Type locality: Type locality: "Kilima-Ndjaru" [Tanzania, Kilimanjaro]. LT male, designated by Papp, 1987a: 458 (HNHM).

Copromyza (Gymnometopina) clunicrus. - Richards, 1938: 404 [generic combination]; Richards, 1980: 617 [Afrotropical catalog].

Borborus (Gymnometopina) clunicrus. - Vanschuytbroeck, 1948: 32 [subgeneric combination]; Vanschuytbroeck, 1959b: 40 [diagnosis].

Gymnometopina clunicrus Hackman, 1961: 1 [generic combination]; Norrbom & Kim, 1987: 500-501 [redescription, phylogeny, biology, illustr.]; Papp, 1987a: 457-461 [redescription, illustr.].

Gymnometopina dudai Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Kenya, Zaire.

Gymnometopina dudai Norrbom in Norrbom & Kim, 1987: 503 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Katanga Prov., Parc National l'Upemba, Lusinga [1,760 m]. HT male (ISNB).

Gymnometopina fulgida Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Zaire.

Gymnometopina fulgida Norrbom in Norrbom & Kim, 1987: 498 [male, phylogeny, illustr.].
Type locality: Zaire, Kivu Prov., Rutshuru [1,258 m]. HT male (ISNB).

Borborus (Gymnometopina) setosa Vanschuytbroeck, 1948: 34 [partim; misidentification, incorrect name termination].

Gymnometopina garambaensis (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Cameroon, Ethiopia, Ghana, Kenya, Liberia, Nigeria, Uganda, ?South Africa, Zaire.

Borborus (Gymnometopina) garambaensis Vanschuytbroeck, 1959a: 50 [both sexes, illustr.].
Type locality: Zaire, Oriental Prov., Parc National Garamba. HT male (MRAC).

Copromyza (Gymnometopina) garambaensis. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Gymnometopina garambaensis. - Vanschuytbroeck, 1970: 264 [generic combination]; Norrbom & Kim, 1987: 489-490 [redescription, phylogeny, biology, phylogeny, illustr.].

Borborus (Gymnometopina) clunicrus Duda, 1923: 105 [partim; misidentification]. - Curran, 1931: 8 [partim; misidentification].

Gymnometopina haasae Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Ethiopia, Kenya, Tanzania, Zaire.

Gymnometopina haasae Norrbom in Norrbom & Kim, 1987: 501 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, Mt. Sesero, près Bitashimwa [2,000 m]. HT male (ISNB).

Borborus (Gymnometopina) setosa Vanschuytbroeck, 1948: 34 [partim; misidentification, incorrect name termination].

Gymnometopina halidayi Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Rwanda.

Gymnometopina halidayi Norrbom in Norrbom & Kim, 1987: 503 [both sexes, phylogeny, illustr.]. Type locality: Rwanda, Ruhengeri, riv. Penge [1,800-1,825 m.] HT male (ISNB).

Gymnometopina hallidayi. - Norrbom & Kim, 1987: 489 [misspelling].

Borborus (Gymnometopina) setosa Vanschuytbroeck, 1948: 34 [partim; misidentification, incorrect name termination].

Gymnometopina kibokoensis (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Congo, Uganda, Zaire.

Borborus (Gymnometopina) kibokoensis Vanschuytbroeck, 1959a: 54 [both sexes, illustr.].
Type locality: Zaire, Orientale Prov., Parc National de la Garamba. HT male (MRAC).

Copromyza (Gymnometopina) kibokoensis. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Gymnometopina kibokoensis. - Norrbom & Kim, 1987: 492-493 [generic combination, redescription, phylogeny, biology, illustr.].

Gymnometopina kiboboensis. - Norrbom & Kim, 1987: 487 [misspelling].

Gymnometopina lucida (Séguy, 1933). **Distr.:** Afrotropical: Mozambique, Tanzania, Zaire.

Cypsela lucida Séguy, 1933: 44 [both sexes]. Type locality: Mozambique, Zambèze, bas Sangadzé, Pindiriri. LT male, designated by Norrbom & Kim, 1987: 490 (MNHN).

Copromyza (Gymnometopina) lucida. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Gymnometopina lucida. - Norrbom & Kim, 1987: 490-491 [generic combination, redescription, phylogeny, illustr.].

Gymnometopina magna Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Zaire.

Gymnometopina magna Norrbom in Norrbom & Kim, 1987: 496 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, S. Lake Edward, Kitembo [925 m]. HT male (MRAC).

Borborus (Gymnometopina) setosa Vanschuytbroeck, 1948: 24 [partim; misidentification, incorrect name termination].

Gymnometopina marshalli Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Zaire.

Gymnometopina marshalli Norrbom in Norrbom & Kim, 1987: 493 [male, phylogeny, illustr.]. Type locality: Zaire, Katanga Prov., Parc National de l'Upemba, Kaziba, affl. g. Senze s. (affl. dr. Lufira) [1,140 m]. HT male (MRAC).

Gymnometopina richardsi Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Uganda, Zaire.

Gymnometopina richardsi Norrbom in Norrbom & Kim, 1987: 499 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, S. Lake Edward, Tshambi [975 m]. HT male (MRAC).

Gymnometopina scolocerca Norrbom in Norrbom & Kim, 1987. **Distr.:** Afrotropical: Zaire.

Gymnometopina scolocerca Norrbom in Norrbom & Kim, 1987: 491 [male, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Rutshuru. HT male (MRAC).

Gymnometopina scoocerca. - Norrbom & Kim, 1987: 484 [misspelling].

Genus *Lotophila* Lioy, 1864

Lotophila Lioy, 1864: 1113 (feminine). Type species: *Borborus lugens* Meigen, 1830 [= *Borborus ater* Meigen, 1830], subsequent designation by Richards, 1930: 264. - Norrbom & Kim, 1984: 306-310 [as genus; redescription, illustr.]; Papp, 1984: 74-75 [as subgenus of *Copromyza* Fallén, 1810; Palaearctic catalog]; Hayashi, 1985b: 561-564 [as genus; diagnosis, taxonomy, illustr.]; Marshall & Richards, 1987: 1004 [diagnosis in key]; Pitkin, 1988: 30 [as genus; diagnosis in key]; Norrbom & Marshall, 1988: 18-31 [as genus; redescription, revision of world species, phylogeny, key, illustr.]; Roháček, 1998a: 475 [diagnosis in key].

Olinea Richards, 1965c: 719 (feminine) [as subgenus of *Copromyza* Fallén]. Type species: *Borborus ater* Meigen, 1830, original designation]. - Hackman, 1965b: 42 [as subgenus of *Copromyza* Fallén; diagnosis in key, illustr.]; Papp, 1973c: 15 [as subgenus of *Copromyza* Fallén; diagnosis in key, illustr.]; Norrbom & Kim, 1984: 306 [synonymy].

Olinea Richards, 1961b: 561 (feminine) [nomen nudum - see Norrbom & Marshall, 1988: 18].

Borborus. - Meigen, 1830: 198 [partim]; Duda, 1938: 35 [as subgenus of *Borborus* Meigen, 1830; misinterpretation].

Olina. - Duda, 1923: 58, 99 [as subgenus of *Borborus* Meigen; misinterpretation, redescription]; Richards, 1930: 263, 315 [as subgenus of *Copromyza* Fallén; misinterpretation].

Scatophora. - Spuler, 1925b: 1 [as genus; misinterpretation].

Lotophila atra (Meigen, 1830). **Distr.:** Nearctic: Canada (AB, BC, NB, NF, NS, ON, QC), USA (AR, CA, CO, DC, FL, GA, IA, ID, IL, IN, KS, KY, MD, ME, MI, MN, MO, MT, NC, NE, NH, NJ, NM, NY, OH, OK, OR, PA, SC, SD, TN, VA, VT, WA, WI, WY); Oriental: China (SIC), Pakistan; Palaearctic: Afghanistan, Algeria, Austria, Azores (Portugal), Belgium, Bulgaria, Canary Is. (Spain), China (HEB, TIB), Croatia, Czech Republic, Denmark, Estonia, Finland, France

(incl. Corsica), Faeroe Is. (Denmark), Georgia, Germany, Great Britain, Greece (incl. Crete), Hungary, Kazakhstan, Israel, Italy (incl. Sardinia), Japan, Latvia, Lithuania, Macedonia, Madeira (Portugal), Malta, Mongolia, Morocco, Netherlands, North Korea, Norway, Poland, Roumania, Russia (CET, ES, FE, NET, WS), Slovakia, Spain, Sweden, Switzerland, Tadjikistan, Tunisia, Ukraine, Uzbekistan, Yugoslavia.

Borborus ater Meigen, 1830: 203 [sex not stated]. Type locality: not stated, probably Germany, Hamburg. LT male, designated by Norrbom & Kim, 1984: 307 (NHMW). - Schumann, 1961: 299 [egg, illustr.]; Schumann, 1962: 417-419, 431-434 [larva, illustr.]; Morge, 1976: Pl. 215, Figs 6a,b [Meigen's original illustr.]; Hinton, 1981: 746 [egg, illustr.].

Borborus (Borborus) ater. - Duda, 1938: 35-36 [subgeneric combination, redescription].

Copromyza (Olinea) atra. - Richards, 1961b: 562 [generic combination]; Richards, 1965c: 719 [Nearctic catalog]; Papp, 1973c: 15 [key, illustr.].

Copromyza (Lotophila) atra. - Papp, 1984: 74 [subgeneric combination; Palaearctic catalog].

Lotophila atra. - Norrbom & Kim, 1984: 306-310 [partim; generic combination, redescription, biology, illustr.]; Hayashi, 1985b: 562-564 [diagnosis, illustr.]; Norrbom & Marshall, 1988: 22-25, 29-31 [redescription, phylogeny, illustr.]; Roháček, 1989: 3-5 [biology, distribution]; Smith, 1989: 206 [cephalopharyngeal skeleton, illustr.].

Copromyza (Lotophila) atra. - Papp, 1984: 74 [subgeneric combination; Palaearctic catalog].

Borborus modestus Meigen, 1830: 203 [sex not stated]. Type locality: France, Montpellier.

LT male, designated by Norrbom & Marshall, 1988: 22 (NHMW). - Duda, 1923: 101 [synonymy]; Morge, 1976: Pl. 215, Figs 4a,b [Meigen's original illustr.].

Borborus lugens Meigen, 1830: 205 [sex not stated]. Type locality: France, region of Lyon.

LT female, designated by Norrbom & Kim, 1984: 307 (NHMW). - Duda, 1923: 101 [synonymy]; Morge, 1976: Pl. 215, Figs 3a,b [Meigen's original illustr.].

Lotophila lugens. - Lioy, 1864: 1113 [generic combination].

Borborus geniculatus Macquart, 1835: 567 [both sexes]. Type locality: France. LT male, designated by Norrbom & Marshall, 1988: 22 (MNHN). - Duda, 1938: 35 [synonymy].

Copromyza geniculata. - Zetterstedt, 1847: 2479-2480 [generic combination].

Olinea geniculata. - Becker, 1905: 27 [generic combination; catalog]; Hammer, 1941: 260 [egg, illustr.].

Borborus (Olinea) geniculata. - Duda, 1923: 99-101 [incorrect name termination, subgeneric combination, redescription, illustr.].

Cypsela geniculata. - Séguy, 1934: 448, 450 [generic combination].

Borborus analis von Roser, 1840: 64 [sex not stated]. Type locality: Germany, Württemberg.

LT male, designated by Norrbom & Marshall, 1988: 22 (SMNS). - Becker, 1903a: 66 [synonymy].

Borborus aeneus Macquart, 1849: 500 [supposedly female; illustr. shows male]. Type locality: Algeria, environs of Algiers or Constantine. LT male, designated by Norrbom & Marshall, 1988: 22 (MNHN). - Norrbom & Marshall, 1988: 22 [synonymy].

Olinea ferruginea Becker, 1908b: 198 [male]. Type locality: Madeira. HT male (ZMHB). - Duda, 1938: 36 [synonymy]. **Note:** The holotype was re-examined [Norrbom] to confirm this synonymy.

Scatophora carolinensis. - Spuler, 1925b: 1 [misidentification, illustr.].

Copromyza (Olinea) hirtipes. - Richards, 1930: 315 [misidentification].

Lotophila bicolor Norrbom & Marshall, 1988. **Distr.:** Oriental: Nepal.

Lotophila bicolor Norrbom & Marshall, 1988: 28 [male, phylogeny, illustr.]. Type locality: Nepal, Helumbu District, 28°00'N, 85°00'E, [10,500 ft]. HT male (CNCI). - Hayashi, 1991b: 11 [female, additional characters, illustr.].

Lotophila confusa Norrbom & Marshall, 1988. **Distr.:** Nearctic: USA (AK, AZ); Neotropical: Mexico (DUR, MEX, NUL); Oriental: China (SIC); Palaearctic: China (QIN, TIB).

Lotophila confusa Norrbom & Marshall, 1988: 25 [both sexes, phylogeny, variability, illustr.]. Type locality: Mexico, Nuevo Leon, E slope Cerro Potosí [9,200 ft]. HT male (CNCI).

Lotophila atra. - Norrbom & Kim, 1984: 306 [partim; misidentification].

Lotophila nepalensis Hayashi, 1991, **stat.n.** **Distr.:** Oriental: Nepal.

Lotophila pallida ssp. *nepalensis* Hayashi, 1991b: 11 [both sexes, illustr.]. Type locality: Nepal, Dobang Kharka [2,400 m]. HT male (KUEC).

Note: This taxon is elevated to species rank because its male genitalia are distinct from those of *L. pallida*.

Lotophila norrbomi (Papp, 1988). **Distr.:** Oriental: India (Assam), Nepal.

Copromyza norrbomi Papp, 1988b: 467 [male, taxonomic notes, illustr.]. Type locality: India, W. Bengal, Darjeeling distr., Tonglu [3,100 m]. HT male (MHNG).

Lotophila norrbomi. - Norrbom & Marshall, 1988: 26-27 [generic combination, both sexes, redescription, phylogeny, illustr.].

Lotophila pallida Hayashi, 1985. **Distr.:** Palaearctic: Japan.

Lotophila pallida Hayashi, 1985b: 561 [both sexes, taxonomic notes, illustr.]. Type locality: Japan, Hokkaido, Oshima, Nanae. HT male (ITLJ). - Norrbom & Marshall, 1988: 27-28 [redescription, phylogeny, illustr.]; Hayashi, 1991b: 12 [male genitalia, illustr.].

Genus *Metaborborus* Vanschuytbroeck, 1948

Metaborborus Vanschuytbroeck, 1948: 39 (masculine) [as subgenus of *Borborus* Meigen, 1803].

Type species: *Borborus (Metaborborus) calcaratus* Vanschuytbroeck, original designation. - Vanschuytbroeck, 1959a: 47 [as subgenus of *Borborus*; diagnosis]; Vanschuytbroeck, 1962a: 470 [as genus, list]; dtdo: 471 [as subgenus of *Borborus*; diagnosis]; Hackman, 1969a: 207 [as subgenus of *Copromyza* Fallén, 1810; list]; Richards, 1980: 617 [as subgenus of *Copromyza*; Afrotropical catalog]; Norrbom & Kim, 1985d: 17-41 [as genus; redescription, revision of world species, key, phylogeny, biology, immature stages, illustr.].

Dudaborborus Papp, 1980: 91 (masculine) [as subgenus of *Copromyza* Fallén, 1810]. Type species: *Borborus (Borborillus) saliens* Duda, 1923, original designation. - Norrbom & Kim, 1985d: 24 [synonymy].

Metaborborus calcaratus (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Zaire.

Borborus (Metaborborus) calcaratus Vanschuytbroeck, 1948: 39 [both sexes, illustr.]. Type locality: Zaire, Parc National Albert, riv. Bishakishaki, Kamatembe, plaine de lave [2,100 m]. LT male, designated by Norrbom (see p. 30) (MRAC).

Copromyza (Metaborborus) calcarata. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Metaborborus calcaratus. - Norrbom & Kim, 1985d: 30-31 [generic combination, redescription, phylogeny, illustr.].

Metaborborus flavior (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Tanzania, Zaire. Oriental: Bangladesh, Malaysia (Sabah).

Borborus (Metaborborus) flavior Vanschuytbroeck, 1959a: 48 [both sexes, illustr.]. Type locality: Zaire, Orientale Prov., Parc National Garamba. HT male (MRAC).

Copromyza (Metaborborus) flavior. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Metaborborus flavior. - Norrbom & Kim, 1985d: 28-30 [generic combination, redescription, phylogeny, illustr.]; Hayashi, 1990b: 734 [distribution].

Metaborborus glaber Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus glaber Norrbom & Kim, 1985d: 28 [male, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. HT male (MRAC).

Metaborborus hackmani Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus hackmani Norrbom & Kim, 1985d: 37 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. HT male (IRSN).

Metaborborus hacmani. - Norrbom & Kim, 1985d: 22 [misspelling].

Metaborborus mitus Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus mitus Norrbom & Kim, 1985d: 34 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. HT male (MRAC).

Metaborborus parastichosus Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus parastichosus Norrbom & Kim, 1985d: 37 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., W. Ruwenzori, Kalonge. HT male (MRAC).

Metaborborus pilifer (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Zaire.

Borborus (Gymnometopina) pilifer Vanschuytbroeck, 1948: 38 [both sexes, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. LT male, designated by Norrbom (see p. 34) (MRAC). - Vanschuytbroeck, 1959b: 42 [diagnosis].

Copromyza (Gymnometopina) pilifer. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Metaborborus pilifer. - Norrbom & Kim, 1985d: 31 [generic combination, redescription, phylogeny].

Metaborborus pollinosus (Hackman, 1965). **Distr.:** Afrotropical: South Africa.

Copromyza (Gymnometopina) pollinosa Hackman, 1965a: 487 [male, taxonomic notes, illustr.]. Type locality: South Africa, Natal, Tugela Ferry. HT male (NMSA). - Richards, 1980: 617 [Afrotropical catalog].

Metaborborus pollinosus. - Norrbom & Kim, 1985d: 39-40 [generic combination, male, redescription, phylogeny, illustr.].

Metaborborus ruwenzoriensis Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus ruwenzoriensis Norrbom & Kim, 1985d: 36 [male, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., W. Ruwenzori, Kalonge. HT male (MRAC).

Metaborborus saliens (Duda, 1923). **Distr.:** Oriental: Malaysia, Timor.

Borborus (Borborillus) saliens Duda, 1923: 107 [both sexes]. Type locality: Timor, Bonico. LT male, designated by Papp, 1980: 92 (ZMHB).

Copromyza (Dudaborborus) saliens. - Papp, 1980: 92-93 [generic combination, redescription, illustr.].

Metaborborus saliens. - Norrbom & Kim, 1985d: 32-33 [generic combination, redescription, phylogeny, illustr.].

Metaborborus schumanni (Papp, 1980). **Distr.:** Oriental: Indonesia (Java).

Copromyza (Dudaborborus) schumanni Papp, 1980: 93 [male, taxonomic notes, illustr.]. Type locality: Indonesia, Java, Nongkodjadjar. HT male (ZMHB).

Metaborborus schumanni. - Norrbom & Kim, 1985d: 33 [generic combination, male, redescription, phylogeny, illustr.].

