

THE SUBFAMILIES OF THE FAMILY DOLICHOPODIDAE IN NORTH AND SOUTH AMERICA (DIPTERA)

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In any family having the size and diversity of the Dolichopodidae the relationships within the family can be of particular interest and importance. Such relationships should be reflected in the organization of the subfamilies. Unfortunately, in the Dolichopodidae the subfamilies have been based primarily on certain obvious extreme forms without enough attention to many intermediate types. Also, most of the smaller forms have been placed rather casually in one or two loosely defined subfamilies in spite of a great diversity of characters. Studies regarding mouth parts (Cregan, 1941), and genitalia (Buchmann, 1961) along with isolated works on larvae and pupae (Dyde, 1967) have occasionally appeared but no formal effort has been made to incorporate the knowledge into a revised subfamily organization.

The following review and revision of the subfamilies of the Dolichopodidae is based on various characters including male and female genitalia, mouth parts, antennal structure, wing venation, chaetotaxy, leg structure, and larval form. While none of these characters are entirely reliable, they are all useful within limits. As an example, the setae borne on the dorsal surface of the first antennal segment are characteristic of the Dolichopodinae where there is no suggestion of variation. In the Hydrophorinae, however, some genera have such setae and others lack them. In the genera *Argyra* and *Symbolia* of the Diaphorinae and *Stolidosoma* of the Stolidosominae, presence or absence of such setae is important only at the species level. As another example, in the genus *Stolidosoma*, the occurrence of acrostichal setae is particularly variable though the character distinguishes valid genera elsewhere in the family. The occurrence of preapical setae on the femora seems of great importance in distinguishing subfamilies, but the character is variable within the genus *Rhaphium* and is very erratic in the genus *Harmstonia*. As a final example, the characters I would use to distinguish the Stolidosominae might seem weak on the basis of their value in other groups, but I am convinced the Stolidosominae as thus delimited is a natural group.

The characters described and illustrated by Cregan (1941) in her study of the mouth structure seem particularly worthy of comment. There is no question that most of the groups tentatively established in the study are highly unnatural. Certainly, the mouth being a highly functional structure would be subject to many

adaptations that would obscure relationships. Still, close examination of certain characters in light of known relationships is very revealing. The pseudotracheae seem potentially useful, with closely related genera usually showing similar structure. The Sciapodinae and Medeterinae are entirely or almost entirely unsclerotized. The Hydrophorinae show an inclination toward massive sclerotization. Limits must be placed on the interpretations in such cases as the barred pattern in *Gymnopternus* which is a genus closely related to others having geminate sclerotization. Still, I find it impossible to ignore the nonsclerotized condition of *Xanthochlorus* which contrasts strongly with the geminately sclerotized pattern in all genera to which *Xanthochlorus* has been considered related.

The subfamilies that I would recognize at present are as follows:

1. **Sciapodinae.** Arista usually dorsal, if apical third segment usually asymmetric, first segment bare; vertex of head strongly excavated; epipharyngeal armature with four smooth long prongs, connected; pseudotracheae unsclerotized. Thorax often broad with enlarged acrostichal bristles; fourth wing vein usually forked. Femora without preapicals. Hypopygium relatively small but not enclosed in preabdomen, female genitalia with few dornen. Larvae with four prominent projections posteriorly. Though this is perhaps the most distinctive and natural group in the family, no one character is sufficient to distinguish it. *Mesorhaga* lacks the forked fourth vein, *Psilopiella* and *Leptorhethum* lack the excavated vertex, and many species of *Sciapus* lack the broad thorax.

2. **Neurigoninae.** Arista dorsal or subapical, first segment bare; head usually strongly excavated behind the vertex; epipharyngeal armature with two slightly denticulated long prongs; pseudotracheae geminately sclerotized. Thorax narrow with small usually doubly seriate acrostichals and a strongly flattened posterior slope; fourth wing vein not forked. Femora without preapicals. Hypopygium relatively large, not projecting far forward; female genitalia with no dornen. Larvae rounded posteriorly, without obvious lobes. I would place here, tentatively, a number of neotropical genera described as having a flattened posterior slope on the mesoscutum and a narrow pollinose face.

