Family Group Names in Braconidae (Hymenoptera: Ichneumonoidea)

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Abstract.—The known family-group names for Braconidae are listed with their authors and dates of publication. The status of the 224 previously proposed names is reviewed, with particular attention to the validity and priority of names used by nineteenth century authors.

The family Braconidae is exceptionally diverse. It is the second largest family within the Hymenoptera, and contains over 15,000 described species. Considerable attention has been given to the classification of the Braconidae in recent years, including the production of comprehensive catalogs and regional synopses and the publication of several treatises on higher order relationships within the family (e.g., Shenefelt 1969, 1980, Fischer 1971, 1972, Čapek 1965, 1970, Mackauer and Stary 1967, Mackauer 1968, Tobias 1976b, 1986, Mason 1981a, 1983, van Achterberg 1984, Quicke and van Achterberg 1990, Shaw and Huddleston 1991, Wharton et al. 1992, 1997, van Achterberg and Quicke 1992). There have been numerous changes in the subfamily classification, and shifts in rank are commonplace. In the same year, for example, Sharkey (1993) and van Achterberg (1993) recognized 29 and 43 subfamilies, respectively, in the Braconidae. As subfamilies, tribes, and subtribes are either combined into larger units or split into smaller ones, it is essential to know which family-group names are available, and which have priority. The following discussion on available family-group names is therefore offered to facilitate the correct application of family-group names to braconid taxa. We welcome further discussion on this matter.

INTERNATIONAL CODES OF ZOOLOGICAL NOMENCLATURE

As noted by Menke (1997), there have been detailed presentations on how the Third Edition of the International Code of Zoological Nomenclature (ICZN 1985) applies to family-group names in other groups of Hymenoptera (Fitton and Gauld 1976, Michener 1986). The recently published Fourth Edition (ICZN 1999) contains only a few pertinent additions. We therefore present a brief discussion here, focusing on those provisions of particular relevance to the Braconidae. Some knowledge of the history of braconid classification relative to the development of various Codes or Règles is also necessary for a complete understanding of the rationale for earlier name changes. Prior to the publication of the 1961 version of the Code (ICZN 1961), for example, replacement of a family-group name was a standard and acceptable practice when its type genus was discovered to be a junior synonym. This practice was disallowed under the 1961 Code for names falling into synonymy after 1960. Nevertheless, some of the older replacement names have become well established in the Braconidae, and are still used today (Article 40.2).

Names not based on genera are not available (Article 11.7). This applies to the names used by Wesmael (1835) to group...
genera within the Braconidae, names that were nevertheless adopted by most subsequent authors through the first half of the 20th century. A family-group name proposed after 1930 must also be accompanied by a statement of characters differentiating the group, or reference to same, or be a replacement name (Article 13). Though there are few such cases in the Braconidae, it is not always clear when these names have met the criteria for availability in subsequent publications. Article 13.2.1, a new section added to ICZN (1999), further complicates this problem.

Articles 35.4 and 40.2 apply to the authorship and dates of availability of family-group names affected by replacements for unjustified emendations or synonyms. We agree with Menke (1997) that the results are not particularly satisfying (since a name could then become available before the birth of its author), but we accept this, and have noted those cases below. Similarly, there are a few family-group names in the Braconidae that are invalid because the type genus is a junior homonym (Article 39).