Metaborborus schumanni. - Norrbom & Kim, 1985d: 25 [misspelling].

Metaborborus spinifer (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Zaire.

Borborus (Gymnometopina) spinifer Vanschuytbroeck, 1948: 36 [both sexes, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. LT male, designated by Norrbom (see p. 35) (MRAC). - Vanschuytbroeck, 1959b: 40 [diagnosis].

Copromyza (Gymnometopina) spinifer. - Richards, 1980: 617 [generic combination, Afrotropical catalog].

Metaborborus spinifer. - Norrbom & Kim, 1985d: 38-39 [generic combination, redescription, phylogeny, illustr.].

Metaborborus stichosus Norrbom & Kim, 1985. **Distr.:** Afrotropical: Kenya, Tanzania, Zaire.

Metaborborus stichosus Norrbom & Kim, 1985d: 35 [male, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., W. Ruwenzori, Kalonge. HT male (MRAC).

Metaborborus superciliosus Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus superciliosus Norrbom & Kim, 1985d: 27 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Kivu Prov., Parc National Albert, riv. Bishakishaki, Kamatembe [2,100 m]. HT male (MRAC).

Metaborborus trichosus Norrbom & Kim, 1985. **Distr.:** Oriental: Philippines (Luzon).

Metaborborus trichosus Norrbom & Kim, 1985d: 31 [male, phylogeny, illustr.]. Type locality: Philippines, Luzon, Rizal Prov., Alabang. HT male (USNM). **Note:** The holotype locality label reads "D1 Alabang, Rizal, PI".

Metaborborus wittei Norrbom & Kim, 1985. **Distr.:** Afrotropical: Zaire.

Metaborborus wittei Norrbom & Kim, 1985d: 40 [male, phylogeny, illustr.]. Type locality: Zaire, Parc National Albert, Shamuheru, Nyamuragira Volc. [1,843 m]. HT male (MRAC).

Genus *Norrbomia* Papp, 1988

Norrbomia Papp, 1988a: 394 (feminine). Type species: *Norrbomia indica* Papp, 1988 (= *Norrbomia tropica* (Duda, 1923), original designation. - Papp, 1988a: 394-407 [diagnosis, phylogenetic notes, review of Afrotropical species, key, illustr.]; Marshall & Norrbom, 1993: 151-180 [diagnosis, revision of New World species, phylogeny, biology, key, illustr.]; Roháček, 1998a: 475 [diagnosis in key, illustr.].

Borborillus. - Duda, 1923: 54 [partim; as subgenus of *Borborus* Meigen, 1803; revision of Old World species, key]; Spuler, 1925b: 8-12 [as subgenus of *Borborus* Meigen; review of Nearctic species, key]; Richards, 1930: 313-314 [partim; as subgenus of *Coromyza* Fallén, 1810; review of British species, key]; Duda, 1938: 51-59 [partim; as subgenus of *Borborus* Meigen; review of Palaearctic species, key]; Hackman, 1965b: 43-45 [partim; as subgenus of *Copromyza* Fallén; review of Finnish species, key]; Richards, 1965c: 720 [as subgenus of *Copromyza* Fallén; Nearctic catalog]; Richards, 1967b: 2 [as subgenus of *Copromyza* Fallén; Neotropical catalog]; Papp, 1973a: 376-379 [partim; as subgenus of *Copromyza* Fallén; review of Mongolian species]; 1973c: 19-22 [partim; as subgenus of *Copromyza* Fallén; diagnosis, key to Hungarian species]; Richards, 1973: 303 [partim, as subgenus of *Copromyza* Fallén; diagnosis]; Hackman, 1977: 399 [partim; as subgenus of *Copromyza* Fallén; Oriental catalog]; Richards, 1980: 616 [partim; Afrotropical catalog]; Papp, 1984: 75-76 [partim; as subgenus of *Copromyza* Fallén; catalog of Palaearctic species]; Norrbom & Kim, 1985a: 183 [partim; as genus, diagnosis in key]; Papp & Roháček, 1987: 83-86 [partim;

as genus; review of Israeli species, key]; Marshall & Richards, 1987: 1004 [as genus; diagnosis in key, illustr.].

Norrbomia beckeri (Duda, 1938) **comb.n. Distr.:** Palaearctic: China (TIB).

Borborus (*Borborillus*) *Beckeri* Duda, 1938: 52 [nom.n. for *Borborus opacus* Becker, 1907].
Copromyza (*Borborillus*) *beckeri*. - Papp, 1984: 75 [generic combination, restitution from synonymy, Palaearctic catalog].

Borborus opacus Becker, 1907a: 257 [a primary junior homonym of *Borborus opacus* Meigen, 1835; both sexes]. Type localities: China, Tibet, Itschegyn, Bomyn River; and Tibet, Chabirga Lake, East Zaidam. STs, both sexes (ZISP?).

Note: Richards (1962a: 364) synonymized *N. beckeri* (and *B. opacus*) with *Norrbomia gravis* (Adams, 1905) on the basis of Duda's (1938: 52) redescription that was based on specimens from Ethiopia which actually are *N. gravis* (cf. Papp, 1988a: 403). Because neither Duda nor Richards examined syntypes of *B. opacus* (from Tibet), Papp (1984: 75) questioned whether they are conspecific with the Afrotropical *N. gravis*, and treated *N. beckeri* as a valid species. Restudy of the type specimens is needed to clarify its identity.

Norrbomia costalis (Zetterstedt, 1847). **Distr.:** Palaearctic: Algeria, Austria, Belgium, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Great Britain, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Latvia, ?Mongolia, ?Morocco, Netherlands, Norway, Poland, Portugal, Roumania, Russia (CET, ES, ?FE, NET, SET, WS), Slovakia, Spain, Sweden, Switzerland, Tunisia, Ukraine, Yugoslavia. **Note:** Other species of the *costalis* complex have sometimes been misidentified as this species, so the range of *N. costalis* and some of the above records need to be verified. It does appear to be the only species of the complex occurring in northern Europe. The records from the Canary Islands and Madeira may have been based only on the type locality of *N. unicolor* (which is not a synonym) and the misconception that this locality was on Madeira, and at least some Mongolian records (Papp, 1973a: 377) were also based on another species.

Copromyza costalis Zetterstedt, 1847: 2483 [both sexes]. Type locality: "Dania, Hafnia" [= Denmark, Copenhagen]. LT male, designated by Norrbom (see p. 30) (ZMUC).

Copromyza (*Borborillus*) *costalis*. - Richards, 1930: 314 [subgeneric combination]; Hackman, 1965b: 41, 44, 45 [key, male genitalia, illustr.]; Papp, 1973c: 22 [key, illustr.]; Papp, 1984: 75 [Palaearctic catalog].

Cypsela costalis. - Séguy, 1934: 449 [generic combination].

Borborus (*Borborillus*) *costalis*. - Duda, 1938: 52-53 [generic combination, redescription].

Borborillus costalis. - Frey, 1941: 26 [generic combination]; Papp & Roháček, 1987: 84-85 [key]; Pitkin, 1988: 31 [key, illustr.].

Norrbomia costalis. - Papp, 1988a: 407 [generic combination]; Roháček, 1994a: 2-3 [biology, distribution].

Borborus (*Borborillus*) *opacifrons* Duda, 1923: 86 [both sexes]. Type locality: Germany, S. Harz, Ilfeld. LT male, designated by Norrbom (see p. 33) (ZMHB). - Richards, 1930: 314 [synonymy].

Borborus vitripennis. - Haliday, 1836: 325 [misidentification].

Norrbomia cryptica (Papp, 1973) **comb.n. Distr.:** Palaearctic: Kirghizia, Mongolia.

Copromyza (*Borborillus*) *cryptica* Papp, 1973a: 377 [both sexes, taxonomic notes, illustr.].
Type locality: Mongolia, Archangaj aimak, Koschoo zajdam at Chogschin-Orchon, 35

- km N from Somon Lun [1,490 m]. HT male (HNHM). - Papp, 1984: 75 [Palaeartic catalog].
- Borborillus crypticus*. - Papp, 1992: 86 [generic combination].
- Norrbomia demeteri*** Papp, 1988. **Distr.:** Afrotropical: Ethiopia.
Norrbomia demeteri Papp, 1988a: 395 [both sexes, key, illustr.]. Type locality: Ethiopia, Adis Abeba, Akaki River. HT male (HNHM).
- Norrbomia elephantis*** Papp, 1988. **Distr.:** Afrotropical: Tanzania, South Africa.
Norrbomia elephantis Papp, 1988a: 396 [both sexes, key, illustr.]. Type locality: Tanzania, Morogoro region, Mikumi National Park, Mikumi Tented Camp. HT male (HNHM).
- Norrbomia frigipennis*** (Spuler, 1925). **Distr.:** Nearctic: USA (FL, GA, MA, NC, NJ, SC).
Borborus (Borborillus) frigipennis Spuler, 1925b: 9 [both sexes, illustr.]. Type locality: USA, Florida, Lake Worth. HT female (USNM).
Copromyza (Borborillus) frigipennis. - Richards, 1965c: 720 [generic combination, Nearctic catalog]; Steyskal, 1971b: 477 [diagnosis in key, illustr.].
Borborillus frigipennis. - Sivinski, 1983: 419-423 [generic combination, biology, kleptoparasitism, life history]; Sivinski, 1984: 232-235 [biology, behaviour].
Norrbomia frigipennis. - Marshall & Norrbom, 1993: 159-160 [generic combination, redescription, phylogeny, biology, key, illustr.].
- Norrbomia fulvipennis*** Marshall & Norrbom, 1993. **Distr.:** Nearctic: USA (AL, FL, GA, MA, MD, MI, MS, NC, NE, NY, OK, SC, TX); Neotropical: Mexico (VRC).
Norrbomia fulvipennis Marshall & Norrbom, 1993: 160 [both sexes, phylogeny, biology, key, illustr.]. Type locality: USA, Florida, Collier Co., Seminole State Park. HT male (CNCI).
- Norrbomia fumipennis*** (Stenhammar, 1855). **Distr.:** Nearctic: Canada (BC, MB, NF, NT, QC, YT); USA (AK, CO, NM, UT, WY); Palaeartic: Finland, Iceland, Norway, Russia (NET, WS), Svalbard Is. (Norway), Sweden.
Copromyza fumipennis Stenhammar, 1855: 352 [both sexes]. Type locality: Sweden, Lapponia Lulensi (= Lule Lappmark). LT male, designated by Marshall & Norrbom, 1993: 162 (NHRS).
Borborus fumipennis. - Collin, 1925: 336 [generic combination, diagnosis]; Richards, 1929: 171-172 [diagnosis in key].
Borborus (Borborillus) fumipennis. - Duda, 1938: 53-54 [subgeneric combination, diagnosis].
Copromyza (Borborillus) fumipennis. - Hackman, 1965b: 41, 44, 45 [key, male genitalia, illustr.]; Papp, 1984: 75 [Palaeartic catalog].
Borborillus fumipennis. - Florén, 1989: 10 [generic combination].
Norrbomia fumipennis. - Marshall & Norrbom, 1993: 162-166 [generic combination, redescription, phylogeny, key, biology, illustr.]; Marshall 1997d: 673 [distribution].
Borborus articus Malloch, 1913a: 367 [both sexes]. Type locality: Canada, Quebec, Fort Chimo. LT male, designated by Marshall & Norrbom, 1993: 162 (USNM). - Marshall & Norrbom, 1993: 162 [synonymy].
Borborillus articus. - Norrbom & Kim 1985a: 176 [generic combination].
Borborus (Borborillus) articus. - Spuler, 1925b: 12 [misspelling; subgeneric combination, key].
Copromyza (Borborillus) arctica. - Richards, 1965c: 720 [misspelling, generic combination, Nearctic catalog].
- Norrbomia fuscana*** (Becker, 1909) **comb.n.** **Distr.:** Afrotropical: Ethiopia.

Borborus fuscianus Becker, 1909: 120 [female]. Type locality: Ethiopia, Harrar. HT female (?MNHN). - Becker, 1910a: 30 [repeated description].

Copromyza (Borborillus) fuscana. - Richards, 1980: 616 [generic combination; Afrotropical catalog].

Note: Papp (1988a: 407) suggested this species as a probable synonym of *Norrbomia gravis* (Adams, 1905) and considered the holotype "probably lost", but did not state if the MNHN collection, the likely depository, was checked. Restudy of this specimen is needed to clarify the status of this name.

Norrbomia gravis (Adams, 1905). **Distr.:** Afrotropical: Ethiopia, Kenya, Zaire, Zimbabwe.

Borborus gravis Adams, 1905: 199 [sex not stated]. Type locality: Zimbabwe, Salisbury. LT male, designated by Richards, 1962a: 364 (SEMC).

Copromyza (Borborillus) gravis. - Richards, 1962a: 364 [generic combination, diagnosis]; Richards, 1980: 616 [Afrotropical catalog]; Papp, 1984: 75 [Palaeartic catalog].

Norrbomia gravis. - Papp, 1988a: 403, 405 [generic of combination, key].

Borborus (Borborillus) opacus. - Duda 1923: 81-82 [partim; misidentification (Ethiopian specimens)].

Norrbomia hispanica (Duda, 1923). **Distr.:** Palaeartic: Bulgaria, Czech Republic, Finland, France, Great Britain, Hungary, Italy, Israel, Kazakhstan, Roumania, Russia (SET), Spain (incl. Balearic Is.), Tadjikistan.

Borborus (Borborillus) hispanicus Duda, 1923: 90 [male]. Type locality: Spain, Algeciras. HT male (ZMHB). - Duda, 1938: 54 [redescription, both sexes].

Copromyza (Borborillus) hispanica. - Richards, 1930: 313 [generic combination]; Hackman, 1965b: 41, 44 [key, male genitalia, illustr.]; Papp, 1973c: 21 [key, illustr.]; Papp, 1984: 75 [Palaeartic catalog].

Copromyza (Borborillus) hispanicus. - Nishijima & Yamazaki, 1984: 76 [incorrect name termination, key].

Borborillus hispanicus. - Papp & Roháček, 1987: 84-85 [generic combination, key]; Pitkin, 1988: 31 [key, illustr.].

Norrbomia hispanica. - Papp, 1990a: 108 [generic combination].

Norrbomia hypopygialis (Richards, 1939). **Distr.:** Afrotropical: Kenya, Rwanda, South Africa, Zaire.

Copromyza sordida var. *hypopygialis* Richards, 1939: 71 [both sexes]. Type locality: South Africa, Zululand, Umfolosi River. HT male (BMNH). - Richards, 1962a: 367 [diagnosis, illustr.]; Richards, 1980: 616 [Afrotropical catalog].

Norrbomia hypopygialis. - Papp, 1988a: 405 [generic combination, specific status, key]; Papp, 1990c: 114-115 [notes on type material, distribution].

Borborus (Borborillus) ambili Vanschuytbroeck, 1959a: 68 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba, Utukuru. HT male (MRAC). - Papp, 1988a: 404 [synonymy with *Norrbomia spinosa* (Vanschuytbroeck, 1959)].

Copromyza (Borborillus) ambili. - Richards, 1980: 616 [generic combination; Afrotropical catalog].

Borborus (Borborillus) spinosus Vanschuytbroeck, 1959a: 71 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba, Utukuru. HT male (MRAC). - Papp, 1988a: 405 [synonymy].

Copromyza (Borborillus) spinosa. - Richards, 1980: 616 [generic combination; Afrotropical catalog].

Norrbomia spinosa. - Papp, 1988a: 404-406 [generic combination, key, illustr.].

Norrbomia keniaca Papp, 1988. **Distr.:** Afrotropical: Kenya.

Norrbomia keniaca Papp, 1988a: 400 [both sexes, illustr.]. Type locality: SW Kenya, Narok, 1 km S junction at Enoso Nyuro. HT male (MZLU).

Norrbomia lacteipennis (Malloch, 1913). **Distr.:** Nearctic: USA (LA, OK, TX); Neotropical: Mexico (TAM).

Borborus lacteipennis Malloch, 1913a: 366 [both sexes]. Type locality: Mexico, Tamaulipas, Tampico. LT male, designated by Marshall & Norrbom, 1993: 166 (USNM).

Borborus (*Borborillus*) *lacteipennis*. - Spuler, 1925b: 9 [subgeneric combination, key].

Copromyza (*Borborillus*) *lacteipennis*. - Richards, 1967b: 2 [generic combination; Neotropical catalog]; Steyskal, 1971b: 477-478 [key, taxonomic notes, illustr.].

Norrbomia lacteipennis. - Marshall & Norrbom, 1993: 166-168 [generic combination, redescription, phylogeny, key, illustr.].

Borborus (*Borborillus*) *peltastes* Spuler, 1925b: 10 [both sexes, illustr.]. Type locality: USA, Texas, Mobeetie [misspelled as "Mobeste", see Steyskal, 1971b: 478]. HT male (USNM). - Steyskal, 1971b: 478 [synonymy].

Copromyza (*Borborillus*) *peltastes*. - Richards, 1965c: 720 [generic combination, Nearctic catalog].

Norrbomia marginatis (Adams, 1905). **Distr.:** Afrotropical: Angola, Cape Verde Is., Ethiopia, Kenya, Madagascar, Namibia, Nigeria, South Africa, Togo, Uganda, Zaire, Zimbabwe; Australasian/Oceanian: Australia (ACT, NSW, NT, QLD, WA), Belau, Fiji, Palau, Samoa, Vanuatu; Oriental: China (YUN), India, Malaysia (Sabah), Nepal, Pakistan, Philippines, Sri Lanka, Taiwan, Thailand; Palaearctic: Canary Is. (Spain), China (HEB), Egypt, Greece, Israel, Japan, Malta.

Borborus marginatis Adams, 1905: 198 [female]. Type locality: Zimbabwe: Salisbury (Harare) [5,050 ft]. LT female, designated by Richards, 1962a: 365 by inference of holotype (SEMC).

Copromyza (*Borborillus*) *marginatis*. - Richards, 1962a: 365-366 [generic combination, redescription, illustr.]; Hackman, 1977: 399 [Oriental catalog]; Richards, 1980: 616 [Afrotropical catalog]; Papp, 1984: 76 [Palaearctic catalog].

Borborillus marginatis. - Hayashi, 1986a: 118 [generic combination, key]; Papp & Roháček, 1987: 84-85 [key].

Norrbomia marginatis. - Papp, 1988a: 403 [generic combination].

Borborillus marginatus. - Marshall, 1989b: 602 [misspelling; Australasian/Oceanian catalog].

Borborus marmoratus Becker, 1908a: 133 [both sexes]. Type locality: Canary Is., Tenerife. LT male, designated by Norrbom (see p. 32) (ZMHB). - Richards, 1962a: 365 [synonymy].

Borborus (*Borborillus*) *marmoratus*. - Duda, 1923: 83-84 [subgeneric combination, redescription]; Duda, 1938: 54 [redescription].

Borborillus marmoratus. - Hackman, 1958b: 37 [generic combination].

Norrbomia mexicana Marshall & Norrbom, 1993. **Distr.:** Neotropical: Mexico (CHI).

Norrbomia mexicana Marshall & Norrbom, 1993: 168 [both sexes, phylogeny, key, illustr.]. Type locality: Mexico, Chiapas, 2 mi S Trinitaria. HT male (CNCI).