3. **Medeterinae.** Arista apical, antennal segments all short and symmetric, first segment bare; head usually strongly excavated behind the vertex; epipharyngeal armature with two smooth long prongs; hypopharynx often with spur below; pseudotracheae not sclerotized. Thorax narrow with small usually doubly seriate acrostichals and a strongly flattened posterior slope; fourth wing vein not forked. Femora lacking preapicals. Hypopygium usually large and projecting far forward; female genitalia with no dornen or one pair apically. Larvae rounded posteriorly or with very blunt lobes. Pupae with flat ventral profile of head and thorax. This and the preceding subfamily seem very closely related, especially in the presence of a strongly flattened posterior slope of the thorax, the lack of dornen on the female genitalia, and the blunt tip of the larva. Antennae, pseudotracheae, and hypopygial and facial structure are characters useful in distinguishing the two subfamilies.

4. **Systeminae**, subfam. n. Arista subapical to apical on an enlarged sometimes prolonged third antennal segment, first segment bare, head usually excavated behind the vertex; mouth parts not examined. Thorax narrow with biseriate acrostichals and a flattened posterior slope; fourth wing vein not forked. Femora without preapicals. Hypopygium large, projecting far forward; female genitalia with a crest of dornen above. Larvae with a pair of distinct prolegs; four prominent lobes posteriorly, uppermost smaller. I have been inclined to relate the genus *Systemus* to the Medeterinae, but the enlarged third antennal segment, the dornen on the female genitalia, and the prolegs and lobes on the larvae indicate a position entirely outside of the Neurigoninae — Medeterinae complex. The genus has been placed in the Rhaphiinae, but that subfamily lacks the flattened posterior slope of the thorax, has the posterior surface of the male head flattened, has numerous hairs on the upper part of the propisternum, and has a small hypopygium.

5. **Xanthochlorinae**. Body color usually a translucent yellow. Arista subapical to apical, third antennal segment sometimes enlarged, first segment bare; head rounded to slightly concave behind the vertex; epipharyngeal armature with two somewhat denticulate long prongs, connected; labellae often expanded, pseudotracheae not sclerotized. Thorax narrow with acrostichals biseriate to lacking and with a slightly flattened posterior slope; fourth wing vein not forked. Femora without preapicals. Hypopygium relatively small but not or only partially enclosed in the preabdomen; female genitalia with a crest of dornen above. Larvae unknown. The genus *Xanthochlorus* has been placed in the Sympycninae, but from that complex it differs by the lack of preapicals on the femora and by the unsclerotized pseudotracheae. Also the Sympycninae proper do not have a flattened posterior slope on the thorax. Though there are a number of differences between *Xanthochlorus* and *Xanthina* including especially the absence versus the presence of acrostichals, the two genera agree in the characters by which I distinguish the subfamily, both even having yellow body color and unsclerotized pseudotracheae. The *Xanthina* sp. observed had eight or more pseudotracheae rather than six as found in most genera of the Dolichopodidae. Mouth parts have not been examined in *Achalcus*, but it very strongly resembles *Xanthina*, and I would place it here tentatively in spite of the presence of preapicals on the femora.

6. **Enliniinae**, subfam. n. Arista apical to subapical, rarely dorsal, third segment often distinct in shape or size, first segment bare above; head slightly concave behind the vertex; pseudotracheae very small, slightly rugose but not obviously sclerotized. Thorax narrow with acrostichals biseriate or absent, posterior slope of thorax flattened, fourth wing vein not branched, straight from the base and diverging from the third vein or highly modified. Femora with or without preapicals. Hypopygium globose, large to small and partially to almost completely enclosed in the preabdomen; female genitalia with a crest of dornen above. Larvae unknown. The third and fourth veins being divergent mark the group well with only the very distinct *Asyndetus* of the Diaphorinae being at all

similar. The two genera, *Enlinia* and *Harmstonia*, have sufficient differences that close relationship cannot be assumed, but they share very similar pseudotracheae.

7. **Peloropecodinae**, subfam. n. Arista apical to dorsal, third antennal segment sometimes enlarged, first segment bare; head slightly depressed behind the vertex; epipharyngeal armature with four seriatly denticulate prongs connected; pseudotracheae geminately sclerotized. Thorax narrow, having acrostichals usually bi- to uniseriate, and having a slightly flattened posterior slope; fourth wing vein not branched. Femora with preapicals. Hypopygium relatively large to relatively small but not enclosed in the preabdomen; female genitalia with a crest of dornen above. Larvae unknown. The group has been submerged in the Sympycninae with which it shows some resemblance. Nevertheless, species in the group are generally shorter and thicker in build, have a slightly flattened posterior slope on the thorax, and have generally larger and more exposed hypopygia. The subfamily seems further divisible into those having globose hypopygia such as *Peloropecodes* and *Neurigonella*, and those with smaller cylindrical hypopygia such as *Micromorphus*, *Chrysotimus*, and *Nanomyia*.