ASSessment of Relevant Literature

The works of Nees von Esenbeck (1812, 1814, 1816) represent the first attempt to establish a hierarchical framework for the Braconidae. Working in close association with Gravenhorst, who had just published his first significant monograph on the Ichneumonidae (Gravenhorst 1807), Nees concentrated on the “Ichneumonides asciti,” which contained the species now included in the Braconidae. In this series of papers (dated 1811–1813, but actually published from 1812–1816), Nees used the word “familia” to denote both groups of species within a genus as well as groups of genera. He also gave collective names to some of these groups of species and two of the groups of genera. The collective names used in this series of papers include names later used to establish formal generic and suprageneric categories in subsequent papers (Nees von Esenbeck 1819, 1834). The collective names so used by Nees were Chelones, Sigalphi, Microgastreres (-i), Agathidies, Bracones, and Bassi. The first four names were clearly used in the sense of groups of species within a genus, though this is not apparent unless all three parts of the series are examined. The genus Sigalplus Latreille, for example, was divided into “Familia I. Sigalphi” (Nees von Esenbeck 1816, p. 247) and “Familia II. Cheloni” (Nees von Esenbeck 1816, p. 260). The 18 nominal species treated by Nees (1816) under his “Familia II. Cheloni” were all listed in binominal form with Sigalplus as the genus name. These four names thus do not satisfy Article 11.7.1.2 (ICZN 1999) for establishment of family group names. Nevertheless, there has been some confusion in this regard, with the subfamily names Agathidinae, Cheloninae and Microgastrinae variously attributed to Nees, Blanchard (1845) or Foerster (1862) over the past 30 years.

The names Bracones Nees von Esenbeck, 1812 and Bassi Nees von Esenbeck, 1812, however, were used in a hierarchical sense to denote suprageneric groups. The nominal genera included in Bracones were Stephanus Jurine, Bracon F., Microgastrer Latreille, Microdus Nees, and Agathis Latreille (Nees von Esenbeck 1812, 1814). Nominal genera included in Bassi were Bassus Nees, Eubazus Nees, Helcon Nees, Sigalplus, and Ichneutes Nees (Nees von Esenbeck 1814, 1816). Bracones and Bassi are the oldest available family group names known to us for members of what is now the family Braconidae. The family name Braconidae can thus be attributed to Nees (1812). Bassinae Nees (available from Nees 1812, but not completely described until Nees 1814, p. 200) is unfortunately problematic, since it is based on Bassus Nees, 1814. Nees (1814) inexplicably proposed the name Bassus for Alysia Latreille, 1804, citing Latreille’s Alysia on the line follow-
ing "Bassus mihi." Nees (1814) failed to cite the use of the name Bassus by Fabricius (1804), which, based on the accepted type species Ichneumon calculator F., 1798, belongs to the Agathidinae rather than the Alysiinae. While it is also possible that Nees simply misidentified Bassus Fabricius (following the interpretation of Bassus by Spinola (1808) and others), Nees (1814) nevertheless used the term "mihi" when describing Bassus, leading to uncertainty in the application of the name. The family group name Bassi is thus based on a junior objective synonym (of Alysiia) as well as a junior homonym (of Bassus F.).

Nees (1819) eventually recognized Alysiia, and later (Nees 1834) replaced the family group name Bassi with Alysiioideorum. Earlier, however, Leach (1815) proposed Alysiida and Stephens (1829) proposed Alysiidae as family-group names for the species placed in Alysiia. Thus, the subfamily name Alysiinae dates from Leach (1815), though it is often credited to Stephens (1829). Since the family group name Bassi was replaced well before 1961, and the replacement name has won general acceptance, Article 40.2 (ICZN 1999) would appear to apply, and Bassinae would therefore become a synonym of Alysiinae. Nevertheless, Article 39 (ICZN 1999) also applies, and Bassinae, based on a junior homonym, is thus invalid.

If, however, Bassus Nees is treated as a misidentification of Bassus Fabricius, then Bassinae could be viewed as a senior synonym of Agathidinae. As stability would be affected in this case (by the resurrection of Bassinae after 163 years), Articles 41 and 65 (ICZN 1999) apply, and the matter would have to be referred to the Commission. As all internal evidence points to Bassus Nees as a separate taxon from Bassus F., it seems logical to treat Bassinae as invalid due to homonymy of the type genus.

The first three family-group names applicable to our current concept of the family Braconidae were thus proposed by Nees (1812) and Leach (1815). Several other early workers, some predating Nees, presented classifications or arrangements of parasitic wasps in general or ichneumons in particular. Several adopted the names proposed by Nees (1812, 1814, 1834) and Leach (1815) to designate groups of genera, while others proposed additional names. Most of the newly proposed names in these early publications were not based on included genera and thus do not satisfy the requirements of the current Code of Zoological Nomenclature (ICZN 1999) for availability of family-group names. To our knowledge, only two other authors proposed valid, family-group names prior to the work of Foerster (1862). These were Haliday (1833b) and Blanchard (1845).