Norrbomia micropyga (Papp, 1973) **comb.n.** **Distr.:** Palaearctic: Mongolia.

Copromyza (*Borborillus*) *micropyga* Papp, 1973: 378 [both sexes, illustr.]. Type locality: Mongolia, Central aimak, Altan Bulak. HT male (HNHM). - Papp, 1984: 76 [Palaearctic catalog].

Borborillus micropyga. - Papp, 1992: 86 [incorrect name termination, generic combination].

Norrbomia mpazaensis (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Zaire.

Borborus (*Borborillus*) *mpazaensis* Vanschuytbroeck, 1959a: 65 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba. HT male (MRAC).

Copromyza (Borborillus) mpazaensis. - Richards, 1980: 616 [generic combination, Afrotropical catalog].

Norrbomia mpazaensis. - Papp, 1988a: 403, 405 [generic combination, key, illustr.].

Norrbomia nilotica (Becker, 1903) **sp.restit., comb.n. Distr.:** Palaearctic: Austria, Belgium, Bulgaria, Czech Republic, Egypt, France (incl. Corsica), Germany, Great Britain, Hungary, Israel, Latvia, Morocco, Poland, Russia (NET), Spain (incl. Balearic Is.), Tunisia.

Borborus niloticus Becker, 1903b: 124 [male]. Type locality: Egypt, Assiut. HT male (ZMHB). **Note:** Becker stated that he described this species from a single male, which is therefore the holotype by monotypy. It is labeled: "Assiut 44452. XII"; "Borborus niloticus Beck. [Becker's writing] det. Becker"; "costalis det. Duda" [Duda's writing]; "Holotype Borborus niloticus Becker 1903: 124, labelled by Norrbom x.91". Duda (1938: 52) considered this name a possible synonym of *N. costalis* (Zetterstedt) or *N. nitidifrons*. Papp (1984: 75) treated it as a synonym of *N. costalis*, but examination of the holotype indicates that *N. nilotica* is the senior synonym of *N. nitidifrons*.

Borborus (Borborillus) nitidifrons Duda, 1923: 86 [both sexes]. Type locality: Germany, S. Harz, Ilfeld. LT male, designated by Norrbom (see p. 33) (ZMHB). - Duda, 1938: 55 [redescription, key]. - **syn.n.** (see p. 22).

Copromyza (Borborillus) nitidifrons. - Richards, 1930: 314 [generic combination]; Papp, 1973c: 22 [key, illustr.]; Papp, 1984: 76 [Palaearctic catalog].

Cypsela nitidifrons. - Séguéy, 1934: 449, 451 [generic combination, key].

Borborillus nitidifrons. - Papp & Roháček, 1987: 84-85 [generic combination, key]; Pitkin, 1988: 31 [key, illustr.].

Norrbomia nitidifrons. - Papp, 1990a: 108 [generic combination]; Roháček, 1994a: 3-4 [biology, distribution].

Norrbomia niveipennis (Duda, 1923), **comb.n. Distr.:** Palaearctic: Afghanistan, Egypt, Greece, Iran, Israel, Italy, Libya, Morocco, Spain, Tadjikistan, Tunisia, Turkey, Turkmenistan.

Borborus (Borborillus) niveipennis Duda, 1923: 89 [both sexes]. Type localities: Iran, Gerry-Rub; and Tunisia, Gafsa. STs, both sexes (ZMHB, HNHM). - Duda, 1938: 55-56 [redescription]. **Note:** The syntype series may be mixed. Duda described this species based on a pair in Becker's collection and a pair in the HNHM which he said were labeled "Persien Chorassan Zeppen Pydz & 8-10.10.98." and "Gafsa, Biró", respectively. The former syntypes in the ZMHB are labeled: "Герры-Рубь, окр. Бухары [= Gerry-Rub, vic. of Buchara]. 8-10.IV.98" [hand-written]; "Эксп. В. Персию 1898 Зарудный [Exp. to Persia 1898 Zarudny]"; "Persien Chorassan" [hand-written]; "niveipennis Duda ♂ Typus" in Duda's writing; red rectangle. Apparently these specimens were collected by Zarudny at Gerry-Rub (in eastern Iran near the Afghan border), although the reference to Buchara (presumably not the city in Uzbekistan) on their labels is unclear. They are not conspecific with the lectotype of *B. parallelinervis*, which is the species that has generally been identified as *N. niveipennis*. Restudy of the full syntype series is needed to clarify the status of this name.

Copromyza (Borborillus) niveipennis. - Richards, 1962b: 177 [generic combination]; Papp, 1977d: 121 [notes on type material]; Papp, 1984: 76 [Palaearctic catalog].

Borborillus niveipennis. - Papp & Roháček, 1987: 84-85 [key].

Borborus (Borborillus) niveipennis var. *parallelinervis* Duda, 1938: 56 [both sexes]. Type locality: Spain, Tarifa. LT male, designated by Norrbom (see p. 34) (ZMHB). - Papp, 1984: 76 [synonymy].

Borborus (Borborillus) niveipennis var. *tenuicalcar* Duda, 1938: 56 [both sexes]. Type localities: Turkey, Akschehir; Israel, Tiberias. STs, both sexes (SMNS). - Papp, 1984: 76 [synonymy]. **Note:** Restudy of the types is needed to confirm the synonymy of this name.

Norrbomia sarcophaga Papp, 1988. **Distr.:** Afrotropical: South Africa.

Norrbomia sarcophaga Papp, 1988a: 401 [both sexes, key, illustr.]. Type locality: South Africa, Transvaal, n. Kruger National Park, Pafuri, 22°27'S, 31°17'E. HT male (NMSA).

Norrbomia scripta (Malloch, 1915). **Distr.:** Nearctic: Canada (SK), USA (AZ, IL, IN, KS, NM, OK, TX, WA); Neotropical: Mexico (HID, NUL).

Borborus scriptus Malloch, 1915: 64 [male]. Type locality: USA, Illinois, St. Joseph. HT male (INHS).

Borborus (Borborillus) scriptus. - Spuler, 1925b: 11 [subgeneric combination, key].

Copromyza (Borborillus) scripta. - Richards, 1965c: 720 [generic combination; Nearctic catalog]; Steyskal, 1971b: 477 [key].

Norrbomia scripta. - Marshall & Norrbom, 1993: 170-174 [generic combination, redescription, both sexes, key, phylogeny, biology, illustr.].

Borborus (Borborillus) singularis Spuler, 1925b: 12 [male, illustr.]. Type locality: USA, Washington, Kettle Falls. HT male (USNM). - Marshall & Norrbom, 1993: 172 [synonymy].

Copromyza (Borborillus) singularis. - Richards, 1965c: 720 [generic combination, Nearctic catalog].

Norrbomia singusta Marshall & Norrbom, 1993. **Distr.:** Nearctic: Canada (SK), USA (AZ).

Norrbomia singusta Marshall & Norrbom, 1993: 174 [both sexes, phylogeny, key, illustr.]. Type locality: Canada, Saskatchewan, Val Marie. HT male (CNCI).

Norrbomia somogyii (Papp, 1973). **Distr.:** Oriental: India (Kashmir), Nepal; Palaearctic: Azores, China (XIN), Greece, Hungary, Iran, Japan, Kirghizia, Mongolia, Morocco, Spain, Tadjikistan, Ukraine, Uzbekistan.

Copromyza (Borborillus) somogyii Papp, 1973a: 378 [both sexes, illustr.]. Type locality: Mongolia, Central aimak, Altan-Bulak. HT male (HNHM). - Papp, 1984: 76 [Palaearctic catalog].

Borborillus somogyii. - Hayashi, 1986b: 196, 204 [generic combination, male genitalia, illustr.]; Papp, 1992: 86 [list].

Norrbomia somogyii. - Papp, 1990a: 108 [generic combination].

Norrbomia sordida (Zetterstedt, 1847). **Distr.:** Australasian/Oceanian: Hawaii (USA); Nearctic: Canada (AB, BC, MB, NB, NF, NS, ON, QC, SK), USA (AK, AL, AZ, CA, CO, DC, FL, GA, IA, ID, IL, IN, KS, MA, MD, MI, MN, MO, MT, NC, NH, NJ, NM, NY, OH, OR, PA, TX, UT, VA, WA, WI, WY). Neotropical: Bermuda, Guatemala, Mexico (BCN, GUE, VRC); Oriental: India (Punjab); Palaearctic: Austria, Azores, Belgium, Canary Is. (Spain), China (XIN), Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Israel, Italy, Japan, Kazakhstan, Latvia, Mongolia, Norway, Poland, Roumania, Russia (CET, FE, NET), Slovakia, Spain (incl. Balearic Is.), Sweden, Switzerland, Tadjikistan, Turkey. **Note:** According to Papp (1988a: 407) all Afrotropical records are based on misidentifications.

Copromyza sordida Zetterstedt, 1847: 2484 [both sexes]. Type locality: southern Sweden. LT male, designated by Marshall & Norrbom, 1993: 176 (MZLU).

Borborus sordidus. - Becker, 1908a: 134 [generic combination].

Borborus (Borborillus) sordidus. - Duda, 1923: 84-86 [subgeneric combination, redescription]; Duda, 1938: 57 [redescription].

- Copromyza (Borborillus) sordida*. - Richards, 1930: 313 [subgeneric combination]; Richards, 1962a: 365-367 [taxonomic notes, synonymy, illustr.]; Hackman, 1965b: 44 [key]; Richards, 1965c: 720 [Nearctic catalog]; Papp, 1973a: 20 [key, illustr.]; Hackman, 1977: 399 [Oriental catalog]; Papp, 1984: 76 [Palaeartic catalog].
- Cypsela sordida*. - Séguy, 1934: 449, 451 [generic combination, key].
- Borborillus sordidus*. - Hammer, 1941: 257, 262 [generic combination, egg, illustr.]; Schumann, 1961: 298-299 [egg, illustr.]; Schumann, 1962: 419-420, 434-437 [larva, illustr.]; Papp & Roháček, 1987: 84, 86 [key]; Pitkin, 1988: 31 [key, illustr.]; Marshall, 1989b: 602 [Australasian/Oceanian catalog].
- Copromyza sordidus*. - Hinton, 1981: 746 [incorrect name termination, egg, illustr.].
- Borborillus sordida*. - Hayashi, 1986a: 118 [incorrect name termination, key, illustr.].
- Norrbomia sordida*. - Papp, 1988a: 394, 405, 407 [generic combination, key, illustr.]; Marshall & Norrbom, 1993: 176-178 [redescription, phylogeny, key, biology, illustr.]; Roháček, 1994a: 4-6 [biology, distribution].
- Copromyza (Borborillus) sordidia*. - Nishijima & Yamazaki, 1984: 76 [misspelling, key].
- Copromyza sordida* var. *nigritella* Zetterstedt, 1847: 2484 [male]. Type locality: Sweden, Scane, Esperöd. HT male (MZLU). - Marshall & Norrbom, 1993: 176 [synonymy].
- Borborus bilineatus* Grimshaw, 1901: 75 [both sexes]. Type locality: Hawaii (USA), Kona [4,000 ft]. STs, both sexes (BMNH). - Richards, 1952a: 429 [synonymy].
- Borborus brevisetus* Malloch, 1913a: 365 [both sexes]. Type locality: USA, District of Columbia, Washington. LT male, designated by Marshall & Norrbom, 1993: 176 (USNM). - Richards, 1962a: 366 [synonymy].
- Borborus minutus* Johnson, 1913: 449 [male]. Type locality: Bermuda, Spanish Point. HT male (MCZC). - Richards, 1962a: 365 [synonymy].
- Borborus (Borborillus) marmoratus*. - Spuler, 1925a: 11 [misidentification, illustr.].
- Norrbomia stuckenbergi*** (Hackman, 1967). **Distr.:** Afrotropical: Madagascar.
Copromyza (Borborillus) stuckenbergi Hackman, 1967b: 30 [both sexes, taxonomic notes, illustr.]. Type locality: E. Madagascar, Anosibe Road, Moramanga [840 m]. HT male (NMSA). - Richards, 1980: 616 [Afrotropical catalog].
- Norrbomia stuckenbergi*. - Papp, 1988a: 405 [generic combination, key].
- Norrbomia szelenyii*** (Papp, 1974). **Distr.:** Palaeartic: Hungary.
Copromyza (Borborillus) szelenyii Papp, 1974c: 169 [both sexes, phylogenetic notes, illustr.]. Type locality: Hungary, Com. Pest, Dömsöd, Apajpuszta. HT male (HNHM). - Papp, 1984: 76 [Palaeartic catalog].
- Norrbomia szelenyii*. - Papp, 1990a: 108 [generic combination].
- Borborillus szelenyii*. - Papp, 1992: 84 [generic combination].
- Norrbomia triglabra*** Marshall & Norrbom, 1993. **Distr.:** Nearctic: USA (KY).
Norrbomia triglabra Marshall & Norrbom, 1993: 178 [male, phylogeny, key, illustr.]. Type locality: USA, Kentucky, Whitley Co., Cumberland Falls State Park. HT male (CNCI).
- Norrbomia tropica*** (Duda, 1923) **stat.n., comb.n.** **Distr.:** Australasian/Oceanian: Austral Is., Australia (QLD), Fiji, Papua New Guinea, Solomon Is., Samoa, Tonga, Vanuatu; Oriental: India (Maharashtra), Pakistan, Philippines, Sri Lanka, Thailand; Palaeartic: Japan (Ryukyu Is.).
- Borborus (Borborillus) sordidus* var. *tropicus* Duda, 1923: 86 [both sexes]. Type locality: India, Matheran [800 m]. LT male, designated by Norrbom (see p. 36) (HNHM). - Richards, 1962a: 365 [probable synonymy with *N. marginatis* (Adams)].
- Norrbomia indica* Papp, 1988a: 399 [both sexes, taxonomic notes, illustr.]. Type locality: India, Matheran [800 m]. HT male (HNHM). - **syn.n.** (see p. 22).
- Norrbomia unicolor*** (Becker, 1908) **sp.restit., comb.n.** **Distr.:** Palaeartic: Canary Is. (Spain).

Borborus unicolor Becker, 1908a: 134 [male]. Type locality: Canary Islands, Tenerife, Güimar. LT male, designated by Norrbom (see p. 36) (ZMHB). - Duda, 1938: 52 [synonymy with *N. costalis*].

Copromyza (Borborillus) costalis. - Papp, 1977b: 123 [misidentification]; Papp, 1984: 75 [Palearctic catalog].

Norrbomia utukuruensis (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Zaire.

Borborus (Borborillus) utukuruensis Vanschuytbroeck, 1959a: 67 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba, Utukuru. HT male (MRAC).

Copromyza (Borborillus) utukuruensis. - Richards, 1980: 616 [generic combination, Afrotropical catalog].

Norrbomia utukuruensis. - Papp, 1988a: 404-405 [generic combination, key].

Norrbomia yukonensis Marshall & Norrbom, 1993. **Distr.:** Nearctic: Canada (YT).

Norrbomia yukonensis Marshall & Norrbom, 1993: 179 [both sexes, phylogeny, key, illustr.]. Type locality: Canada, Yukon, Northern Richardson Mountains, Erebia Creek base camp, 67°58'N 136°29'W. HT male (CNCI). - Marshall 1997d: 673 [distribution].

Genus *Palaeoceroptera* Duda, 1929

Palaeoceroptera Duda, 1929: 39 (feminine) [as subgenus of *Archileptocera* Duda, 1920]. Type species: *Archileptocera (Palaeoceroptera) boliviensis* Duda, 1929, monotypy. - Richards, 1967b: 6 [as subgenus of *Archileptocera* Duda; Neotropical catalog]; Marshall, 1998: 212-214 [as genus; diagnosis, revision of species, phylogenetic notes, illustr.].

Note: The genus was transferred from the *Archileptocera* group of genera (subfamily Limosiniinae) to Copromyzinae by Marshall (1998: 212).

Palaeoceroptera boliviensis (Duda, 1929). **Distr.:** Neotropical: Bolivia.

Archileptocera (Palaeoceroptera) boliviensis Duda, 1929: 39 [female, illustr.]. Type locality: Bolivia, Santa Cruz, San José de Chiquitos. HT female (SMNS). - Richards, 1967b: 6 [Neotropical catalog].

Palaeoceroptera boliviensis. - Marshall, 1998: 214 [generic combination, redescription, taxonomic notes].

Palaeoceroptera clefta Marshall, 1998. **Distr.:** Neotropical: Argentina.

Palaeoceroptera clefta Marshall, 1998: 212 [male, phylogenetic notes, illustr.]. Type locality: Argentina, Salta, El Maray, 50 km W Chicoana [2,500 m]. HT male (CNCI).

Genus *Palaeolimosina* Duda, 1920

Palaeolimosina Duda, 1920: 437 (feminine) [as subgenus of *Archileptocera* Duda, 1920]. Type species: *Archileptocera (Palaeolimosina) nigrina* Duda, 1920, monotypy. - Richards, 1967b: 7 [as subgenus of *Archileptocera* Duda; Neotropical catalog]; Marshall, 1998: 214-215 [as genus; diagnosis, phylogenetic notes].

Note: Marshall (1998: 215) tentatively considered this genus, originally placed in the Limosiniinae, a member of the subfamily Copromyzinae.

Palaeolimosina nigrina (Duda, 1920). **Distr.:** Neotropical: Bolivia.

- Archileptocera (Palaeolimosina) nigrina* Duda, 1920: 436 [female, illustr.]. Type locality: Bolivia, Cordillere [4,000-5,000 m]. HT female (SMTD). - Richards, 1967b: 7 [Neotropical catalog].
- Palaeolimosina nigrina*. - Marshall, 1998: 214-215 [generic combination, diagnosis, phylogenetic notes].

Genus *Penola* Richards, 1941

Penola Richards, 1941: 324 (feminine). Type species: *Penola eudypitidis* Richards, 1941, original designation. - Richards, 1941: 326 [phylogenetic notes]; 1951a: 848 [key]; Richards, 1967b: 4 [Neotropical catalog].

Penola eudypitidis Richards, 1941. **Distr.:** Neotropical: Falkland Is.

Penola eudypitidis Richards, 1941: 324 [female, illustr.]. Type locality: Falkland Is., Kidney I. HT female (BMNH). - Richards, 1967b: 4 [Neotropical catalog].

Genus *Pycnopota* Bezzi, 1927

Pycnopota Bezzi, 1927: 2 (feminine). Type species: *Pycnopota manni* Bezzi, 1927, original designation. - Richards, 1967b: 4 [Neotropical catalog].

Note: This enigmatic genus questionably belongs to the subfamily Copromyzinae; it is more probably relegable to Heleomyzidae (s. lat.) as indicated by its distinctly spinose costa. However, Mourgués-Shurter (in litt.), who studied genitalia of another (unnamed) species of *Pycnopota*, considers it only an aberrant member of Copromyzinae.

Pycnopota manni Bezzi, 1927. **Distr.:** Neotropical: Bolivia.

Pycnopota manni Bezzi, 1927: 5 [both sexes, illustr.]. Type locality: Bolivia, Beni, Huacha. HT male (USNM). - Steyskal, 1971a: 377-378 [taxonomic notes, illustr.].