8. **Diaphorinae**. Arista dorsal, subapical, or in an apical notch, third antennal segment usually enlarged, first segment bare or with hairs above; head rounded behind the vertex or sometimes the hind surface of the male head totally flat; epipharyngeal armature variously denticulate with two to four prongs; pseudotracheae geminately sclerotized. Thorax narrow having usually biseriate or uniseriate acrostichals, posterior slope not flattened, proepisternum with many, one, or no hairs on the upper part; fourth wing vein not branched, sometimes ending before the wing margin and the costa ending at the third vein. Femora without preapicals, pulvilli of the male fore tarsus often enlarged. Hypopygium small and partially to mostly enclosed in the tip of the preabdomen, often bearing a group of large bristles posteriorly; female genitalia with a crest of dornen above. Larvae with four or five prominent lobes posteriorly. This subfamily with the following, forms a very natural group. The hypopygium of the group seems very characteristic, having a rounded basal and ventral surface along which runs the penis-aedeagus mechanism. This arrangement seems most highly developed in this group, but hypopygia of most Sympycninae and Dolichopodinae are rather similar. In the Peloropecodinae, Enliniinae, and Medeterinae groups the penis-aedeagus mechanism is usually more distorted in shape and restricted to the middle and apical parts of the hypopygium.

Notable within the subfamily is the great variation in antennal form including shape of the second segment and pubescence of the first segment. The subfamily includes the only Dolichopodidae with eyes contiguous above the antennae or with the fourth wing vein not reaching the wing margin. I have included *Nematoproctus* and *Keirosoma* here rather than in the Rhabdiniinae in spite of the pubescence of the proepisternum. At least one species of *Nematoproctus*, *N. cylindricus*, was described as a *Diaphorus* and shows many characters of that genus including the rounded posterior surface of the male head and the shorter hypopygial appendages.

9. **Rhaphiinae.** Arista strictly apical, third antennal segment sometimes very elongate, first segment bare; head of male flat posteriorly; epipharyngeal armature with two short stout somewhat denticulate prongs; pseudotracheae essentially geminately sclerotized. Thorax narrow with biseriate or uniseriate acrostichals, posterior slope not flattened, upper proepisternum with many long hairs; fourth wing vein not branched. Femora with or without preapicals. Hypopygium relatively small to somewhat enlarged, sometimes partially enclosed in the tip of the preabdomen; female genitalia with a crest of dornen above. Larvae with four obvious lobes posteriorly. The subfamily is very closely related to the Diaphorinae with similar flattening of the posterior surface of the male head and similar pubescence of the proepisternum occurring in the genera *Nematoproctus*, *Keirosoma*, and to some extent in *Argyra* of the latter group. The Rhaphiinae are distinct in the strictly apical arista (except in one species) and the occurrence of preapical bristles in some species. Cregan (1941) noted the absence of an apodeme on the epipharyngeal armature in *Rhaphium effilatum* Wheeler, a situation not observed in members of any other subfamily. The subfamily shows greater development of sexual dimorphism than the Diaphorinae, but much less than that in the Enliniinae.

10. **Plagioneurinae.** Arista dorsal, third antennal segment enlarged, first segment bare; head flat posteriorly in both sexes; face with a median longitudinal furrow; epipharyngeal armature with four short somewhat denticulate connected prongs; pseudotracheae geminately sclerotized. Thorax narrow without acrostichals, posterior slope not flattened, upper proepisternum with many long hairs; fourth wing vein not branched, strongly bent in last part, forming an acute angle with the crossvein. Femora with preapicals. Fourth and fifth abdominal sternites with submarginal bristles; hypopygium very small, enclosed in the tip of the preabdomen; female genitalia with a crest of dornen above. Larvae unknown. The group contains a single quite distinctive species.