Haliday (1833a) presented an outline of his classification of the parasitic Hymenoptera of Britain, then filled in the outline with descriptions of the genera and species in subsequent issues of the Entomological Magazine. In a "Tabula Synoptica," Haliday (1833b) proposed a division of Nees’ Ichneumones ascitici into 4 tribes: Aphidini, Sigalphini, Braconii, and Agathenses. The currently used family-group names Agathidinae, Aphidiinae, and Sigalphinae should therefore be attributed to Haliday (1833b). Haliday’s proposal of valid family-group names is often overlooked because Haliday did not use these names in the remainder of his work, and later, Haliday (1840) unfortunately abandoned this arrangement in favor of the divisions used by Wesmael (1835). Wesmael’s names (Cyclostomes, Areolaires, Polymorphes, and Cryptogastres), though unavailable from the standpoint of formal family-group taxa, were nevertheless widely used by subsequent authors well into the 20th century.

Blanchard (1845) was the next author to propose new family-group taxa in a manner consistent with the Code. Blanchard (1845) arranged the braconid genera known to him into six named groups. Four of these had already been proposed as family-group names (Nees 1812, Leach 1815, Haliday...
1833b). The remaining two, Hybrizonites (containing *Hybrizon F.*, *Ephedrus* Haliday, and *Praon* Haliday) and Opites (containing 17 genera), are the oldest valid and available names for their respective family-group taxa. The subfamily name Opinae thus dates from Blanchard (1845). Blanchard clearly states that he followed the classification of earlier authors fairly closely, but his hierarchical arrangement and use of names based on included genera makes it easier to recognize these unequivocally as family-group taxa. Poxylommatinae is currently treated as a subfamily within Ichneumonidae, and as a senior synonym of Hybrizontinae. Previously (Shenefelt 1969, Mason 1981b) the oldest family-group name for this taxon was thought to be Pachylommatoidae Foerster, 1862.

Throughout the 19th century, the family-group name based on *Sigalphus* Latreille was largely used in a very different sense than it is today. Blanchard (1845) presented a clear picture of the earliest use of the name for a group of genera containing *Sigalphus*, *Chelonus* Jurine, and *Triaspis* Haliday. When used in this sense, Sigalphinae is thus a senior synonym of Cheloniinae. After Foerster’s (1862) description of the Chelonioidae, and his separation of Chelonioidae from Sigalphoidae, however, the subfamily name Sigalphinae was generally misapplied to a group of helconines now known as the Brachistini. It was not until Vierreck (1914) finally tied the name *Sigalphus* to its correct type species that the subfamily name took on its present meaning (Baker 1926).

Most of the better-known subfamily and tribal names in use today date from the work of Foerster (1862), who proposed a large number of family-group names for the Braconidae. Foerster proposed the following as new: Chelonioidae and Microgasteroidae (validating the species group names used by Nees), Blacoidae, Brachistoidae, Dacnusoidae, Diospiloidae, Doryctoidae, Eumicrodoidae, Euphoroidae, Euspathioidae, Exothecoidae, Helconoidae, Hormioidae, Ichneutoidae, Liophronoidae, Macrocentroidae, Perilotoidea, Rhysaloidae, and Rogadoidea. Of these names, Liophronini is currently treated as a synonym of Euphorini within the Euphorinae (based on the classification of Shaw (1985)), Euspathioidae is based on an unjustified emendation (*Euspathius* Foerster, 1862) of *Spathius* Nees, 1819 within the Doryctinae, and Eumicrodini may also be based on an unjustified emendation, though unlike *Euspathius*, Foerster did not explicitly propose *Eumicrodus* Foerster, 1862 as an emendation for *Microdus* Nees, 1814 (only implying as much by his selection of the same type species). Eumicrodini could therefore also be interpreted as an unused senior synonym of Microdini (as the latter is defined by Sharkey (1992)) within the Agathidinae. With the exception of these three (Liophronoidae, Eumicrodoidae, Euspathioidae), all other family-group names proposed by Foerster (1862) are currently in use as either tribes or subfamilies within the Braconidae. In those cases where several of these taxa are combined as tribes under a single subfamily, the priority of the subfamily name has been established solely on the basis of historical usage (essentially following a first reviser principle). Thus, Diosplini is treated as a tribe of Helconinae and not vice versa. The same is true for the tribal classification of the Doryctinae and Euphorinae. Only in the case of the names Hormiinae and Exothecinae has lack of consistent usage as well as uncertainties regarding relationships led to problems of priority, as explained by Wharton (1993).