Genus *Richardsia* Papp, 1973

Richardsia Papp, 1973a: 373 (feminine) [as subgenus of *Copromyza* Fallén, 1910]. Type species: *Copromyza (Richardsia) mongolica* Papp, 1973, original designation. - Papp, 1973a: 373-376 [taxonomic notes, illustr.]; Papp, 1984: 77 [as subgenus of *Copromyza* Fallén, 1910; Palaearctic catalog]; - Norrbom & Kim, 1985a: 180, 183 [as genus; taxonomic notes, diagnosis in key]; Papp, 1991c: 139-144 [as genus; redescription, phylogenetic notes, illustr.]; Roháček, 1998a: 475 [diagnosis in key].

Richardsia mongolica (Papp, 1973). **Distr.:** Palaearctic: Mongolia.

Copromyza (Richardsia) mongolica Papp, 1973a: 374 [both sexes, illustr.]. Type locality: Mongolia, Middle Gobi aimak, 8 km NW from the ruin Oldoch Chijd, 54 km NNW from Somon Zogt-Ovoo [1,350 m]. HT male (HNHM). - Papp, 1984: 77 [Palaearctic catalog].

Richardsia mongolica. - Papp, 1991c: 139-144 [generic combination, genitalia of both sexes, illustr.].

Doubtful species of Copromyzinae (species dubiae)

- communis** Robineau-Desvoidy, 1830: 805 *Mycetia* [sex not stated]. Type locality: not given (? France). ST(s), sex unknown (not found in MNHN, ? lost). - Becker, 1905: 24 [as synonym of *Borborus equinus*; Palaearctic catalog]; Duda, 1938: 15 [notes on generic placement]. **Note:** Haliday (1836: 322) considered this species a synonym of *Borborus suillorum* var. β = *Crumomyia roserii* (Rondani, 1880). As this cannot be demonstrated without revision of type material the species is treated here as an unrecognizable species, possibly belonging to *Crumomyia* following Duda (1938: 15).
- nitens** Macquart, 1843: 424 *Borborus* [female, illustr.]. Type locality: "Ile de France" [= Mauritius]. ST(s), female (MNHN, destroyed). **Note:** In box 28 of the Macquart Collection (MNHN) there is a drawer label with "B. nitens M., M. Desjardins, Ile de France", but there are no specimens and the collection catalog says "détruit, II/3.267".
- nitida** Robineau-Desvoidy, 1830: 803 *Nerea* [sex not stated]. Type locality: France, Paris. ST(s), sex unknown (not found in MNHN, ? lost). - Duda, 1938: 14 [probable identity of the species]; Papp, 1984: 106 [unrecognizable Sphaeroceridae]. **Note:** A doubtful species, possibly relegable to *Crumomyia*. Duda (1938: 14), following Haliday (1836: 321) considered it a doubtful synonym of *Crumomyia nitida* (Meigen, 1830).
- punctipennis** Macquart, 1835: 508 *Borborus* [female]. Type locality: North France. ST(s) female (NHNLi; apparently lost, not found in MNHN or MHNLI). **Note:** Unrecognized species, possibly a *Crumomyia*.
- tibialis** Robineau-Desvoidy, 1830: 806 *Mycetia* [sex not stated]. Type locality: not given (? France). ST(s), sex unknown (not found in MNHN, ? lost). - Becker, 1905: 26 [as synonym of *Borborus glabrifrons*; Palaearctic catalog]; Duda, 1938: 15 [notes on generic placement]. **Note:** Haliday (1836: 322) recognized this species as *Borborus suillorum* = *Crumomyia fimetaria* (Meigen, 1830). However, this is uncertain without examination of the type material. Therefore, it is considered a doubtful species, possibly belonging to *Crumomyia* in agreement with Duda (1938: 15).

Subfamily SPHAEROCERINAE

- SPHAEROCERINAE Macquart, 1835: 561 [as Sphaeroceridae]. Type genus: *Sphaerocera* Latreille, 1805. - Vanschuytbroeck, 1959a: 20-21 [partim; diagnosis, key to genera]; Kim, 1968: 299 [taxonomic limits, illustr.]; Hackman, 1969a: 295, 207 [phylogenetic notes, biogeography]; Kim, 1972b: 441-443 [classification, phylogeny, illustr.]; Hennig, 1973: 64 [partim, list of genera]; Papp, 1973c: 3 [diagnosis in key]; Hackman, 1977: 398 [Oriental catalog]; Papp, 1978d: 371 [diagnosis]; Roháček, 1983e: 4 [diagnosis in key]; Papp, 1984: 69-72 [Palaearctic catalog]; Marshall & Richards, 1987: 995, 1004 [diagnosis, key to Nearctic genera, illustr.]; Pitkin, 1988: 30, 33-43 [diagnosis in key, key to British genera and species]; Marshall, 1989b: 601 [Australasian/Oceanian catalog]; Roháček, 1998a: 473, 475 [diagnosis, key to Palaearctic genera, illustr.].
- SPHOEROCERINAE Macquart, 1846: 345 [as Sphaeroceridae; misspelling].
Further references: Duda, 1920a: 1-39 [as genus *Sphaerocera*; revision of Old World species, keys].

Genus *Afromyia* Kim, 1968

Afromyia Kim, 1968: 306 (feminine). Type species: *Sphaerocera ruandana* Vanschuytbroeck, 1948, original designation. - Kim, 1968: 306-310 [diagnosis, phylogenetic notes, revision of species, illustr.]; Richards, 1980: 625 [as subgenus of *Sphaerocera* Latreille, 1804, Afrotropical catalog].

Afromyia flavimana Papp, 1978. **Distr.:** Afrotropical: South Africa, Zaire.

Afromyia flavimana Papp, 1978d: 373 [female, illustr.]. Type locality: Zaire, Lefinie reservation, Nambouli river. HT female (HNHM).

Sphaerocera (Afromyia) flavimana. - Richards, 1980: 625 [generic combination, Afrotropical catalog].

Afromyia ghanensis Papp, 1978. **Distr.:** Afrotropical: Ghana.

Afromyia ghanensis Papp, 1978d: 374 [both sexes, illustr.]. Type locality: Ghana, Kpeze. HT male (HNHM).

Sphaerocera (Afromyia) ghanensis. - Richards, 1980: 625 [generic combination, Afrotropical catalog].

Afromyia jeanneli (Richards, 1938). **Distr.:** Afrotropical: Kenya.

Sphaerocera (Sphaerocera) jeanneli Richards, 1938a: 404 [male]. Type locality: Kenya, East side Mount Elgon, Elgon Saw mill, Camp II, [2,470 m]. HT male (MNHN). - Vanschuytbroeck, 1959a: 23 [key].

Sphaerocera jeanneli. - Vanschuytbroeck, 1962a: 469 [list].

Afromyia jeanneli. - Kim, 1968: 309 [generic combination, diagnosis].

Sphaerocera (Afromyia) jeanneli. - Richards, 1980: 625 [subgeneric combination, Afrotropical catalog].

Sphaerocera (Sphaerocera) jeanneli. - Vanschuytbroeck, 1959a: 84 [misspelling].

Afromyia jeanneli. - Kim, 1968: 300 [misspelling, key].

Afromyia longipes (Richards, 1951). **Distr.:** Afrotropical: Ethiopia.

Sphaerocera longipes Richards, 1951b: 269 [male]. Type locality: Ethiopia, Adis Abeba. HT male (IEUS, but not located recently, see Pitkin, 1989: 6). - Richards, 1959: 181 [additional record, male variability].

Sphaerocera (Sphaerocera) longipes. - Richards, 1965b: 224 [subgeneric combination].

Afromyia longipes. - Kim, 1968: 309 [generic combination, diagnosis].

Sphaerocera (Afromyia) longipes. - Richards, 1980: 625 [subgeneric combination, Afrotropical catalog].

Sphaerocera longiceps. - Vanschuytbroeck, 1962a: 469 [misspelling, list].

Afromyia ruandana (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Rwanda.

Sphaerocera (Sphaerocera) ruandana Vanschuytbroeck, 1948: 10 [male, illustr.]. Type locality: Rwanda, lac Gando, pied volcan Karisimbi, [2,400 m]. HT male (MRAC).

Afromyia ruandana. - Kim, 1968: 306-307 [generic combination, male, redescription, phylogenetic notes, illustr.].

Sphaerocera (Afromyia) ruandana. - Richards, 1980: 625 [subgeneric combination, Afrotropical catalog].

Afromyia wittei (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Cameroon, Ghana, Lesotho, Uganda, Zaire.

Sphaerocera (Sphaerocera) Wittei Vanschuytbroeck, 1948: 8 [both sexes, illustr.]. Type locality: Zaire, Parc National Albert, Nyasheke [= Nyamasheke], volcan Nyamuragira, [1,820 m]. HT male (MRAC).

- Afromyia wittei*. - Kim, 1968: 307-308 [generic combination, redescription, phylogenetic notes, illustr.]; Papp, 1978d: 375 [variability].
Sphaerocera (Afromyia) wittei. - Richards, 1980: 625 [subgeneric combination, Afrotropical catalog].

Genus *Ischiolepta* Lioy, 1864

- Ischiolepta* Lioy, 1864: 1112 (feminine). Type species: *Borborus denticulatus* Meigen, 1830, monotypy. - Richards, 1965b: 224 [as subgenus of *Sphaerocera* Latreille, 1804; diagnosis in key]; Kim, 1972b: 440-443 [as genus; phylogenetic notes]; Papp, 1973c: 7 [as genus; diagnosis, illustr.]; Richards, 1973: 301 [as subgenus of *Sphaerocera* Latreille; diagnosis]; Hackman, 1977: 398 [as genus; Oriental catalog]; Richards, 1980: 625 [as subgenus of *Sphaerocera*; Afrotropical catalog]; Papp, 1984: 70-71 [as genus; Palearctic catalog]; Roháček & Papp, 1984: 469 [as genus; diagnosis, illustr.]; Marshall & Richards, 1987: 1004 [diagnosis in key, illustr.]; Pitkin, 1988: 33-34 [as genus; key, British species]; Han & Kim, 1990: 411-442 [as genus; redescription, revision of world species, key, phylogeny, illustr.]; Han & Marshall, 1992: 313-324 [as genus; review of *Ischiolepta crenata* group, key, phylogeny, illustr.]; Papp, 1993a: 101 [as genus; diagnosis]; Roháček, 1998a: 475 [diagnosis in key, illustr.].
- Ischiogaster*. - Richards, 1930: 264 [misspelling].
- Lotobia*. - Richards, 1930: 318 [partim = group of *Sphaerocera pusilla*; diagnosis]; Richards, 1965c: 719 [partim; Nearctic catalog].
- Ischiolepta barberi*** Han & Marshall, 1992. **Distr.:** Nearctic: Canada (AB, NS, ON), USA (AK).
- Ischiolepta barberi* Han & Marshall, 1992: 316 [both sexes, phylogeny, illustr.]. Type locality: Canada, Ontario, Sudbury Distr. S of Gogama, 1 km SE of junction of Highways 144 and 560. HT male (CNCI).
- Ischiolepta crenata*** (Meigen, 1838). **Distr.:** Palearctic: Czech Republic, Finland, Germany, Great Britain, Italy, Norway, Poland, Slovakia, Sweden.
- Borborus crenatus* Meigen, 1838: 407 [sexes not stated]. Type locality: Germany, "Baiern" (= Bavaria). LT female, designated by Han & Kim, 1990: 416 (MNHN). - Morge, 1976: Pl. 293, Figs 11a-c [Meigen's original illustr.].
- Sphaerocera crenata*. - Richards, 1938b: 127-129 [both sexes, generic combination, key, illustr.].
- Sphaerocera (Sphaerocera) crenata*. - Duda, 1938: 27-28 [subgeneric combination, redescription].
- Sphaerocera (Ischiolepta) crenata*. - Richards, 1965b: 224 [subgeneric combination].
- Ischiolepta crenata*. - Papp, 1973c: 8 [generic combination, key]; Papp, 1984: 70 [Palearctic catalog]; Pitkin, 1988: 34 [key, illustr.]; Han & Kim, 1990: 413-416 [both sexes, redescription, phylogenetic notes, illustr.]; Han & Marshall, 1992: 313 [key, phylogeny, illustr.].
- Copromyza coronata* Zetterstedt, 1838: 770 [female]. Type locality: Sweden, Lapland ("Lapponia Umensi"), Naestansjö. LT female, designated (by inference of "type") by Kim, 1972a: 207 (MZLU). - Richards 1938b: 128 [synonymy]; Duda, 1938: 27 [synonymy].
- Sphaerocera coronata*. - Schiner, 1864a: 327 [generic combination]; Duda, 1920a: 21-22 [redescription].

Sphaerocera (Lotobia) coronata. - Richards, 1930: 318 [subgeneric combination].

Ischiolepta denticulata (Meigen, 1830). **Distr.:** Palaearctic: Austria, Belgium, Czech Republic, Finland, France, Germany, Great Britain, Hungary, ?Italy, Norway, Poland, Russia (ES, FE, WS), Sweden, Switzerland.

Borborus denticulatus Meigen, 1830: 200 [both sexes]. Type locality: not given. LT male, designated by Han & Kim, 1990: 416 (NHMW). - Morge, 1976: Pl. 163, Figs 9a-c [Meigen's original illustr.].

Copromyza denticulata. - Zetterstedt, 1847: 2488-2489 [generic combination].

Ischiolepta denticulata. - Papp, 1984: 70 [generic combination, Palaearctic catalog]; Han & Kim, 1990: 416-417 [both sexes, redescription, phylogenetic notes, illustr.]; Han & Marshall, 1992: 314 [key, phylogeny, illustr.].

Sphaerocera paracrenata Duda, 1920a: 25 [female]. Type locality: Germany, Kohlfurt. LT female, designated by Han & Kim, 1990: 416 (ZMHB). - Papp, 1984: 70 [synonymy]. - Richards, 1938b: 127, 129 [key, illustr.].

Sphaerocera (Sphaerocera) paracrenata. - Duda, 1938: 27, 31-32 [redescription, illustr.].

Sphaerocera (Ischiolepta) paracrenata. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta paracrenata. - Papp, 1973c: 9 [generic combination]; Pitkin, 1988: 33 [key, illustr.].

Sphaerocera Falcozi Duda in Falcoz, 1921: 140 [male]. Type locality: France, Dauphiné, Vienne. HT male (?HNHM). - Papp, 1984: 70 [synonymy].

Sphaerocera (Sphaerocera) Falcozi. - Duda, 1938: 27, 29 [redescription, probable variety of *I. paracrenata*].

Sphaerocera (Ischiolepta) falcozi. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta falcozi. - Nishijima & Yamazaki, 1984: 85 [generic combination, key].

Ischiolepta similis Papp, 1978d: 392 [both sexes, phylogenetic notes, illustr.]. Type locality: Russia, Kamchatka, Bolsh. oz u Kljutschewsk na r. Kamsch. HT male (ZISP). - Papp, 1984: 71 [Palaearctic catalog]; Han & Kim, 1990: 416 [synonymy].

Ischiolepta draskovitsae Roháček & Papp, 1984. **Distr.:** Palaearctic: Japan, North Korea.

Ischiolepta draskovitsae Roháček & Papp, 1984: 472 [male, illustr.]. Type locality: North Korea, Mt. Kum Gang-San, 7 km W of Hotel Kum Gang. HT male (HNHM). - Han & Kim, 1990: 417-419 [male, redescription, phylogenetic notes, illustr.].

Ischiolepta yezoensis Nishijima & Yamazaki, 1984: 87 [male, illustr.]. Type locality: Japan, Tokachi, Atsunai. HT male (LEOU). - Han & Kim, 1990: 417 [synonymy].

Ischiolepta flava (Vanschuytbroeck, 1951). **Distr.:** Afrotropical: Zaire.

Sphaerocera (Lotobia) flava Vanschuytbroeck, 1951a: 3 [female, illustr.]. Type locality: Zaire, Eala. HT female (ISNB).

Sphaerocera (Ischiolepta) flava. - Richards, 1965b: 224 [subgeneric combination]; Richards, 1980: 625 [Afrotropical catalog].

Ischiolepta flava. - Han & Kim, 1990: 419 [generic combination, both sexes, redescription, phylogenetic notes, illustr.].

Sphaerocera (Lotobia) kifaruensis Vanschuytbroeck, 1959a: 39 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba. HT male (MRAC). - Han & Kim, 1990: 419 [synonymy].

Sphaerocera (Ischiolepta) kifaruensis. - Richards, 1965b: 224 [subgeneric combination]; Richards, 1980: 625 [Afrotropical catalog].

Ischiolepta horrida Papp, 1973. **Distr.:** Palaearctic: Mongolia.

Ischiolepta horrida Papp, 1973a: 370 [both sexes, illustr.]. Type locality: Mongolia, Bulgan aimak, Dasincsilen. HT male (HNHM). - Papp, 1984: 70 [Palaearctic catalog]; Roháček

& Papp, 1984: 477-478 [redescription, phylogenetic notes, illustr.]; Han & Kim, 1990: 419-420 [redescription, phylogenetic notes, illustr.].

Ischiolepta indica Papp, 1993. **Distr.:** Oriental: India (Uttaranchal).

Ischiolepta indica Papp, 1993a: 101 [both sexes, phylogenetic notes, illustr.]. Type locality: India, Uttaranchal (formerly Uttar Pradesh), Nainital, Governor's House Park, [ca 2,050 m]. HT male (HNHM).

Ischiolepta intermedia Han & Kim, 1990. **Distr.:** Nearctic: Canada (AB, BC, NS, ON, YT), USA (MA, MI, MN, ?OR).

Ischiolepta intermedia Han & Kim, 1990: 421 [both sexes, phylogenetic notes, illustr.]. Type locality: Canada, Ontario, Lanark. HT male (CNCI). - Han & Marshall, 1992: 313 [key, phylogeny, illustr.].

Ischiolepta janssensi (Vanschuytbroeck, 1948) **comb.n.** **Distr.:** Afrotropical: Zaire.

Sphaerocera (Lotobia) Janssensi Vanschuytbroeck, 1948: 14 [both sexes, illustr.]. Type locality: Zaire, Parc National Albert, Nyasheke, volcan Nyamuragira, [1,820 m]. HT male (ISNB). - Vanschuytbroeck, 1959a: 27 [key]; Vanschuytbroeck, 1959b: 25, 31 [key, diagnosis].

Sphaerocera (Ischiolepta) janssensi. - Richards, 1980: 625 [Afrotropical catalog].

Sphaerocera (Ischiolepta) jansseni. - Richards, 1965b: 224 [subgeneric combination, misspelling].

Note: This species was not revised by Han & Kim (1990) and, therefore, its status is uncertain. However, it surely belongs to *Ischiolepta*, as suggested by Richards (1980).

Ischiolepta lama Han & Marshall, 1992. **Distr.:** Nearctic: Canada (ON).

Ischiolepta lama Han & Marshall, 1992: 314 [both sexes, phylogeny, illustr.]. Type locality: Canada, Ontario, Oliver Bog, 3 km south of Galt. HT male (CNCI).