11. **Stolidosominae.** Arista dorsal, third antennal segment often enlarged, first segment bare or with hairs above; head slightly depressed behind the vertex; epipharyngeal armature serially denticulate with four rather short prongs, connected; pseudotracheae geminately sclerotized. Thorax narrow, having acrostichals biseriate, uniseriate, or lacking, five pairs of dorsocentrals or six pairs with anterior pair weakest; posterior slope not flattened; fourth wing vein not branched. Femora with preapicals; tip of male hind tibia with sinus; second joint of male fore tarsus slightly to strongly ornamented. Hypopygium relatively small, partially enclosed in the tip of the preabdomen; female genitalia with a crest of dornen above. Larvae unknown. The group seems very close to the Sympycninae but is clearly distinct from *Sympycnus* and its closest allies by the dorsocentrals, the sinus in the tip of the male hind tibia, and the consistently modified second joint of the male fore tarsus. The group as thusly separated seems unquestionably natural having absolutely uniform general structure of the male genitalia. The question remains whether the Stolido-

sominae are more distinct from *Sympycnus* than other elements retained in the Sympycninae.

12. **Sympycninae.** Arista dorsal, third antennal segment usually somewhat enlarged, first segment usually bare; head slightly depressed behind the vertex; epipharyngeal armature seriatly denticulate with four rather short prongs connected; pseudotracheae geminately sclerotized. Thorax narrow with acrostichals usually uniseriate or lacking, usually six pairs of dorsocentrals with the fifth pair displaced or lacking, sometimes only three or four pairs of dorsocentrals, posterior thoracic slope not flattened, proepisternum with or without hairs on the upper part; fourth wing vein not branched. Femora with preapicals; tip of hind tibia without a sinus. Hypopygium relatively small, partially enclosed in tip of the preabdomen; female genitalia with a crest of dornen above. Larvae unknown. The genera *Telmaturgus* and *Lamprochromus* with only three or four pairs of dorsocentrals seem to be distinctive. The face of *Telmaturgus* is similar to that of *Syntormon* which with its second antennal segment produced thumblike along the inside of the third and its first antennal segment sometimes bearing setae provides another anomalous element in the subfamily.

13. **Dolichopodinae.** Arista dorsal, rarely apical, third antennal segment usually somewhat enlarged, first segment with hairs above; head of male slightly depressed behind the vertex; epipharyngeal armature seriatly denticulate, with four short connected prongs; pseudotracheae barred or geminately sclerotized. Thorax narrow with biseriate acrostichals, posterior slope not flattened; upper proepisternum with some hairs; fourth wing vein usually unbranched, sometimes with a stump vein of a posterior branch. Femora with preapicals. Hypopygium very large, extending forward to near the base of the abdomen; female genitalia with a crest of dornen above. Larvae with four or five obvious lobes posteriorly. The large hypopygium is a prime character of the group. The setae on the first antennal segment are consistently present in the subfamily.

14. **Hydrophorinae.** Arista dorsal or apical, third antennal segment often elongate or lobed; head rounded posteriorly or slightly depressed behind the vertex; epipharyngeal armature with two to four short or long lobes often separated at the base, smooth or slightly to seriatly denticulate; labellae sometimes highly sclerotized and mandibuliform, pseudotracheae geminately to massively sclerotized, sometimes the sixth panal unsclerotized, sensory papillae often located on or attached to bases of the pseudotracheae. Thorax rather narrow, acrostichals biseriate to lacking, four to ten pairs of often reduced dorsocentrals; slightly to strongly convex, sometimes flattened posteriorly; proepisternum bare in upper part, often heavily pubescent below; fourth wing vein not branched, last of fifth vein often shorter than the posterior crossvein. Femora with poorly differentiated preapicals often remote from the tips of the femora, anterior femora often thickened at the base and bearing distinctive setae. Abdomen sometimes flattened above; hypopygium relatively small or somewhat enlarged but usually enclosed in the tip of the preabdomen; female genitalia with a crest

of dornen above. Larvae with obvious lobes posteriorly (7 lobes in *Aphrosylus*).

The massively sclerotized pseudotracheae combined with the posterior crossvein close to the wing margin seem to indicate a related group of genera. Some genera such as *Liancalus*, *Hypocharassus*, and *Melanderia* lack the characteristic pseudotracheae, others such as *Aphrosylus* and *Thinophilus* have the posterior crossvein farther from the wing margin, but no genus that I would presently include in the subfamily lacks both characters. I can see no basis by which a separate subfamily, Aphrosylinae, might be maintained. The American species placed in this group do not show the backwardly curved beak on the mouth by which the European members of the Aphrosylinae have been distinguished. Also, I have concluded that the great resemblance between *Campsicnemus* and the Hydrophorine genus, *Thinophilus*, is misleading. *Campsicnemus* has a much narrower face, well developed preapicals on the middle femur, six dorsocentral bristles with the fifth displaced, and has neither the wing venation or pseudotracheal structure of the Hydrophorinae. I have placed *Campsicnemus* provisionally in the Sympycninae where it is usually placed. The subfamily Hydrophorinae seems easily subdivided into genera with eight or more small dorsocentrals such as *Hydrophorus*, *Scellus*, and *Hypocharassus*, and those with four to six usually larger dorsocentrals as in *Liancalus*, *Oedematopus*, *Aphrosylus*, *Diostracus*, *Melanderia*, and *Thinophilus*. The former group includes species showing an angular type of hypopharynx not known elsewhere in the family. The latter group includes two genera *Liancalus* and *Oedematopus* that show a larger shorter pronged united epipharyngeal armature with close set seriate denticulations or striations. Such an epipharyngeal armature is uncommon in the Hydrophorinae but might indicate an ancestral type within the family.