Marshall (1872) was the first to use the correct form for Foerster’s Euspathioidae when he proposed the family-group name Spathiides. Based on Article 35.4 (ICZN 1999), the valid family-group name must be based on the name *Spathius*, and should be attributed to Foerster (1862) despite the priority of usage of the correct form of the name by Marshall (1872). Marshall (1872)
is often overlooked as a source for newly proposed family-group names, with most authors incorrectly referring to his later publications, or sometimes to Parfitt (1881) for the family-group names Spathi- ides and/or Calyptides. Similarly, the family-group name Pambolides was first published by Marshall (1885), though Marshall (1887) or Marshall in Cresson (1887) is sometimes cited. Calyptinae (-ini) and Pambolinae (-ini) thus date from Marshall (1872) and Marshall (1885) respectively. As explained in detail by Mason (1974), the names Brachistinae and Brachistini have priority over Calyptinae and Calypti even though the latter were widely used prior to Mason’s (1974) publication. The spellings Rhogas and Rhogadinæ, which are unjustified emendations, date from Marshall (1872).

In 1887 both Cresson (as Meteorinae) and Marshall (as Meteorides) used a family-group name based on the generic name Meteorus Haliday. In the report dated 26 May 1887 (Transactions of the American Entomological Society 1887: v), Cresson’s paper is listed as an addition to the Society’s library. Marshall’s contribution is published in the June issue of the Transactions of the Entomological Society of London, and thus was published after Cresson’s. Meteorinae (-ini) therefore dates from Cresson (1887), even though Cresson (1887) cites Marshall for kindly sending him a preprint of his manuscript on the British fauna. The family group name Toxoneurinae also dates from Cresson, 1887. This name was replaced with Cardiochilinae by Ashmead (1900a, 1900b) when Ashmead sank Toxoneuron Say, 1836 as a junior subjective synonym of Cardiochilus Nees, 1819. Though Toxoneurinae has priority, Cardiochilinae has gained widespread acceptance (ICZN 1999, Article 40.2), and should thus be used as the valid name for this taxon even though Toxoneuron has recently been reinstated (Whitfield and Dangerfield 1997).

William H. Ashmead is responsible for several family-group names, all published in 1900. Slight confusion has arisen, however, because many of the names proposed by Ashmead were transmitted to several workers in applied entomology prior to the appearance of Ashmead’s (1900b) Classification of the Ichneumonoidea, and a few of the family-group names thus first became available in these other works. Despite the complexities of this matter, the names Aphyrastobraconinae (-ini), Cardiochilinae (-ini), Euurobraconi- nae (-ini), Orgilinae (-ini), Trioxinae (-ini), and Zelinae (-ini) should all be attributed to Ashmead, with Cardiochilinae and Orgi- linæ in Ashmead (1900a) and the rest in Ashmead (1900b). Ashmead (1900a, 1900b) also appears to have been the first to use Microdini in place of Foerster’s Eumicrodoidæ, though no specific reason was offered. As with Spathinae, however, the family-group name Microdini should probably be attributed to Foerster (1862), since Eumicrodus appears to be an unjustified emendation of Microdus (ICZN 1999, Article 35.4). Fourteen other authors each proposed a single family-group name during the first half of the 20th century. Only Szépligeti, Viereck, Enderlein and Fahringer proposed more than one during this period. The publications by Marshall (1885, 1887, 1888, 1889, 1891), Marshall in Dalla Torre (1898), Ashmead (1900b), and Szépligeti (1904) did much to promote the use of a standard set of subfamily names in Braconidae during the 20th century, even though these names were still frequently placed within the framework of Wesmael’s older groupings.