Ischiolepta loebli Roháček & Papp, 1984. **Distr.:** Oriental: India (Uttaranchal), Pakistan.

Ischiolepta loebli Roháček & Papp, 1984: 470 [both sexes, phylogenetic notes, illustr.]. Type locality: North India, Uttaranchal (formerly Uttar Pradesh), 2 km E of Dhanolti [2,250 m]. HT male (MHNG). - Han & Kim, 1990: 423-424 [redescription, phylogenetic notes, illustr.].

Ischiolepta longispina Papp, 1973. **Distr.:** Palaearctic: Mongolia.

Ischiolepta longispina Papp, 1973a: 371 [female, illustr.]. Type locality: Mongolia, Bulgan aimak, Dasincilen. HT female (HNHM). - Papp, 1984: 70 [Palaearctic catalog]; Han & Kim, 1990: 424-425 [female, redescription, phylogenetic notes, illustr.].

Ischiolepta micropyga (Duda, 1938). **Distr.:** Nearctic: all records are misidentifications; Palaearctic: Austria, Czech Republic, Germany, Great Britain, Hungary, Netherlands, Poland, Russia (FE, WS), Slovakia, Sweden.

Sphaerocera (Sphaerocera) micropyga Duda, 1938: 29 [both sexes]. Type locality: Germany, S.-Harz, Ilfeld. LT male, designated by Han & Kim, 1990: 426 (ZMHB).

Sphaerocera micropyga. - Richards, 1938b: 127 [notes on synonymy].

Sphaerocera (Ischiolepta) micropyga. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta micropyga. - Papp, 1973c: 8 [generic combination, key]; Papp, 1984: 70 [Palaearctic catalog]; Han & Kim, 1990: 424-426 [partim; redescription, phylogenetic notes, illustr.].

Borborus denticulatus. - Meigen, 1830: 200 [partim, misidentification, cf. Han & Kim, 1990: 424].

Sphaerocera denticulata. - Stenhammar, 1855: 433-435 [generic combination, misidentification, cf. Duda, 1938: 29]; Duda, 1920a: 23-25 [misidentification, redescription].

Ischiolepta minuscula Papp, 1993. **Distr.:** Afrotropical: Tanzania.

Ischiolepta minuscula Papp, 1993a: 104 [both sexes, phylogenetic notes, illustr.]. Type locality: Tanzania, Morogoro region, Mikumi National Park, Mikumi Tented Camp. HT male (HNHM).

Ischiolepta nitida (Duda, 1920). **Distr.:** Oriental: China (SIC); Palaearctic: Afghanistan, Austria, Belgium, Bulgaria, China (TIB), Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Ireland, Latvia, Netherlands, Norway, Russia (NET, WS), Slovakia, Sweden, Switzerland, Ukraine.

Sphaerocera nitida Duda, 1920a: 27 [both sexes]. Type locality: Germany, Westfalen, Herten. LT male, designated by Han & Kim, 1990: 426 (ZMHB).

Sphaerocera (Lotobia) nitida. - Richards, 1930: 318 [subgeneric combination].

Sphaerocera (Sphaerocera) nitida. - Duda, 1938: 31 [subgeneric combination, redescription, illustr.].

Sphaerocera (Ischiolepta) nitida. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta nitida. - Roháček, 1978b: 244 [generic combination, list]; Papp, 1984: 70 [Palaearctic catalog]; Han & Kim, 1990: 426-428 [redescription, phylogenetic notes, illustr.].

Ischiolepta denticulata. - Papp, 1973c: 10 [misidentification, see Han & Kim, 1990: 426; generic combination, key, illustr.]; Pitkin, 1988: 34 [key, illustr.]; Skidmore, 1993: 7, 14 [puparium, illustr.].

Ischiolepta oedopoda Papp, 1972. **Distr.:** Palaearctic: Hungary, Japan, Mongolia, North Korea, Russia (SET), Uzbekistan.

Ischiolepta oedopoda Papp, 1972a: 469 [male, illustr.]. Type locality: Hungary, Csévharaszt. HT male (HNHM). - Papp, 1973a: 372-373 [redescription, both sexes, illustr.]; Papp, 1984: 70 [Palaearctic catalog]; Han & Kim, 1990: 428-429 [both sexes, redescription, phylogenetic notes, illustr.].

Ischiolepta orientalis (de Meijere, 1908). **Distr.:** Oriental: China (HEB), India, Indonesia (Java), Pakistan, Sri Lanka, Vietnam; Palaearctic: Japan.

Sphaerocera orientalis de Meijere, 1908: 178 [female]. Type locality: Java, Semarang. HT, probably female [see remarks by de Jong, 2000: 158] (ZMAN).

Sphaerocera (Ischiolepta) orientalis. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta orientalis. - Hackman, 1977: 398 [generic combination, Oriental catalog]; Roháček & Papp, 1984: 474-477 [both sexes, redescription, phylogenetic notes, illustr.]; Han & Kim, 1990: 428-430 [redescription, phylogenetic notes, illustr.].

Ischiolepta pansa Han & Kim, 1990. **Distr.:** Afrotropical: Zaire.

Ischiolepta pansa Han & Kim, 1990: 429 [both sexes, phylogenetic notes, illustr.]. Type locality: Zaire, Kivu, Rutshuru [1,285 m]. HT male (ISNB).

Lotobia scabricula. - Vanschuytbroeck, 1948: 20 [partim; misidentification]; Vanschuytbroeck, 1959a: 26-27 [partim; misidentification].

Ischiolepta pusilla (Fallén, 1820). **Distr.:** Australasian/Oceanian: Australia (territory not given), New Zealand; Nearctic: Canada (BC, NB, NF, NS, NT, ON, QC, YT), USA (AZ, DC, ID, IL, MA, MI, OR, VA, WA, WY); Neotropical: Argentina, Chile; Palaearctic: Austria, Belgium, Bulgaria, Canary Is. (Spain); Czech Republic, Denmark, Egypt, Faeroe Is. (Denmark), Finland, France, Germany, Great Britain, Hungary, Iceland, Iran, Italy (incl. Sicily), Japan, Latvia, Madeira (Portugal), Malta, Netherlands, Norway, Poland, Roumania, Russia (CET, NET,

SET, WS), Slovakia, Spain, Sweden, Switzerland, Tunisia, Yugoslavia (Serbia).

Note: Afrotropical records are probably all based on misidentifications.

Copromyza pusilla Fallén, 1820: 8 [both sexes]. Type locality: not stated, probably Sweden.

LT female, designated by Han & Kim, 1990: 433 (NHRS).

Sphaerocera pusilla. - Stenhammar, 1855: 435-438 [generic combination]; Duda, 1920a: 29-32 [redescription]; Séguy, 1934: 453 [key]; Hammer, 1941: 260-261 [egg, illustr.]; Hinton, 1981: 746 [egg, illustr.].

Sphaerocera (Allosphaerocera) pusilla. - Spuler, 1924c: 68 [subgeneric combination, key].

Sphaerocera (Lotobia) pusilla. - Richards, 1930: 318 [subgeneric combination]; Harrison, 1959: 258 [diagnosis]; Richards, 1965c: 719 [Nearctic catalog].

Sphaerocera (Sphaerocera) pusilla. - Duda, 1938: 27, 33 [subgeneric combination; redescription].

Sphaerocera (Ischiolepta) pusilla. - Richards, 1965b: 224 [subgeneric combination]; Okely, 1974: 43-44 [puparium, illustr.]; Richards, 1980: 625 [Afrotropical catalog].

Ischiolepta pusilla. - Kim, 1972a: 205 [generic combination, notes on type material]; Papp, 1973c: 11 [key]; Papp, 1984: 71 [Palaeartic catalog]; Pitkin, 1988: 34 [key, illustr.]; Marshall, 1989b: 601 [Australasian/Oceanian catalog]; Han & Kim, 1990: 431-433 [redescription; both sexes, phylogeny, illustr.]; Skidmore, 1993: 7, 14 [puparium, illustr.].

Sphaerocera pusilla var. *nigripes* Strobl, 1900: 68 [male]. Type locality: Spain, Algeciras. HT male (NMBA). - Duda, 1938: 32 [synonymy].

Sphaerocera margaritata Becker, 1907b: 376 [male]. Type locality: Tunisia, Tabarka. HT male (ZMHB). - Duda, 1938: 33 [synonymy].

Sphaerocera parapusilla. - Duda, 1920a: 32 [partim; misidentification]; Duda, 1938: 32 [partim; redescription].

Ischiolepta scabra (Spuler, 1924). **Distr.:** Nearctic: Canada (BC), USA (?OR, WA).

Note: All eastern Nearctic records are probably misidentifications.

Sphaerocera (Allosphaerocera) scabra Spuler, 1924c: 68 [male]. Type locality: USA, Washington, South Bend. HT male (USNM).

Sphaerocera scabra. - Malloch, 1925a: 119 [key].

Sphaerocera (Ischiolepta) scabra. - Richards, 1965b: 224 [subgeneric combination].

Sphaerocera (Lotobia) scabra. - Richards, 1965c: 719 [subgeneric combination, Nearctic catalog].

Ischiolepta scabra. - Han & Kim, 1990: 433-434 [partim; generic combination, both sexes, redescription, phylogeny, illustr.]; Han & Marshall, 1992: 314, 320-321 [key, illustr., phylogeny].

Note: The species illustrated under the name *I. scabra* by Han & Marshall, 1992: 314, 320-321 is a new species (Buck, in litt.).

Ischiolepta scabricula (Haliday, 1836). **Distr.:** Afrotropical: Ghana, South Africa, Tanzania; Nearctic: Canada (OR); Neotropical: Brazil; Oriental: India (Orissa); Palaeartic: Afghanistan, Austria, Belgium, Bulgaria, Czech Republic, Finland, France, Germany, Great Britain, Hungary, Ireland, Italy, Japan, Roumania, Slovakia, Spain, Sweden, Switzerland.

Sphaerocera scabricula Haliday, 1836: 320 [sex not given]. Type locality: Great Britain, England, near London. LT male, designated by Han & Kim, 1990: 435 (MVMA). - Duda, 1920a: 34-35 [redescription].

Sphaerocera (Lotobia) scabricula. - Richards, 1930: 318 [subgeneric combination].

Sphaerocera (Sphaerocera) scabricula. - Duda, 1938: 33-34 [subgeneric combination, redescription].

Sphaerocera (Ischiolepta) scabricula. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta scabricula. - Papp, 1973c: 10 [generic combination, key, illustr.]; Papp, 1984: 71 [Palaeartic catalog]; Pitkin, 1988: 33 [key, illustr.]; Han & Kim, 1990: 433-435 [redescription, phylogeny, key, illustr.].

Sphaerocera (Ischiolepta) scabricula. - Okely, 1974: 43-44 [subgeneric combination, puparium, illustr.]; Richards, 1980: 625 [Afrotropical catalog];

Ischiolepta scabricula. - Gosseries et al., 1991: 175 [misspelling].

Sphaerocera pallidimana Rondani, 1880: 17 [sex not given]. Type locality: Italy, Parma. STs, sex unknown (MZUF). - Collin, 1914: 237 [synonymy]; Villeneuve, 1914a: 208 [synonymy].

Ischiolepta stuarti Han & Kim, 1990. **Distr.:** Afrotropical: Zaire.

Ischiolepta stuarti Han & Kim, 1990: 435 [both sexes, phylogeny, illustr.]. Type locality: Zaire, Parc National Albert, Ngarusambol (Kikere) [2,226 m]. HT male (MRAC).

Sphaerocera (Lotobia) scabricula. - Vanschuytbroeck, 1948: 20 [partim, misidentification]; Vanschuytbroeck, 1959a: 26-27 [misidentification].

Ischiolepta vanschuytbroeckii Papp, 1978. **Distr.:** Afrotropical: Congo.

Ischiolepta vanschuytbroeckii Papp, 1978d: 394 [male, illustr.]. Type locality: Congo, Sibiti, IRHO rain forest. HT male (HNHM). - Han & Kim, 1990: 437 [diagnosis, key].

Sphaerocera (Ischiolepta) vanschuytbroeckii. - Richards, 1980: 625 [generic combination, Afrotropical catalog].

Ischiolepta vaporariorum (Haliday, 1836). **Distr.:** Nearctic: Canada (AB, ON), USA (IL, IN, MN, MT, NM, NY, OK, TN, WA). Palaeartic: Afghanistan, Austria, Belgium, Czech Republic, Finland, Germany, Great Britain, Hungary, ?Iran, Ireland, Kazakhstan, Latvia, Netherlands, Norway, Poland, Roumania, Russia (CET, NET, SET, ?WS), Slovakia, Spain (incl. Balearic Is.), Sweden, Switzerland, ?Tadjikistan, ?Tunisia.

Sphaerocera vaporariorum Haliday, 1836: 319 [both sexes]. Type locality: Ireland, Belfast. LT male, designated by Han & Kim, 1990: 438 (NMID).

Sphaerocera (Lotobia) vaporariorum. - Richards, 1930: 318 [subgeneric combination]; Richards, 1965c: 719 [Nearctic catalog].

Sphaerocera (Ischiolepta) vaporariorum. - Richards, 1965b: 224 [subgeneric combination].

Ischiolepta vaporariorum. - Papp, 1971c: 433 [generic combination]; Papp, 1973c: 12 [key, illustr.]; Papp, 1984: 70 [Palaeartic catalog]; Pitkin, 1988: 34 [key, illustr.]; Han & Kim, 1990: 437-438 [redescription, phylogeny, illustr.].

Sphaerocera parapusilla Duda, 1920a: 32 [both sexes]. Type localities: Poland, Silesia, Nimptsch (= Niemcza); Germany: Ilfeld, Eickel, Recklinghausen, Lössnitz. STs, both sexes (ZMHB). - Richards, 1930: 318 [synonymy].

Sphaerocera (Sphaerocera) parapusilla. - Duda, 1938: 32 [subgeneric combination, redescription].

Genus *Lotobia* Lioy, 1864

Lotobia Lioy, 1864: 1114 (feminine). Type species: *Borborus pallidiventris* Meigen, 1830, monotypy. - Richards, 1930: 264, 317-318 [as subgenus of *Sphaerocera* Latreille, 1804; partim]; Duda, 1938: 25-27, 34-35 [as subgenus of *Sphaerocera* Latreille; diagnosis, key, review of Palaeartic species]; Vanschuytbroeck, 1948: 11-20 [as subgenus of *Sphaerocera* Latreille; partim, diagnosis, review of Afrotropical species, key, illustr.]; Vanschuytbroeck, 1951a: 2-4 [as subgenus of *Sphaerocera* Latreille; partim, diagnosis, illustr.]; Vanschuytbroeck, 1959a: 26-40 [as subgenus of *Sphaerocera* Latreille; partim, diagnosis, key to

Afrotropical species, illustr.]; Vanschuytbroeck, 1959b: 24-33 [as subgenus of *Sphaerocera* Latreille; partim, diagnosis, key, illustr.]; Richards, 1965b: 224 [as subgenus of *Sphaerocera* Latreille; diagnosis in key]; Kim, 1968: 297 [as genus]; Hackman, 1969a: 199, 207 [as genus; zoogeography]; Kim, 1972b: 441-443 [as genus; relationships]; Papp, 1973c: 12-13 [as genus; diagnosis, illustr.]; Hackman, 1977: 398 [as genus; Oriental catalog]; Papp, 1984: 71-72 [as genus; Palaearctic catalog]; Nishijima & Yamazaki, 1984: 84 [as genus, illustr.]; Richards, 1980: 625-626 [as subgenus of *Sphaerocera* Latreille; Afrotropical catalog]; Pitkin, 1988: 33 [as genus, diagnosis in key, illustr.]; Kim & Han, 1990: 386-433 [as genus, redescription, revision of world species, key, phylogeny, illustr.]; Han & Kim, 1996: 39-42 [phylogeny and classification]; Roháček, 1998a: 475 [diagnosis in key].

Allosphaerocera Hendel, 1920: 54 (feminine). Type species: *Borborus hyalipennis* Meigen, 1838 [= *Lotobia pallidiventris* (Meigen, 1830)], original designation. - Spuler, 1924c: 67-71 [as subgenus of *Sphaerocera* Latreille, 1804; partim]; Richards, 1930: 267 [synonymy].

Lotobia africana (Becker, 1907). **Distr.:** Afrotropical: Rwanda, ?South Africa, Zaire; Palaearctic: France (Corsica), Hungary, Israel, Morocco, Slovenia, Tunisia.

Sphaerocera africana Becker, 1907b: 375 [? both sexes]. Type localities: Tunisia, Tabarka; Tunisia, Gafsa. STs (ZMHB syntype from Tabarka destroyed, see Kim & Han, 1990: 393; HNHM syntype from Gafsa exists).

Sphaerocera (*Lotobia*) *pallidiventris* var. *africana*. - Duda, 1938: 34-35 [subgeneric combination, diagnosis]; Vanschuytbroeck, 1959a: 32 [partim, diagnosis]; Richards, 1980: 626 [Afrotropical catalog].

Sphaerocera (*Lotobia*) *pallidiventris* ab. *africana*. - Vanschuytbroeck, 1948: 20 [diagnosis].

Sphaerocera (*Lotobia*) *pallidiventris* var. *africana*. - Richards, 1980: 626 [Afrotropical catalog].

Lotobia africana. - Kim & Han, 1990: 392-395 [redescription, both sexes, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera pallidiventris var. *nigricoxa* Duda, 1920a: 37 [male]. Type locality: France, Corsica. HT male (ZMHB). - Duda, 1938: 34 [synonymy].

Lotobia alpina Kim & Han, 1990. **Distr.:** Afrotropical: Zaire.

Lotobia alpina Kim & Han, 1990: 395 [male, phylogeny, key, illustr.]. Type locality: Zaire, Parc National Albert, Shamuheru (volcan Nyamuragira) [1,820 m]. HT male (ISNB). - Han & Kim, 1996: 39-41 [phylogeny].

Lotobia arcuata (Séguy, 1933). **Distr.:** Afrotropical: Mozambique.

Sphaerocera arcuata Séguy, 1933: 43 [both sexes, illustr.]. Type locality: Mozambique, Lourenço Marquês. HT male (MNHN).

Sphaerocera (*Lotobia*) *arcuata*. - Vanschuytbroeck, 1959b: 26-27 [list, key]; Richards, 1980: 625 [subgeneric combination, Afrotropical catalog].

Lotobia arcuata. - Kim & Han, 1990: 396-398 [generic combination, redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 40-41 [phylogeny].

Lotobia arcuarta. - Han & Kim, 1996: 39 [misspelling].

Lotobia dolabrata Kim & Han, 1990. **Distr.:** Afrotropical: Zaire.

Lotobia dolabrata. - Kim & Han, 1990: 398 [both sexes, phylogeny, key, illustr.]. Type locality: Zaire, Parc National Albert, Bugazia [920 m]. HT male (ISNB). - Han & Kim, 1996: 39-41 [phylogeny].

Lotobia dura (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Zaire.

Sphaerocera (*Lotobia*) *dura* Vanschuytbroeck, 1959b: 32 [male, illustr.]. Type locality: Zaire, Parc National de l'Upemba, gorges de la Pelenge [1,150 m]. HT male (MRAC).