KEY TO SUBFAMILIES

1. Fourth wing vein usually with a widely divergent fork, vertex of head usually deeply excavated from anterior view, when fourth vein unbranched the vertex is deeply excavated Sciapodinae
- Fourth wing vein never with a widely diverging fork, vertex of head not or only slightly excavated 2
2. Third and fourth wing veins strongly divergent at least in female, males sometimes with veins highly distorted and not divergent; body 1.5 mm or less long; posterior slope of mesoscutum flattened Enliniinae
- Third and fourth veins parallel or convergent in distal part or insects larger; with or without flattened posterior slope of mesoscutum 3
3. First antennal segment bearing distinct setae above; male hypopygial capsule very large, over half as long as preabdomen Dolichopodinae

- First antennal segment bare above or hypopygium small, less than half as long as preabdomen 4
4. Posterior crossvein distinctly longer than distal part of fifth vein; hypopygium always short, usually enclosed in tip of preabdomen Hydrophorinae
- Posterior crossvein not longer than last of fifth vein, or hypopygium extending far forward under preabdomen 5
5. Abdomen distinctly flattened dorsally, acrostichal setae absent Hydrophorinae (*Thinophilus*)
- Abdomen not flattened dorsally, or acrostichal setae present 6
6. Face with a median vertical furrow; third and fourth abdominal sternites with large submarginal bristles; posterior crossvein very oblique, parallel to last part of fourth vein Plagioneurinae
- Face without median vertical furrow; third and fourth abdominal sternites without obvious bristles; posterior crossvein not parallel to last of fourth vein 7
7. Middle and hind femora bearing distinct preapical setae on their anterodorsal surface; proepisternum without long dense pubescence on the upper part 8
- Femora without distinct preapical setae, or proepisternum bearing long dense pale pubescence before the anterior spiracle 11
8. Elongate area on posterior slope of thorax somewhat flattened; hypopygium usually borne below and extending somewhat forward from tip of preabdomen 9
- Posterior slope of thorax not flattened; hypopygium usually forming cap on tip of preabdomen 10
9. Third and fourth wing veins somewhat divergent beyond posterior crossvein, distinctly farther apart at margin than at crossvein; usually yellowish species Xanthochlorinae (*Achalcus*)
- Third and fourth veins parallel or convergent beyond posterior crossvein; usually greenish or brownish species Peloropeodinae
10. Dorsocentrals usually five, rarely with equally large anterior sixth pair; hind tibia of male with a minute apical notch anterodorsally; second joint of male fore tarsus with either special hairs or otherwise modified Stolidosominae
- Dorsocentrals usually six with fifth pair often reduced or lacking, rarely only three or four pairs present; hind tibia of male without apical notch; second joint of male fore tarsus not particularly distinct Sympycninae

11. Posterior slope of thorax not flattened; species usually highly metallic green or silvery pollinose 12
- Posterior slope of thorax flattened; some species metallic green, others entirely yellow, brown, or black 13
12. Arista strictly apical, third segment never notched; proepisternum with long pale hairs on upper part Rhaphiinae
- Arista subapical to dorsal, sometimes borne in apical notch or slightly lateral; proepisternum with or without long pale hairs on upper part Diaphorinae
13. Posterior slope of thorax only slightly flattened; yellowish species totally lacking metallic green coloration; acrostichal setae sometimes lacking Xanthochlorinae
- Posterior slope of thorax strongly flattened or species metallic green; acrostichal setae present 14
14. Third antennal segment slightly to greatly enlarged, the three segments very unequal; female genitalia with a crest of dornen above Systeminae
- Third antennal segment not enlarged, three segments nearly equal; female genitalia with dornen rudimentary or lacking 15
15. Arista strictly apical; face usually metallic greenish, not narrower in the male; hypopygium usually cylindrical, extending forward under the preabdomen Medeterinae
- Arista subapical or dorsal; face covered with whitish pollen, usually narrower in the male; hypopygium usually globose, borne on or under the tip of the preabdomen Neurigoninae

The following list includes the subfamilies and genera of Dolichopodidae presently recognized in North and South America.