The works of Viereck (1914, 1918, 1919, 1921) are especially noteworthy as they provide explicit designations for the type species of genera and thus a clear meaning for the family-group names based on these genera. Subsequent authors have disagreed with several of Viereck’s interpretations, but the value of Viereck’s work lies in his attempt to provide stability for ichneumonoid classification through a rig-
orous application of the type species concept (following adoption of a set of rules for zoological nomenclature in 1901 (Règles 1905)). Gahan’s (1917) use of the subfamily name Vipinae and Viereck’s (1918) subsequent adoption of Vipionidae for nine subfamilies formerly included in the Braconidae were a direct result of Viereck’s (1914) interpretation of the type species of the genus *Bracon*. This particular interpretation led to a transfer of the name *Bracon* to the group known then and now as the Agathidinae. Viereck (1914) also corrected previous designations for the type species of *Sigalphus* Latreille, and further noted the possibility that *Incubus* Schrank was a senior synonym of *Aphidius* Nees. These and other actions resulted in several major changes in generic concepts and the consequent proposal of several new family-group names as replacements for existing ones no longer deemed appropriate (e.g., Bridwell 1920, Essig 1942). To counter this, various petitions (e.g., for *Bracon*) were made to the International Commission of Zoological Nomenclature to fix certain generic concepts, leading to re-establishment of the older names used by Marshall in Dalla Torre (1898), Ashmead (1900b), and Szépligeti (1904).

From the standpoint of newly proposed family-group names, the last major author of the first half of the 20th century was Fahringer. Fahringer (1928, 1929, 1930, 1936) proposed numerous new names for suprageneric taxa, principally in his monumental work, *Opuscula Braconologica*, published in several fascicles over a 12 year period. Most of the tribal and subtribal names he proposed were properly formed and thus available, but a few of them (such as the subtribe Longiradiilii) are not because they are not based on generic names. Fahringer also provided what appear to be valid family-group names for two sections (a suprageneric category he used below subtribe).

Aside from Mackauer’s (1961) proposal of seven new family-group names for aphidiines, there were relatively few new suprageneric taxa described from 1940–1969. By contrast, there were as many new family-group names proposed from 1970–1998 as there were from 1812–1969. About 50 of the names proposed after 1969 were based on newly described genera, with nearly all of these representing new discoveries of unusual taxa rather than mere splitting of existing genera. Most of the remaining family-group taxa described after 1969 represent attempts to add structure to larger subfamilies such as the Agathidinae, Doryctinae, Euphorinae, and Opinae. Major works containing new family-group names during this period include those of Fischer (1970, 1981a), van Achterberg (1979c, 1984a, 1988, 1995), Mason (1981a), Shaw (1985), Tobias (1987), Zettel (1990), Belokobylskij (1992, 1993), and Sharkey (1992).

A few of the family-group names first proposed after 1930 apparently do not meet the criteria for availability set out in Article 13 of the previous edition of the Code (ICZN 1985). Under this provision, names proposed in catalogues, if such names were unaccompanied by descriptions, are unavailable (e.g., Cosmophorinae Muesebeck and Walkley, 1951). However, a new provision, Article 13.2.1 (ICZN 1999), provides an exception for names (such as Cosmophorinae) proposed between 1930 and 1961. Article 13 may also apply to names first proposed in discussions of relationships among higher taxa, when there is no clear statement on how the newly named taxon is differentiated (e.g., Capek 1965). In such cases, it is also difficult to determine when these names first meet the criteria of availability. We have noted these problems in brackets in the chronological list below, as well as our proposals for when the names first became available. Our findings are summarized below in two forms: a chronological list of all family-group names known to us and an appendix of all proposed names in alphabetical order.
CHRONOLOGICAL LIST OF FAMILY-GROUP NAMES IN BRACONIDAE, USING SPELLINGS AS ORIGINALLY PROPOSED