Sphaerocera (*Ischiolepta*) *dura*. - Richards, 1965b: 224 [subgeneric combination]; Richards, 1980: 625 [Afrotropical catalog].

Lotobia dura. - Kim & Han, 1990: 400-402 [generic combination, redescription, male, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Lotobia elegans (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Zaire.

Sphaerocera (Lotobia) elegans Vanschuytbroeck, 1959b: 30 [male, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Lusinga [1,760 m]. HT male (MRAC). - Vanschuytbroeck, 1959a: 28 [key]; Richards, 1980: 625 [Afrotropical catalog].

Lotobia elegans. - Kim & Han, 1990: 402-404 [generic combination, redescription, both sexes, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera (Lotobia) garambaensis Vanschuytbroeck, 1959a: 37 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba (MRAC). - Richards, 1980: 626 [Afrotropical catalog]; Kim & Han, 1990: 403 [synonymy].

Lotobia endrodyi Papp, 1978. **Distr.:** Afrotropical: Ghana.

Lotobia endrodyi Papp, 1978d: 389 [both sexes, phylogenetic notes, illustr.]. Type locality: Ghana, Nabogo. HT male (HNHM). - Kim & Han, 1990: 404-405 [redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera (Lotobia) endrodyi. - Richards, 1980: 626 [generic combination, Afrotropical catalog].

Lotobia eritima Kim & Han, 1990. **Distr.:** Afrotropical: Zaire.

Lotobia eritima Kim & Han, 1990: 406 [male, phylogeny, key, illustr.]. Type locality: Zaire, Parc National Albert, S. L Edouard, Tshambi [975 m]. HT male (ISNB). - Han & Kim, 1996: 39-41 [phylogeny].

Lotobia flavofemorata Kim & Han, 1990. **Distr.:** Afrotropical: Zaire.

Lotobia flavofemorata Kim & Han, 1990: 407 [both sexes, phylogeny, key, illustr.]. Type locality: Zaire, Parc National Albert, Mt. Sesero près Bitashimwa [2,000 m]. HT male (ISNB). - Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera (Lotobia) rutshuruensis Vanschuytbroeck, 1948: 12 [partim; misidentification, both sexes, key, illustr.].

Lotobia halidayi Kim & Han, 1990. **Distr.:** Afrotropical: Zaire.

Lotobia halidayi Kim & Han, 1990: 408 [male, phylogeny, key, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Mascombwe [1,120 m]. HT male (MRAC). - Han & Kim, 1996: 39-41 [phylogeny].

Lotobia holidayi. - Kim & Han, 1990: 388 [misspelling].

Lotobia kivuensis (Vanschuytbroeck, 1948). **Distr.:** Afrotropical: Zaire.

Sphaerocera (Lotobia) kivuensis Vanschuytbroeck, 1948: 15 [both sexes, illustr.]. Type locality: Zaire, Kivu, Rutshuru, riv. Lubirizi [1,285 m]. HT male (MRAC). - Vanschuytbroeck, 1959a: 27 [key]; Richards, 1980: 626 [Afrotropical catalog].

Lotobia kivuensis. - Kim & Han, 1990: 410-412 [generic combination, redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Lotobia kovacsi Papp, 1978. **Distr.:** Afrotropical: Ethiopia.

Lotobia kovacsi Papp, 1978d: 390 [both sexes, illustr.]. Type locality: Ethiopia, Dire-Daua. HT male (HNHM). - Kim & Han, 1990: 412-414 [redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera (Lotobia) kovacsi. - Richards, 1980: 626 [generic combination, Afrotropical catalog].

Lotobia moyoensis (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Congo, Zaire.

Sphaerocera (Lotobia) moyoensis Vanschuytbroeck, 1959a: 34 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba, Mt Moyo. HT male (MRAC). - Richards, 1980: 626 [Afrotropical catalog].

Lotobia moyoensis. - Papp, 1978d: 391 [generic combination, distribution]; Kim & Han, 1990: 414-416 [redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Lotobia nigeriana Han & Kim, 1996. **Distr.:** Afrotropical: Nigeria.

Lotobia nigeriana Han & Kim, 1996: 34 [both sexes, phylogeny, illustr.]. Type locality: Nigeria, Zaria, Samaru. HT male (USNM). - Han & Kim, 1996: 39-41 [phylogeny].

Lotobia nigerinana. - Han & Kim, 1996: 39 [misspelling].

Lotobia nigra Kim & Han, 1990. **Distr.:** Afrotropical: Zaire.

Lotobia nigra Kim & Han, 1990: 416 [both sexes, phylogeny, key, illustr.]. Type locality: Zaire, Parc National de la Garamba, Utukuru. HT male (MRAC). - Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera (Lotobia) pallidiventr var. *africana*. - Vanschuytbroeck, 1959a: 32 [partim; misidentification].

Lotobia pallidiventr (Meigen, 1830). **Distr.:** Afrotropical: Ethiopia, ?Rwanda, South Africa, Zaire; Oriental: India (Assam), Nepal, Pakistan; Palaearctic: Afghanistan, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France (incl. Corsica), Germany, Great Britain, Hungary, Italy (incl. Sardinia), Israel, Japan, Kazakhstan, Kirghizia, Latvia, Mongolia, Roumania, Russia (NET, WS), Slovakia, Spain (incl. Balearic Is.), Switzerland, Tadjikistan, Tunisia, Uzbekistan, Yugoslavia.

Borborus pallidiventr Meigen, 1830: 204 [sex not stated]. Type locality: France, Lyon. LT female, designated by Kim & Han, 1990: 418 (NHMW). - Morge, 1976: Pl. 214, Figs 20a-d [Meigen's original illustr.].

Sphaerocera pallidiventr. - Duda, 1920a: 35 [generic combination, redescription].

Sphaerocera (Lotobia) pallidiventr. - Richards, 1930: 317-318 [subgeneric combination]; Duda, 1938: 34-35 [redescription, illustr.]; Vanschuytbroeck, 1948: 12, 18-19 [diagnosis in key, illustr.]; Vanschuytbroeck, 1959a: 28, 37 [diagnosis in key]; Richards, 1980: 626 [Afrotropical catalog].

Lotobia pallidiventr. - Vanschuytbroeck, 1970: 262 [generic combination]; Papp, 1973c: 13 [key, illustr.]; Hackman, 1977: 398 [Oriental catalog]; Papp, 1984: 71 [Palaearctic catalog]; Nishijima & Yamazaki, 1984: 84, 91-95 [diagnosis, illustr.]; Pitkin, 1988: 33 [key, illustr.]; Kim & Han, 1990: 418-420 [redescription, both sexes, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Borborus hyalipennis Meigen, 1835: 72 [sex not stated]. Type locality: Germany, München vicinity. LT female (MNHN). - Papp, 1984: 72 [synonymy]. **Note:** The above lectotype was originally designated by Kim & Han (1990: 418) for *B. hyalipennis* Meigen, 1838 (see below) which was described from the same specimens as *B. hyalipennis* Meigen, 1835. Consequently, this female specimens is also a lectotype of the latter.

Borborus hyalipennis Meigen, 1838: 407 [sex not stated]. Type locality: Germany, "Baiern" (= Bayern). LT female, designated by Kim & Han, 1990: 418 (MNHN). - Duda, 1920a: 35 [synonymy]; Morge, 1976: Pl. 289, Figs 7a,b [Meigen's original illustr.].

Sphaerocera hyalipennis. - Becker, 1905: 28 [generic combination].

Allosphaerocera hyalipennis. - Hendel, 1920: 54 [generic combination].

Sphaerocera curvina Rondani, 1880: 16 [sex not stated]. Type locality: Italy, Parma env. STs, sex unknown (MZUF). - Duda, 1920a: 35 [synonymy].

Sphaerocera eximia Collin, 1902: 57 [both sexes, illustr.]. Type localities: Great Britain, England, Cambs, Chippenham; England, Suffolk, Newmarket, Sussex Lodge. STs, both sexes (OXUM and BMNH, see Pont, 1995: 68). - Villeneuve, 1914a: 208 [synonym of *Sphaerocera curvina* Rondani]; Richards, 1930: 317 [synonymy].

Sphaerocera (Lotobia) rutshuruensis Vanschuytbroeck, 1948: 12 [both sexes, illustr.]. Type locality: Zaire, Parc National Albert, mont Sesero, près Bitashimwa [2,000 m]. HT male (MRAC). - Richards, 1980: 626 [Afrotropical catalog]; Kim & Han, 1990: 418 [synonymy].

***Lotobia saegeri* Kim & Han, 1990. Distr.:** Afrotropical: Rwanda, Zaire.

Lotobia saegeri Kim & Han, 1990: 420 [both sexes, phylogeny, key, illustr.]. Type locality: Rwanda, Ilega (pied volcan Karisimbi) [2,400 m]. HT male (ISNB). - Han & Kim, 1996: 39-41 [phylogeny].

***Lotobia simia* (Séguy, 1933). Distr.:** Afrotropical: Mozambique, South Africa, Zaire.

Sphaerocera simia Séguy, 1933: 42 [both sexes, illustr.]. Type locality: Mozambique, Zambèze, bas Sangadzè, Pindiriri. HT male (MNHN).

Sphaerocera (Lotobia) simia. - Vanschuytbroeck, 1948: 12, 17-18 [subgeneric combination, key, diagnosis]; Vanschuytbroeck, 1959a: 28, 32-34 [key, diagnosis]; Vanschuytbroeck, 1959b: 24, 28 [key, diagnosis]; Richards, 1980: 626 [Afrotropical catalog].

Lotobia simia. - Vanschuytbroeck, 1970: 263 [generic combination]; Kim & Han, 1990: 422-424 [redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Sphaerocera (Lotobia) kanongensis Vanschuytbroeck, 1959b: 26 [both sexes, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Kanonga [675 m]. HT male (MRAC). - Richards, 1980: 626 [Afrotropical catalog]; Kim & Han, 1990: 422 [synonymy].

***Lotobia similiter* (Vanschuytbroeck, 1959). Distr.:** Afrotropical: Zaire.

Sphaerocera (Lotobia) similiter Vanschuytbroeck, 1959a: 28 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba, Ndelele. HT male (MRAC). - Richards, 1980: 626 [Afrotropical catalog].

Lotobia similiter. - Kim & Han, 1990: 424-426 [generic combination, redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

***Lotobia southafricana* Han & Kim, 1996. Distr.:** Afrotropical: South Africa.

Lotobia southafricana Han & Kim, 1996: 36 [both sexes, phylogeny, illustr.]. Type locality: South Africa, Johannesburg, Bedford Ridge. HT male (USNM). - Han & Kim, 1996: 39-41 [phylogeny].

***Lotobia temboensis* (Vanschuytbroeck, 1959). Distr.:** Afrotropical: Zaire.

Sphaerocera (Lotobia) temboensis Vanschuytbroeck, 1959a: 38 [both sexes, illustr.]. Type locality: Zaire, Parc National de la Garamba. HT male (MRAC). - Richards, 1980: 626 [Afrotropical catalog].

Lotobia temboensis. - Kim & Han, 1990: 426-429 [generic combination, redescription, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

***Lotobia turbatrix* Kim & Han, 1990. Distr.:** Afrotropical: Zaire.

Lotobia turbatrix Kim & Han, 1990: 429 [both sexes, phylogeny, key, illustr.]. Type locality: Zaire, Kivu, Rutshuru. HT male (MRAC). - Han & Kim, 1996: 39-41 [phylogeny].

***Lotobia upembaensis* (Vanschuytbroeck, 1959). Distr.:** Afrotropical: Zaire

Sphaerocera (Lotobia) upembaensis Vanschuytbroeck, 1959b: 28 [male, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Mukana-Lusinga [1,810 m]. HT male (MRAC). - Richards, 1980: 626 [Afrotropical catalog].

Lotobia upembaensis. - Kim & Han, 1990: 430-431 [generic combination, redescription, male, phylogeny, key, illustr.]; Han & Kim, 1996: 39-41 [phylogeny].

Lotobia umpembaensis. - Kim & Han, 1990: 388 [misspelling].

***Lotobia wittei* Kim & Han, 1990. Distr.:** Afrotropical: Zaire.

Lotobia wittei Kim & Han, 1990: 431 [male, phylogeny, key, illustr.]. Type locality: Zaire, Parc National de l'Upemba, Gorges de la Plange [1,150 m]. HT male (MRAC). - Han & Kim, 1996: 39-41 [phylogeny].

Genus *Mesosphaerocera* Kim, 1972

Mesosphaerocera Kim, 1972b: 428 (feminine). Type species: *Sphaerocera annulicornis* Malloch, 1913, original designation. - Kim, 1972b: 428-437, 443 [diagnosis, revision of world species, phylogenetic notes, key, illustr.]; Papp, 1978d: 379, 384 [as subgenus of *Parasphaerocera* Spuler, 1924]; Marshall & Richards, 1987: 1004 [diagnosis in key, illustr.]; Han & Kim, 1996: 41 [as genus, phylogenetic relationships].

Note: The genera *Mesosphaerocera*, *Neosphaerocera* and *Parasphaerocera* clearly belong to one clade but taxonomic limits and relationships of each of them need further study. Unpublished results of studies on this problem by D. I. Quiros and S. A. Marshall are partly reflected here in new generic combinations of several species.

***Mesosphaerocera amicimymex* Kim, 1972. Distr.:** Neotropical: Panama.

Mesosphaerocera amicimymex Kim, 1972b: 434 [female, phylogenetic notes, illustr.]. Type locality: Panama, Canal Zone, Barro Colorado Island. HT female (KSUC).

***Mesosphaerocera annulicornis* (Malloch, 1913). Distr.:** Nearctic: Canada (NB, ON), USA (AR, CT, DC, FL, GA, IL, IN, KY, MA, MD, MI, MO, MS, NC, NH, NJ, NY, PA, SC, TN, TX, VA, WV); Neotropical: Costa Rica.

Sphaerocera annulicornis Malloch, 1913a: 363 [male]. Type locality: USA, Massachusetts, Brookline. HT male (USNM). - Malloch, 1925a: 120 [key].

Sphaerocera (Parasphaerocera) annulicornis. - Richards, 1965b: 238 [subgeneric combination, redescription, female].

Sphaerocera (Parasphaerocera) annulicornis. - Richards, 1965b: 239 [misspelling of genus name, key].

Sphaerocera (Sphaerocera) annulicornis. - Richards, 1965c: 718 [subgeneric combination, Nearctic catalog].

Mesosphaerocera annulicornis. - Kim, 1972b: 429-431 [redescription, key, illustr.].

***Mesosphaerocera facialis* (Papp, 1978) comb.n. Distr.:** Neotropical: Costa Rica, Guatemala, Mexico (DUR), Panama.

Parasphaerocera facialis Papp, 1978d: 380 [male, taxonomic notes, illustr.]. Type locality: Costa Rica, Cartago, Suiza de Turrialba. HT male (HNHM).

***Mesosphaerocera pueblensis* Kim, 1972. Distr.:** Neotropical: Mexico (PUE).

Mesosphaerocera pueblensis Kim, 1972b: 431 [male, taxonomic notes, key, illustr.]. Type locality: Mexico, Puebla, 6 mi W Teziutlán. HT male (CNCI).

***Mesosphaerocera robusta* (Kim, 1972) comb.n. Distr.:** Nearctic: USA (FL, LA, TN); Neotropical: Guatemala.

Parasphaerocera robusta Kim, 1972b: 420 [both sexes, phylogenetic notes, key, illustr.]. Type locality: USA, Tennessee, Benton. HT male (USNM).

Genus *Neosphaerocera* Kim, 1972

Neosphaerocera Kim, 1972b: 424 (feminine). Type species: *Sphaerocera flavicoxa* Malloch, 1925, original designation. - Kim, 1972b: 424-427, 441-443 [diagnosis, revision of world species, phylogenetic notes, key, illustr.]; Papp, 1978d: 381 [as subgenus of *Parasphaerocera* Spuler, 1924]; Mourgués-Schurter, 1981: 179-199 [as genus; review of Neotropical species]; Han & Kim, 1996: 41 [as genus; phylogenetic relationships].

Taigetomyia Papp, 1978d: 386 (feminine) [as subgenus of *Parasphaerocera* Spuler, 1924]. Type species: *Parasphaerocera (Taigetomyia) parvula* Papp, 1978, original designation. - **syn.n.** (see p. 21).

Neosphaerocera boraceiensis Mourgués-Schurter, 1981. **Distr.:** Neotropical: Brazil.

Neosphaerocera boraceiensis Mourgués-Schurter, 1981: 182 [both sexes, illustr.]. Type locality: Brazil, Sao Paulo, Salesópolis, Estação Biológica de Boracéia. HT male (MZSP).

Neosphaerocera breviradiata (Papp, 1978) **comb.n.** **Distr.:** Neotropical: Argentina.

Sphaerocera breviradiata Papp, 1978d: 372 [male, taxonomic notes, illustr.]. Type locality: Argentina, Rio Negro, El Bolsón, Pampa Azcona [350 m]. HT male (HNHM).

Neosphaerocera diadelpha Mourgués-Schurter, 1981. **Distr.:** Neotropical: Brazil.

Neosphaerocera diadelpha Mourgués-Schurter, 1981: 186 [both sexes, illustr.]. Type locality: Brazil, Pernambuco, Recife, (Horto Dois Irmãos). HT male (MZSP).

Neosphaerocera flavicoxa (Malloch, 1925). **Distr.:** Neotropical: Belize, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Mexico (CHI), Panama, Paraguay, Venezuela.

Sphaerocera flavicoxa Malloch, 1925a: 120 [both sexes]. Type locality: Costa Rica, San Mateo, Higuito. HT male (USNM).

Sphaerocera (Parasphaerocera) flavicoxa. - Richards, 1965b: 238-239 [subgeneric combination, redescription, key]; Richards, 1967b: 5 [Neotropical catalog].

Neosphaerocera flavicoxa. - Kim, 1972b: 424-426 [generic combination, redescription, key, illustr.]; Mourgués-Schurter, 1981: 180 [redescription, illustr.].

Neosphaerocera youngheae Kim, 1972b: 427 [male, phylogenetic notes, key, illustr.]. Type locality: Brazil, Mato Grosso, Maracaju. HT male (USNM). - Mourgués-Schurter, 1981: 179 [key]. - **syn.n.** (see p. 22).

Neosphaerocera novaeteutoniae Mourgués-Schurter, 1981. **Distr.:** Neotropical: Brazil.

Neosphaerocera novaeteutoniae Mourgués-Schurter, 1981: 184 [both sexes, illustr.]. Type locality: Brazil, Santa Catarina, Nova Teutônia. HT male (MZSP).

Neosphaerocera paraflavicoxa (Papp, 1978) **comb.n.** **Distr.:** Neotropical: Costa Rica.

Parasphaerocera (Neosphaerocera) paraflavicoxa Papp, 1978d: 381 [male, phylogenetic notes, illustr.]. Type locality: Costa Rica, Cartago, Suiza de Turrialba. HT male (HNHM).

Neosphaerocera parvula (Papp, 1978) **comb.n.** **Distr.:** Neotropical: Chile.

Parasphaerocera (Taigetomyia) parvula Papp, 1978d: 386 [male, illustr.]. Type locality: Chile, Provincia Valdivia, environs of La Unión, along road leading to Valdivia. HT male (HNHM).