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| 1. Sciapodinae | 3. Medeterinae |
| <i>Chrysosoma</i> Guérin-Méneville | <i>Medetera</i> Fischer von Waldheim |
| <i>Condyllostylus</i> Bigot | <i>Microchrysotus</i> Robinson |
| <i>Leptorhethum</i> Aldrich | <i>Microcyrtura</i> Robinson |
| <i>Megistostylus</i> Bigot | <i>Thrypticus</i> Gerstaecker |
| <i>Mesorhaga</i> Schiner | |
| <i>Psilopiella</i> Van Duzee | |
| <i>Sciapus</i> Zeller | |
| 2. Neurigoninae | 4. Systeminae, new subfamily |
| <i>Argentinia</i> Parent | <i>Systemus</i> Loew |
| <i>Coelinium</i> Parent | |
| <i>Coeloglutus</i> Aldrich | 5. Xanthochlorinae |
| <i>Neotonnoiria</i> Robinson | <i>Achalcus</i> Loew |
| <i>Neurigona</i> Rondani | <i>Xanthina</i> Aldrich |
| <i>Notobothrus</i> Parent | <i>Xanthochlorus</i> Loew |

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| <p>6. Enliniinae, new subfamily
 <i>Enlinia</i> Aldrich
 <i>Harmstonia</i> Robinson</p> <p>7. Peloropecodinae, new subfamily
 <i>Chrysotimus</i> Loew
 <i>Discopygiella</i> Robinson
 <i>Micromorphus</i> Mik
 <i>Nanomyia</i> Robinson
 <i>Neurigonella</i> Robinson
 <i>Peloropecodes</i> Wheeler</p> <p>8. Diaphorinae
 <i>Argyra</i> Macquart
 <i>Asyndetus</i> Loew
 <i>Chrysotus</i> Meigen
 <i>Diaphorus</i> Meigen
 <i>Ionthadophrys</i> Van Duzee
 <i>Keirosoma</i> Van Duzee
 <i>Nematoproctus</i> Loew
 <i>Pseudargyra</i> Van Duzee
 <i>Symbolia</i> Becker</p> <p>9. Rhaphiinae
 <i>Rhaphium</i> Meigen</p> <p>10. Plagioneurinae
 <i>Plagioneurus</i> Loew</p> <p>11. Stolidosominae
 <i>Pseudosympycnus</i> Robinson
 <i>Stolidosoma</i> Becker
 <i>Sympycnidelpus</i> Robinson</p> <p>12. Sympycninae
 <i>Calyxochaetus</i> Bigot
 <i>Campsicnemus</i> Walker</p> | <p><i>Filatopus</i> Miller
 <i>Hyptiocheta</i> Becker
 <i>Lamprochromus</i> Mik
 <i>Neoparentia</i> Robinson
 <i>Parasyntormon</i> Wheeler
 <i>Pinacocerus</i> Van Duzee
 <i>Sympycnus</i> Loew
 <i>Syntormon</i> Loew
 <i>Telmaturgus</i> Mik
 <i>Teuchophorus</i> Loew</p> <p>13. Dolichopodinae
 <i>Cheirocerus</i> Parent
 <i>Dolichopus</i> Latreille
 <i>Gonioneurum</i> Becker
 <i>Gymnopternus</i> Loew
 <i>Hercostomus</i> Loew
 <i>Paraclius</i> Loew
 <i>Pelastoneurus</i> Loew
 <i>Proarchus</i> Aldrich
 <i>Sarcionus</i> Aldrich
 <i>Stenopygium</i> Becker
 <i>Tachytrechus</i> Haliday</p> <p>14. Hydrophorinae
 <i>Aphrosylus</i> Haliday
 <i>Cymatopus</i> Kertész
 <i>Diostracus</i> Loew
 <i>Hydrophorus</i> Fallén
 <i>Hypochaerassus</i> Mik
 <i>Liancalus</i> Loew
 <i>Melanderia</i> Aldrich
 <i>Oedematopus</i> Van Duzee
 <i>Scellus</i> Loew
 <i>Syntomoneurum</i> Becker
 <i>Thinophilus</i> Wahlberg</p> |
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