The list below contains all family-group names known to us with the exception of those not based on generic names. Names are followed by their author, date first proposed, and page number where the name is first found. Complete citations for each author are in the Literature Cited. We are aware that there are many variant spellings that have been used subsequent to the first proposal of these names (especially before standardization of endings for family-group names), but we have not treated them here. We have focused our attention on the priority of names, and have thus also avoided discussion of the important issue of correct spellings for the most part. Where useful, we include additional information on validity and availability in brackets, especially for younger names thought to have had priority.

Bracones Nees, 1812: 3.
Bassi Nees, 1812: 3 [invalid name; based on junior homonym (Bassus Nees, 1814, not Bassus Fabricius, 1804)].
Alysiada Leach, 1815: 143 [= Alysiidae Stephens, 1929: 355].
Cheloni Nees, 1816: 260 [unavailable name, see introduction].

Aphidini Haliday, 1833b: 482.
Sigalphini Haliday, 1833b: 482 [= Sigalphites Blanchard, 1845: 157].
Agathenes Haliday, 1833b: 482 [= Agathites Blanchard, 1845: 157].
Euspathioidae Foerster, 1862: 227.
Hecaboloidae Foerster, 1862: 227.
Dorcytoidae Foerster, 1862: 227.
Hormioiidae Foerster, 1862: 227.
Rogaidoidea Foerster, 1862: 228.
Rhyssaloidae Foerster, 1862: 228.
Chelonoidae Foerster, 1862: 228.
Microgasteroidae Foerster, 1862: 228.
Eumicrodoidae Foerster, 1862: 228.