Neosphaerocera richardsi (Kim, 1968) **comb.n.** **Distr.:** Neotropical: Peru.

Sphaerocera richardsi Kim, 1968: 303 [male, phylogenetic notes, key, illustr.]. Type locality: Peru, Dept. Huánuco, Sariepama. HT male (SEMC). - Kim, 1972b: 441 [key].

Neosphaerocera similis Kim, 1972. **Distr.:** Neotropical: Guyana.

Neosphaerocera similis Kim, 1972b: 426 [male, phylogenetic notes, key, illustr.]. Type locality: Guyana, Tukeit. HT male (AMNH). - Mourgués-Schurter, 1981: 180 [key].

Genus *Parasphaerocera* Spuler, 1924

Parasphaerocera Spuler, 1924c: 67 (feminine) [as subgenus of *Sphaerocera* Latreille, 1804]. Type species: *Sphaerocera bimaculata* Williston, 1896, original designation. - Richards,

1965b: 224-241 [as subgenus of *Sphaerocera* Latreille; diagnosis in key, review of species, key, illustr.]; Richards, 1967b: 5-6 [as subgenus of *Sphaerocera* Latreille; Neotropical catalog]; Kim, 1972b: 380-424 [as genus; revision of world species, phylogeny, key, illustr.]; Papp, 1978d: 375-387 [as genus, including *Neosphaerocera* Kim, 1972, *Mesosphaerocera* Kim, 1972 and *Taigetomyia* Papp, 1978 as subgenera]; Marshall & Richards, 1987: 1004 [as genus; diagnosis in key]; Han & Kim, 1996: 41 [as genus; phylogenetic relationships].

Note: The genus as currently understood is obviously paraphyletic. New classification of this group is needed, based on thorough cladistic analysis of the entire clade containing also *Mesosphaerocera* and *Neosphaerocera*.

Parasphaerocera ampla Kim, 1972. **Distr.:** Neotropical: Brazil.

Parasphaerocera ampla Kim, 1972b: 401 [both sexes, phylogenetic notes, key, illustr.]. Type locality: Brazil, São Paulo, Boracea. HT male (MZSP).

Parasphaerocera baloghi Papp, 1978. **Distr.:** Neotropical: Chile.

Parasphaerocera baloghi Papp, 1978d: 378 [both sexes, taxonomic notes, illustr.]. Type locality: Chile, Prov. Valdivia, environs of La Unión, along road leading to Valdivia. HT male (HNHM).

Parasphaerocera bimaculata (Williston, 1896). **Distr.:** Nearctic: USA (?FL); Neotropical: Costa Rica, Grenada, Mexico (state not recorded), Monserrat, Panama, St. Vincent, Tobago, Trinidad.

Sphaerocera bimaculata Williston, 1896a: 435 [female]. Type locality: St. Vincent, Westward Side. LT female, designated by Kim, 1972b: 382 (BMNH). - Spuler, 1924c: 67 [key]; Malloch, 1925a: 119 [key].

Sphaerocera (*Sphaerocera*) *bimaculata*. - Richards, 1965c: 718 [subgeneric combination, Nearctic catalog].

Sphaerocera (*Parasphaerocera*) *bimaculata*. - Richards, 1965b: 230-231, 241 [subgeneric combination, redescription, female, illustr.]; Richards, 1967b: 5 [Neotropical catalog].

Parasphaerocera bimaculata. - Kim, 1972b: 382-384 [generic combination, redescription, both sexes, key, illustr.].

Parasphaerocera chimborazo (Richards, 1965). **Distr.:** Neotropical: Costa Rica, Ecuador, Mexico (TAM), Panama.

Sphaerocera (*Parasphaerocera*) *chimborazo* Richards, 1965b: 229 [both sexes, key, illustr.]. Type locality: Ecuador, Chimborazo, Bugna. HT male (USNM). - Richards, 1967b: 5 [Neotropical catalog].

Parasphaerocera chimborazo. - Kim, 1972b: 389-391 [generic combination, redescription, key, illustr.]; Papp, 1978d: 378 [distribution].

Parasphaerocera cooki Kim, 1972. **Distr.:** Neotropical: Brazil, Peru, Trinidad.

Parasphaerocera cooki Kim, 1972b: 412 [male, phylogenetic notes, key, illustr.]. Type locality: Trinidad, Arena Forest. HT male (USNM).

Parasphaerocera costaricensis Papp, 1978. **Distr.:** Neotropical: Costa Rica, Mexico (VRC).

Parasphaerocera (*Mesosphaerocera*) *costaricensis* Papp, 1978d: 379 [both sexes, taxonomic notes, illustr.]. Type locality: Costa Rica, Cartago, Suiza de Turrialba. HT male (HNHM).

Parasphaerocera curiosa Kim, 1972. **Distr.:** Neotropical: Brazil.

Parasphaerocera curiosa Kim, 1972b: 398 [both sexes, phylogenetic notes, key, illustr.]. Type locality: Brazil, São Paulo. HT male (MZSP).

Parasphaerocera currani Kim, 1972. **Distr.:** Neotropical: Guyana, Panama.

- Parasphaerocera currani* Kim, 1972b: 388 [female, phylogenetic notes, key, illustr.]. Type locality: Panama, Canal Zone, Barro Colorado Island. HT female (AMNH).
- Parasphaerocera dozhanskyi*** Kim, 1972. **Distr.:** Neotropical: Brazil, Guyana, Panama, Peru, Venezuela.
- Parasphaerocera dozhanskyi* Kim, 1972b: 403 [both sexes, phylogenetic notes, key, illustr.]. Type locality: Brazil, Para Province, Tapajos, Fordlandia. HT male (USNM).
- Parasphaerocera ecuadoria*** (Richards, 1965). **Distr.:** Neotropical: Brazil, Ecuador, Honduras, Panama.
- Sphaerocera* (*Parasphaerocera*) *ecuadoria* Richards, 1965b: 225 [both sexes, key, illustr.]. Type locality: Ecuador, Los Rios, Pichilingue [40 m]. HT male (CASC). - Richards, 1967b: 5 [Neotropical catalog].
- Parasphaerocera ecuadoria*. - Kim, 1972b: 404-406 [generic combination, redescription, key, illustr.].
- Sphaerocera* (*Parasphaerocera*) *shannoni* Richards, 1965b: 232 [male, key, illustr.]. Type locality: Venezuela, San Esteban, San Esteban. HT male (USNM). - Richards, 1967b: 5 [Neotropical catalog]. - **syn.n.** (see p. 22).
- Parasphaerocera shannoni*. - Kim, 1972b: 406-408 [generic combination, redescription, both sexes, key, illustr.].
- Parasphaerocera guttula*** (Richards, 1965) **comb.n.** **Distr.:** Neotropical: Costa Rica, Mexico (JAL, SON, VRC), Panama, Venezuela.
- Sphaerocera* (*Parasphaerocera*) *guttula* Richards, 1965b: 236 [female, key, illustr.]. Type locality: Panama, Canal Zone, Erwin Island. HT female (BMNH). - Richards, 1967b: 5 [Neotropical catalog].
- Mesosphaerocera guttula*. - Kim, 1972b: 434-435 [generic combination, redescription, both sexes, key, illustr.].
- Parasphaerocera insolita*** Kim, 1972. **Distr.:** Neotropical: Brazil, Costa Rica, Guyana, Peru, Trinidad, Venezuela.
- Parasphaerocera insolita* Kim, 1972b: 411 [male, phylogenetic notes, key, illustr.]. Type locality: Brazil, Para Province, Castanhal. HT male (USNM).
- Parasphaerocera levicastilli*** (Richards, 1965). **Distr.:** Neotropical: Costa Rica, Ecuador, Mexico (CHI).
- Sphaerocera* (*Parasphaerocera*) *levicastilli* Richards, 1965b: 230 [male, taxonomic notes, key, illustr.]. Type locality: Ecuador, Chimborazo, Naranjapata, Chilicay. HT male (USNM). - Richards, 1967b: 5 [Neotropical catalog].
- Parasphaerocera levicastilli*. - Kim, 1972b: 410-411 [generic combination; redescription, male, key, illustr.].
- Parasphaerocera megaventralis*** Kim, 1972. **Distr.:** Neotropical: Brazil, Costa Rica, Mexico (CHI), Panama.
- Parasphaerocera megaventralis* Kim, 1972b: 384 [female, phylogenetic notes, key, illustr.]. Type locality: Panama, Canal Zone, Barro Colorado Island. HT female (USNM).
- Parasphaerocera monomaculata*** Kim, 1972. **Distr.:** Neotropical: Costa Rica, Guyana.
- Parasphaerocera monomaculata* Kim, 1972b: 386 [both sexes, phylogenetic notes, key, illustr.]. Type locality: Costa Rica, Cartago, La Suiza de Turrialba. HT male (WSUC).
- Parasphaerocera nigrifemur*** (Malloch, 1925). **Distr.:** Nearctic: USA (AZ, FL, MD, NC, VA); Neotropical: Guatemala, Mexico (MOR).
- Sphaerocera nigrifemur* Malloch, 1925a: 122 [female]. Type locality: USA, Maryland, Glen Echo. HT female (USNM).
- Sphaerocera* (*Lotobia*) *nigrifemur*. - Richards, 1965c: 719 [subgeneric combination, Nearctic catalog].

Sphaerocera (*Parasphaerocera*) *nigrifemur*. - Richards, 1965b: 224, 239 [subgeneric combination, key].

Parasphaerocera nigrifemur. - Kim, 1972b: 416-417 [generic combination, redescription, key, illustr.].

Parasphaerocera pallipes (Malloch, 1914) **comb.n.** **Distr.:** Neotropical: Panama.

Sphaerocera pallipes Malloch, 1914b: 31 [female]. Type locality: Panama, Buena Ventura. HT female (USNM).

Sphaerocera (*Allosphaerocera*) *pallipes*. - Spuler, 1924c: 67 [subgeneric combination, key].

Sphaerocera (*Parasphaerocera*) *pallipes*. - Richards, 1965b: 236 [subgeneric combination, redescription, female, key]; Richards, 1967b: 5 [Neotropical catalog].

Mesosphaerocera pallipes. - Kim, 1972b: 432-433 [generic combination, redescription, female, illustr.].

Parasphaerocera paratransversa Papp, 1978. **Distr.:** Neotropical: Bolivia.

Parasphaerocera paratransversa Papp, 1978d: 382 [female, phylogenetic notes, illustr.]. Type locality: Bolivia, Beni, Guayaramerín, outskirts of town. HT female (HNHM).

Parasphaerocera parva Kim, 1972. **Distr.:** Neotropical: Panama.

Parasphaerocera parva Kim, 1972b: 409 [male, phylogenetic notes, key, illustr.]. Type locality: Panama, Canal Zone, Barro Colorado Island. HT male (AMNH).

Parasphaerocera prosovaripes Kim, 1972. **Distr.:** Neotropical: Guatemala.

Parasphaerocera prosovaripes Kim, 1972b: 422 [male, phylogenetic notes, key, illustr.]. Type locality: Guatemala. HT male (USNM).

Parasphaerocera sabroskyi Kim, 1972. **Distr.:** Neotropical: Brazil.

Parasphaerocera sabroskyi Kim, 1972b: 388 [female, phylogenetic notes, key, illustr.]. Type locality: Brazil, Santa Catarina, Florianópolis. HT female (MZSP).

Parasphaerocera simplex Kim, 1972. **Distr.:** Neotropical: Brazil, Chile, Costa Rica, Guyana, Peru, Venezuela.

Parasphaerocera simplex Kim, 1972b: 391 [female, phylogenetic notes, key, illustr.]. Type locality: Peru, Iquitos. HT female (USNM).

Parasphaerocera andrassyi Papp, 1978d: 376 [both sexes, taxonomic notes, illustr.]. Type locality: Chile, Prov. Valdivia, environs of La Unión, along road leading to Valdivia. HT male (HNHM). - **syn.n.** (see p. 22).

Parasphaerocera subdissecta Papp, 1978. **Distr.:** Neotropical: Costa Rica.

Parasphaerocera subdissecta Papp, 1978d: 383 [female, phylogenetic notes, illustr.]. Type locality: Costa Rica, Cartago, Suiza de Turrialba. HT female (HNHM).

Parasphaerocera subguttula Papp, 1978. **Distr.:** Neotropical: Costa Rica.

Parasphaerocera (*Mesosphaerocera*) *subguttula* Papp, 1978d: 384 [both sexes, taxonomic notes, illustr.]. Type locality: Costa Rica, Cartago, Suiza de Turrialba. HT male (HNHM).

Parasphaerocera tertia (Richards, 1965). **Distr.:** Neotropical: Belize, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico (VRC), Panama, Peru, Trinidad.

Sphaerocera (*Parasphaerocera*) *tertia* Richards, 1965b: 228 [male, key, illustr.]. Type locality: Ecuador, Los Ríos, Pichilingue [44 m]. HT male (CASC). - Richards, 1967b: 5 [Neotropical catalog].

Parasphaerocera tertia. - Kim, 1972b: 414-416 [generic combination, redescription, male, key, illustr.].

Sphaerocera (*Parasphaerocera*) *amphora* Richards, 1965b: 232 [female, key, illustr.]. Type locality: Ecuador, Chimborazo, Linje. HT female (USNM). - Richards, 1967b: 5 [Neotropical catalog]. - **syn.n.** (see p. 22).

Parasphaerocera amphora. - Kim, 1972b: 393-395 [generic combination, redescription, female, key, illustr.].

Sphaerocera (*Parasphaerocera*) *musiphila* Richards, 1965b: 233 [male, key, illustr.]. Type locality: Panama. HT male (CASC). - Richards, 1967b: 5 [Neotropical catalog.]. - **syn.n.** (see p. 22).

Parasphaerocera musiphila. - Kim, 1972b: 414-415 [generic combination, redescription, male, key, illustr.]; Papp, 1978d: 381 [taxonomic notes, distribution].

Note: *P. amphora* is a female and *P. musiphila* is a male of *Parasphaerocera tertia*.

Parasphaerocera transversa (Richards, 1965). **Distr.:** Neotropical: Panama.

Sphaerocera (*Parasphaerocera*) *transversa* Richards, 1965b: 234 [female, taxonomic notes, key, illustr.]. Type locality: Panama. HT female (CASC). - Richards, 1967b: 5 [Neotropical catalog.].

Parasphaerocera transversa. - Kim, 1972b: 396-398 [generic combination, redescription, female, key, illustr.].

Parasphaerocera transversalis (Richards, 1965). **Distr.:** Neotropical: Argentina, Belize, Bolivia, Brazil, Costa Rica, Ecuador, Honduras, Mexico (VRC), Panama, Paraguay, Venezuela.

Sphaerocera (*Parasphaerocera*) *transversalis* Richards, 1965b: 234 [male, taxonomic notes, key, illustr.]. Type locality: Ecuador, Guayas, Cuatro Hermanitos Experimental Farm. HT male (USNM). - Richards, 1967b: 5 [Neotropical catalog.].

Parasphaerocera transversalis. - Kim, 1972b: 408-409 [generic combination, redescription, male, taxonomic notes, key, illustr.].

Sphaerocera (*Parasphaerocera*) *lepida* Richards, 1965b: 234 [female, taxonomic notes, key, illustr.]. Type locality: Panama, Canal Zone, Fort Kobbe, Camarón. HT female (USNM). - Richards, 1967b: 5 [Neotropical catalog.]. - **syn.n.** (see p. 22).

Parasphaerocera lepida. - Kim, 1972b: 395-396 [generic combination, redescription, female, taxonomic notes, key, illustr.].

Sphaerocera (*Parasphaerocera*) *dissecta* Richards, 1965b: 235 [female, key]. Type locality: Panama. HT female (CASC). - Richards, 1967b: 5 [Neotropical catalog.]; Kim, 1972b: 395 [synonymy].

Parasphaerocera trapezina (Richards, 1965). **Distr.:** Neotropical: Belize, Costa Rica, Ecuador, Guatemala, Mexico (VRC), Panama, Trinidad.

Sphaerocera (*Parasphaerocera*) *trapezina* Richards, 1965b: 226 [both sexes, taxonomic notes, key, illustr.]. Type locality: Ecuador, Los Ríos, Pichilingue [40 m]. HT male (CASC). - Richards, 1967b: 6 [Neotropical catalog.].

Parasphaerocera trapezina. - Kim, 1972b: 397-399 [generic combination, redescription, key, illustr.].

Parasphaerocera varipes (Malloch, 1925). **Distr.:** Nearctic: USA (AZ, CA, FL, GA, NM, TX); Neotropical: Bahamas, Costa Rica, Dominican Republic, Galápagos Is. (Ecuador), Guatemala, Honduras, Mexico (MOR, PUE, SON, TAM, YUC), Nicaragua, Panama, Venezuela.

Sphaerocera varipes Malloch, 1925a: 121 [female]. Type locality: Costa Rica, San Mateo, Higuito. HT female (USNM).

Sphaerocera (*Sphaerocera*) *varipes*. - Richards, 1965c: 718 [subgeneric combination, Nearctic catalog.].

Sphaerocera (*Parasphaerocera*) *varipes*. - Richards, 1965b: 235-236 [subgeneric combination, redescription, both sexes, key, illustr.]. - Richards, 1967b: 6 [Neotropical catalog.].

Parasphaerocera varipes. - Kim, 1972b: 419-420 [generic combination, redescription, key, illustr.].

Sphaerocera striata Malloch, 1925a: 122 [female]. Type locality: USA, Florida, Fort Lauderdale. HT female (USNM). - **syn.n.** (see p. 22).

Sphaerocera (Lotobia) striata. - Richards, 1965c: 719 [subgeneric combination, Nearctic catalog].

Sphaerocera (Parasphaerocera) striata. - Richards, 1965b: 224, 239 [subgeneric combination, key].

Parasphaerocera striata. - Kim, 1972b: 416-419 [generic combination, redescription, both sexes, key, illustr.].

Sphaerocera galapagensis Curran, 1934: 158 [female]. Type locality: Galápagos Is., Chatham I. HT female (CASC). - Richards, 1965b: 239 [probable synonymy]; Richards, 1967b: 6 [synonymy].

Parasphaerocera xiphosternum (Richards, 1965) **sp.restit.** **Distr.:** Neotropical: Costa Rica, Ecuador, Mexico (VRC), Panama, Trinidad.

Sphaerocera (Parasphaerocera) xiphosternum Richards, 1965b: 232 [female, key, illustr.]. Type locality: Costa Rica, San Mateo, Higuito. - Richards, 1967b: 6 [Neotropical catalog]; Kim, 1972b: 393 [synonymy with *Parasphaerocera amphora* Richards, 1965].

Parasphaerocera medialis Kim, 1972b: 393 [female, phylogenetic notes, key, illustr.]. Type locality: Panama, Darien, Patiño Point. HT female (USNM). - **syn.n.** (see p. 22).

Sphaerocera flavicoxa. - Malloch 1925:120-121 [partim].

Parasphaerocera ziesii Papp, 1978. **Distr.:** Neotropical: Bolivia.

Parasphaerocera ziesii Papp, 1978d: 385 [female, phylogenetic notes, illustr.]. Type locality: Bolivia, La Paz, Coroico, 15 km S of town [1,800 m]. HT female (HNHM).

Genus *Safaria* Richards, 1950

Safaria Richards, 1950: 14 (feminine). Type species: *Safaria forcipata* Richards, 1950, original designation. - Vanschuytbroeck, 1951a: 4 [as subgenus of *Sphaerocera* Latreille, 1804]; Vanschuytbroeck, 1959a: 22 [as subgenus of *Sphaerocera* Latreille; diagnosis in key]; Richards, 1968a: 183-190 [as genus; diagnosis, review of known species, key, illustr.]; Richards, 1980: 624 [as genus; Afrotropical catalog]; Pitkin, 1989: 8 [as genus, notes on type material].

Safaria abyssinica Richards, 1951. **Distr.:** Afrotropical: Ethiopia.

Safaria abyssinica Richards, 1951b: 269 [both sexes, taxonomic notes, illustr.]. Type locality: Ethiopia, Adis Abeba. HT male (IEUS, but recently not located, see Pitkin, 1989: 8). - Richards, 1968a: 189 [key]; Richards, 1980: 624 [Afrotropical catalog].

Safaria brachyptera Richards, 1966. **Distr.:** Afrotropical: Rwanda.

Safaria brachyptera Richards, 1966a: 249 [female, taxonomic notes]. Type locality: Rwanda, forêt du Rugege [2,050 m]. HT female (MRAC). - Richards, 1968a: 189 [key]; Richards, 1980: 624 [Afrotropical catalog].

Safaria chelata Richards, 1950. **Distr.:** Afrotropical: Kenya.

Safaria chelata Richards, 1950: 17 [male, illustr.]. Type locality: Kenya, Londiani. HT male (IEUS, but recently not located, see Pitkin, 1989: 8). - Richards, 1951b: 268-269 [redescription, male genitalia]; Richards, 1968a: 186-187, 189 [female, key, illustr.]; Richards, 1980: 624 [Afrotropical catalog].

Safaria cornuta (Duda, 1926). **Distr.:** Afrotropical: Zaire.

Sphaerocera cornuta Duda, 1926: 381 [female]. Type locality: Zaire, Stanleyville (= Kisan-gani). STs females (ZMHB).

Safaria cornuta. - Richards, 1950: 17-18 [generic combination, taxonomic notes]; Richards, 1968a: 190 [diagnosis in key]; Richards, 1980: 624 [Afrotropical catalog].

Safaria forcipata Richards, 1950. **Distr.:** Afrotropical: Kenya, Zaire.

Safaria forcipata Richards, 1950: 15 [both sexes, illustr.]. Type locality: Kenya, Nairobi. HT male (IEUS, but recently not located, see Pitkin, 1989: 8). - Richards, 1968a: 184-187, 189 [redescription, both sexes, key, illustr.]; Richards, 1980: 624 [Afrotropical catalog].

Sphaerocera (Safaria) ghesquièrei Vanschuytbroeck, 1951a: 4 [both sexes, illustr.]. Type locality: Zaire, Eala. HT male (ISNB). - **syn.n.** (see p. 22).

Safaria ghesquierei. - Richards, 1980: 624 [generic combination, Afrotropical catalog].

Safaria kistneri Richards, 1968. **Distr.:** Afrotropical: Cameroon, Ivory Coast.

Safaria kistneri Richards, 1968a: 189 [both sexes, key, illustr.]. Type locality: Cameroon, Edé. HT male (FMNH). - Richards, 1980: 624 [Afrotropical catalog].

Safaria liberiensis Richards, 1968. **Distr.:** Afrotropical: Liberia, Nigeria.

Safaria liberiensis Richards, 1968a: 187 [both sexes, key, illustr.]. Type locality: Liberia, Charlesville. HT male (FMNH). - Richards, 1980: 624 [Afrotropical catalog].

Safaria saegeri (Vanschuytbroeck, 1959). **Distr.:** Afrotropical: Zaire.

Sphaerocera (Safaria) saegeri Vanschuytbroeck, 1959a: 25 [male, illustr.]. Type locality: Zaire, Parc National de la Garamba. HT male (MRAC).

Safaria saegeri. - Richards, 1980: 624 [generic combination, Afrotropical catalog].

Genus *Sphaerocera* Latreille, 1804

Sphaerocera Latreille, 1804: 197 (feminine). Type species: *Sphaerocera curvipes* Latreille, 1805, subsequent monotypy, see Latreille, 1805: 394. [*Musca grossipes* (?), included as the only species in *Sphaerocera* by Latreille, 1804: 197, is a misidentified *Sphaerocera curvipes*, not *Musca grossipes* Linnaeus, 1767]. - Duda, 1920: 6-15 [partim, revision of species]; Richards, 1930: 316-317 [as subgenus s.str.]; Séguy, 1934: 452 [partim]; Duda, 1938: 25-34 [as subgenus s.str.; partim, review of Palaearctic species, key]; Vanschuytbroeck, 1948: 8-11 [as subgenus s.str.; partim, diagnosis in key, illustr.]; Richards, 1965b: 224 [as subgenus s.str.; partim, diagnosis in key]; Richards, 1965c: 718 [as subgenus s.str.; partim, Nearctic catalog]; Richards, 1967b: 5 [as subgenus s.str.; Neotropical catalog]; Kim, 1968: 298-306 [as genus; revision of world species, complete synonymy; key, illustr.]; Hackman, 1969a: 198-199, 207 [as genus; zoogeography]; Papp, 1973a: 6-7 [as genus; key, illustr.]; Richards, 1980: 626 [as subgenus s.str.; Afrotropical catalog]; Papp, 1984: 69-70 [as genus; Palaearctic catalog]; Marshall & Richards, 1987: 1004 [diagnosis in key, illustr.]; Roháček & Florén, 1987: 171-177 [as genus, review of Palaearctic taxa, key, illustr.]; Pitkin, 1988: 33 [as genus; key, illustr.]; Roháček, 1998a: 475 [as genus, diagnosis in key, illustr.].

Cypsela. - Meigen, 1800: 31 [partim, misidentification; unavailable name rejected by ICZN, 1963: 339-342 (opinion 678)]. Type species *Musca subsultans* Linnaeus, 1767, subsequent designation by Coquillett, 1910: 530.

Borborus. - Meigen, 1803: 276 [partim, misidentification; unavailable name suppressed by ICZN, 1997: 65 (opinion 1863)]. Type species: *Musca subsultans* Linnaeus, 1767, subsequent designation by Curtis, 1833: 469.

Sphaerocera curvipes Latreille, 1805. **Distr.:** Afrotropical: Ethiopia; Australasian/Oceanian: Australia (ACT, NSW), New Zealand; Nearctic: Canada (AB, BC, MB, NB, NF, NS, ON, QC, SK), USA (AK, AR, AZ, CA, CO, CT, DC, IA, ID, IL, IN, KS, LA, MA, MD, MI, MN, MO, MT, NE, NH, NJ, NY, NC, OH, OR,

- PA, SD, VT, VA, WA, WI, WY); Neotropical: ?"South America" (cf. Kim, 1968); Oriental: India (Kashmir), Pakistan; Palaearctic: Afghanistan, Algeria, Austria, Azores (Portugal), Belgium, Bulgaria, China (TIB), Czech Republic, Denmark, Egypt, Estonia, Faeroe Is. (Denmark), Finland, France (incl. Corsica), Germany, Great Britain, Greece (incl. Crete), Hungary, Iceland, Iran, Israel, Italy (incl. Sardinia, Sicily), Japan, Latvia, Lithuania, Macedonia, Madeira (Portugal), Malta, Mongolia, Morocco, Netherlands, Norway, Poland, Roumania, Russia (CET, ES, FE, NET, SET, WS), Slovakia, Spain (incl. Balearic Is.), Sweden, Switzerland, Tadzikistan, Tunisia, Ukraine, Yugoslavia.
- Sphaerocera curvipes* Latreille, 1805: 394 [sex not stated]. Type locality: France. STs, sex unknown (not found in MNHN, ? lost). - Kim, 1968: 298-302 [redescription, both sexes, key, illustr.]; Papp, 1973a: 7 [key, illustr.]; Hinton, 1981: 746 [egg, illustr.]; Papp, 1984: 69 [Palaearctic catalog]; Nishijima & Yamazaki, 1984: 81-82 [diagnosis, key, illustr.]; Roháček & Florén, 1987: 176 [key]; Pitkin, 1988: 33 [key, illustr.]; Marshall, 1989b: 601 [Australasian/Oceanian catalog]; Smith, 1989: 206 [cephalopharyngeal skeleton, illustr.]; Skidmore, 1993: 7, 14 [puparium, illustr.].
- Sphaerocera (Sphaerocera) curvipes*. - Duda, 1938: 28-29 [subgeneric combination, redescription, key, illustr.]; Harrison, 1959: 257 [redescription, illustr.]; Richards, 1965c: 718 [Nearctic catalog]; Richards, 1973: 301 [diagnosis]; Richards, 1980: 626 [Afrotropical catalog].
- Lordatia merdarum* Robineau-Desvoidy, 1830: 808 [sex not stated]. Type locality: not given (France). STs, sex unknown (not found in MNHN, ? lost). - Haliday, 1836: 319 [synonymy]; Becker, 1905: 28 [synonymy, Palaearctic catalog].
- Lordatia stercoraria* Robineau-Desvoidy, 1830: 809 [sex not stated]. Type locality: not given (France). STs, sex unknown (not found in MNHN, ? lost). - Haliday, 1836: 319 [synonymy]; Becker, 1905: 29 [synonymy, Palaearctic catalog].
- Lordatia cadaverina* Robineau-Desvoidy, 1830: 809 [sex not stated]. Type locality: not given (France). STs, sex unknown (not found in MNHN, ? lost). - Haliday, 1836: 319 [synonymy]; Becker, 1905: 28 [synonymy, Palaearctic catalog].
- Lordatia necrophaga* Robineau-Desvoidy, 1830: 809 [sex not stated]. Type localities: France, Saint-Sauveur and Paris. STs, sex unknown (not found in MNHN, ? lost). - Haliday, 1836: 319 [synonymy]; Becker, 1905: 28 [synonymy, Palaearctic catalog].
- Borborus obtusus* Meigen, 1835: 72 [sex not stated]. Type locality: Germany, München vicinity. STs, sex unknown (?MNHN). - Papp, 1984: 69 [synonymy].
- Borborus obtusus* Meigen, 1838: 406 [sex not stated]. Type locality: Germany, "Baiern" (= Bayern). STs, sex unknown (?MNHN). - Duda, 1938: 28 [synonymy]; Morge, 1976: Pl. 289, Figs 5a-c [Meigen's original illustr.]. **Note:** *B. obtusus* was described twice from the same type specimens.
- Sphaerocera obtusa*. - Becker, 1905: 29 [generic combination].
- Borborus obtusa*. - Papp, 1984: 69 [incorrect name termination].
- Borborus opacus* Meigen, 1835: 72 [sex not stated]. Type locality: Germany, München vicinity. ST male (MNHN). - Papp, 1984: 69 [synonymy].
- Borborus opacus* Meigen, 1838: 406 [sex not stated]. Type locality: Germany, "Baiern" (= Bayern). ST male (MNHN). - Duda, 1938: 28 [synonymy]; Morge, 1976: Pl. 289, Figs 9a,b [Meigen's original illustr.]. **Note:** *B. opacus* was described twice from the same type specimens. The only preserved male syntype was examined by A. L. Norrbom (in litt.) who confirmed its identity with *S. curvipes*.
- Sphaerocera opaca*. - Becker, 1905: 29 [generic combination].
- Borborus opaca*. - Papp, 1984: 69 [incorrect name termination].
- Borborus planipes* Harris, 1835: 600 [nomen nudum].

Copromyza subsultans. - Fallén, 1820: 7 [generic combination, misidentification]; Zetterstedt, 1847: 2487-2488 [redescription].

Borborus subsultans. - Meigen, 1830: 200 [generic combination, misidentification]; Morge, 1976: Pl. 163, Figs 1a-k, Pl. 215, Figs 1a,b [Meigen's original illustr.].

Sphaerocera subsultans. - Macquart, 1835: 565 [generic combination, misidentification]; Haliday, 1836: 318-319 [redescription]; Stenhammar, 1855: 429-431 [redescription]; Duda, 1920: 16-19 [redescription]; Goddard, 1938: 254-255 [egg, puparium, cephalopharyngeal skeleton, illustr.]; Hammer, 1941: 260-261 [egg, illustr.].

Cypsela subsultans. - Coquillett, 1910: 530 [generic combination, misidentification].

Sphaerocera (Sphaerocera) subsultans. - Spuler, 1924c: 68 [misidentification, key, illustr.]; Richards, 1930: 316-317 [key].

Sphaerocera elephantis Hayashi, 1990. **Distr.:** Oriental: Thailand.

Sphaerocera elephantis Hayashi, 1990a: 261 [both sexes, taxonomic notes, biology, illustr.]. Type locality: Thailand, Chiang Dao. HT male (ITLJ).

Sphaerocera flaviceps Malloch, 1925. **Distr.:** Neotropical: Costa Rica, Cuba, Dominican Republic, Grenada, Jamaica, Panama, St. Vincent, Venezuela.

Sphaerocera flaviceps Malloch, 1925a: 120 [both sexes]. Type locality: Costa Rica, San Mateo, Higuito. HT male (USNM). - Kim, 1972b: 437-441 [redescription, taxonomic notes, key, illustr.].

Sphaerocera (Sphaerocera) flaviceps. - Richards, 1965b: 224 [subgeneric combination]; Richards, 1967b: 5 [Neotropical catalog].

Sphaerocera monilis Haliday, 1836. **Distr.:** Palaearctic: Belgium, Bulgaria, Czech Republic, Finland, Germany, Great Britain, ?Greece, Hungary, Ireland, Latvia, Norway, Poland, Roumania, Slovakia, Sweden, Switzerland, ?Yugoslavia.

Sphaerocera monilis Haliday, 1836: 319 [sex not stated]. Type localities: Great Britain, England, New Forest; England, near London. STs, sex unknown (not located in NMID or BMNH, see Kim, 1968: 305; probably lost). - Duda, 1920a: 19-22 [redescription, both sexes]; Kim, 1968: 304-306 [redescription, phylogenetic notes, key, illustr.]; Papp, 1973c: 7 [key, illustr.]; Okely, 1974: 44 [puparium, illustr.]; Papp, 1984: 70 [Palaearctic catalog]; Roháček & Florén, 1987: 177 [key]; Pitkin, 1988: 33 [key, illustr.].

Borborus monilis. - F. Walker, 1849: 1129 [generic combination].

Sphaerocera (Sphaerocera) monilis. - Richards, 1930: 317 [subgeneric combination]; Duda, 1938: 30-31 [redescription, key]; Okely, 1974: 43-44 [puparium, illustr.].

Sphaerocera tarsalis Wahlgren, 1918: 1 [sex not stated]. Type locality: Sweden, Skåne. HT, sex unknown (NHRS). - Richards, 1930: 317 [synonymy].

Note: The species is probably related to *Afromyia* species (Quiros, in litt.) but further study is necessary to demonstrate its affiliation with the latter genus definitely.

Sphaerocera pseudomonilis ssp. asiatica Papp, 1988. **Distr.:** Oriental: Pakistan.

Sphaerocera pseudomonilis ssp. asiatica Papp, 1988b: 462 [both sexes, taxonomic notes, illustr.]. Type locality: Pakistan, Swat, Marghuzar, [1,300 m]. HT male (MHNG).

Sphaerocera pseudomonilis ssp. hallux Roháček & Florén, 1987. **Distr.:** Nearctic: USA (ID); Palaearctic: Sweden.

Sphaerocera pseudomonilis ssp. hallux Roháček & Florén, 1987: 171 [both sexes, taxonomic notes, key, illustr.]. Type locality: Sweden, Sö. Saltsjöbaden, Älgö. HT male (NHRS).

Sphaerocera pseudomonilis ssp. pseudomonilis Nishijima & Yamazaki, 1984. **Distr.:** Palaearctic: Japan.

Sphaerocera pseudomonilis Nishijima & Yamazaki, 1984: 82 [both sexes, taxonomic notes, illustr.]. Type locality: Japan, Asahikawa, Kamikawa. HT male (LEOU).

Sphaerocera pseudomonilis ssp. *pseudomonilis*. - Roháček & Florén, 1987: 176-177 [taxonomic notes, key, illustr.].

Notes: Like *Sphaerocera monilis*, also this species has distinct affinities to *Afromyia* but its transfer to this genus needs further evidence (Quiros, in litt). Moreover, all the three described subspecies should be re-evaluated, particularly with regard to the recent discovery of *S. pseudomonilis* (a form most resembling ssp. *hallux*) in the Nearctic region.

Sphaerocera tuberculosa Kim, 1968. **Distr.:** Nearctic: Canada (AB, BC), USA (AK, ID, OR, WA).

Sphaerocera tuberculosa Kim, 1968: 302 [both sexes, taxonomic notes, key, illustr.]. Type locality: USA, Alaska, Matanuska. HT male (USNM).

Genus *Trichosphaerocera* Papp, 1978

Trichosphaerocera Papp, 1978d: 387 (feminine). Type species: *Trichosphaerocera africana* Papp, 1978, original designation. - Papp, 1978d: 387-389 [phylogenetic notes]; Richards, 1980: 626 [Afrotropical catalog]; Han & Kim, 1996: 41 [phylogenetic relationships].

Trichosphaerocera africana Papp, 1978. **Distr.:** Afrotropical: Congo.

Trichosphaerocera africana Papp, 1978d: 388 [male, illustr.]. Type locality: Congo, Lefinie reservation, Nambouli river. HT male (HNHM). - Richards, 1980: 626 [Afrotropical catalog].

Doubtful genera of Sphaerocerinae (genera dubiae)

Lordatia Robineau-Desvoidy, 1830: 808 (feminine). Type species: *Lordatia coprina* Robineau-Desvoidy, 1830, subsequent designation by Coquillett, 1910: 563. - Haliday, 1836: 318 [as synonym of *Sphaerocera*]; Becker, 1905: 28 [as synonym of *Sphaerocera*]; Papp, 1984: 105 [as doubtful genus of Sphaeroceridae]. **Note:** The identity of the type species is uncertain and therefore the genus is unrecognizable.

Doubtful species of Sphaerocerinae (species dubiae)

coprina Robineau-Desvoidy, 1830: 809 *Lordatia* [sex not stated]. Type locality: not given (France). STs, sex unknown (not found in MNHN, ? lost). - Haliday, 1836: 319 [as possible synonym of *Ischiolepta vaporariorum* (Haliday, 1836)]; Becker, 1905: 28 [as *Sphaerocera*; Palaearctic catalog]. **Note:** Without examination of the type material unrecognizable species (see also Papp, 1984: 106) possibly belonging to *Ischiolepta* or *Lotobia*.

hyalipennis Macquart, 1846: 345 *Sphaerocera* [misspelling of genus name; female, illustr.]. Type locality: South Africa, "Cafrerie". ST(s), female(s) (?MNHN). **Note:** Identity and generic placement of this species is impossible without examination of the type material.