Perilitoidae Foerster, 1862: 228.
Brachistoidae Foerster, 1862: 229.
Blacoidae Foerster, 1862: 229.
Liophronoidae Foerster, 1862: 229.
Ichneutoiidae Foerster, 1862: 229.
Helconoidea Foerster, 1862: 229.
Macrocentroidae Foerster, 1862: 229.
Diospiloidae Foerster, 1862: 229.
Daicusoidae Foerster, 1862: 229.
Exothecoidae Foerster, 1862: 279.
Metereinae Cresson, 1887: 55.
Toxoneurinae Cresson, 1887: 55.
Orgilini Ashmead, 1900a: 590.
Cardiochilinae Ashmead, 1900a: 592.
Microdini Ashmead, 1900a: 592.
Alloelini Ashmead, 1900b: 104.
Aphrostobracinini Ashmead, 1900b: 136.
Euurobroacini Ashmead, 1900b: 136.
Trioxini Ashmead, 1900b: 113.
Zelini Ashmead, 1900b: 118.
Cenocoelonidae Szépligeti, 1901: 353.
Gnathobracininae Szépligeti, 1904a: 2.
Mimagathidinae Enderlein, 1905: 449.
Holocabraconini Cameron, 1905: 90.
Leiophronininae Schmiedeknecht, 1907: 511 [first correct spelling of Liophronoidae Foerster, 1862].
Helorimorphinae Schmiedeknecht, 1907: 511.
Microtypinae Szépligeti, 1908: 426.
Capitonidae Viereck, 1910: 616.
Trachypetinae Schulz, 1911: 85.
Stephaniscinae Enderlein, 1912: 1 [invalid name, based on junior homonym].
Psenobolini Enderlein, 1912: 2 [= Psenobolina Belokobylskij, 1992: 922].
Pseudospathiini Enderlein, 1912: 2.
Vipiinae Gahan, 1917: 196 [= Vipioninae Viereck, 1918: 69].
Zelinae Viereck, 1918: 69.
Bassinae Viereck, 1918: 70.
Triaspininae Viereck, 1918: 71.
Pelecyctominae Viereck, 1918: 71.
Neoneurinae Bengtsson, 1918: 27.
Coeliniinae Viereck, 1919a: 48.
Stantoninae Viereck, 1919b: 198.
Ypsistocerinae Cushman, 1923: 54.
Aleiodinae Muesebeck, 1928: 901.
Atanycoloidea Fahringer, 1928: 7 [proposed as a Sectio].
Iphialacoidae Fahringer, 1928: 7.
Habrobraconini Fahringer, 1928: 7.
Gastrothecini Fahringer, 1928: 7 [incorrectly attributed to Foerster; invalid name, based on junior homonym].
Phanomerini Fahringer, 1928: 7.
Acanthobraconini Fahringer, 1928: 7.
Rhaconotini Fahringer, 1928: 8.
Pseudostephaniscini Fahringer, 1928: 8 [unavailable, not based on a valid generic name].
Baeocentriini Fahringer, 1928: 8.
Histeromerini Fahringer, 1930: 121.
Incubinae Brues and Melander, 1932: 482 [published as junior synonym of Aphidiinae].
Chiviniini Shestakov, 1932: 258.
Pseudodicrorganiiinae Fahringer, 1936: 572.
Aneurobraconinae Fahringer, 1936: 587.
Incubidae Essig, 1942: 644 [first valid treatment of name, which then becomes available as of 1932 (ICZN 1999, Article 11.6.1)].
Minangina De Saeger, 1948: 71.
Odontobraconinae Granger, 1949: 17.
Cosmophorinae Muesebeck and Walkley, 1951: 183 [nomen nudum but possibly valid under Article 13.2.1].
Neobraconinae Hellén, 1957: 33 [nomen nudum; attributed to Fahringer, thus probably a misspelling of Neorhacodinae].
Chremylini Hellén, 1957: 34.
Acrisidini Hellén, 1957: 35.
Ephylini Hellén, 1957: 36.
Coeloidini Tobias, 1957: 1347.
Cosmophorinae Čapek, 1958: 153 [the first publication in which this name satisfies criterion of availability under Article 13.1].
Iseurini Hedqvist, 1959: 486 [incorrectly included in Megalyridae].
Lysiphlebina Mackauer, 1961: 800.
Muesebeckiini Mason, 1969: 263.
Ademonini Fischer, 1970: 82.
Pokomandyina Fischer, 1970: 86.
Mesostoinae van Achterberg, 1975: 158.
Zemiotini van Achterberg, 1976: 44.
Betylbraconinae Tobias, 1979: 130.
Cercobaraninae Tobias, 1979: 134.
Amicrocentrinae van Achterberg, 1979a: 1.
Xiphozelinae van Achterberg, 1979b: 29.
Evaniodini Fischer, 1981a: 44.
Binareina Fischer, 1981a: 45.
Dendrosotina Fischer, 1981a: 45.
Stenocorsina Fischer, 1981a: 45.
Heterospilini Fischer, 1981a: 45.
Neoclincenrtrina Fischer, 1981a: 45.
Mononeurina Fischer, 1981c: 47.
Adeshini van Achterberg, 1983b: 175.
Dirrhopinae van Achterberg, 1984a: 41.
Acampsini van Achterberg, 1984a: 41 [apparent nomen nudum].
Dyscoletini van Achterberg, 1984a: 41 [apparent nomen nudum].
Leptorhaconotini van Achterberg, 1984a: 41 [apparent nomen nudum].
Aspidobraconina van Achterberg, 1984b: 137.
Physaraiaina van Achterberg, 1984b: 137.
Dinocampini Shaw, 1985: 277.
Townsilitini Shaw, 1985: 277.
Microtonini Shaw, 1985: 277.
Loxocephalini Shaw, 1985: 277 [apparent nomen nudum; also invalid based on junior homonym].
Syntretini Shaw, 1985: 277.
Vaepellinae Quicke, 1987a: 73.
Bathyaulacini Quicke, 1987b: 43.
Lissogastrini Oltra and Michela, 1988: 165.
Chalaropini van Achterberg, 1988: 3.
Hydrangeocolinai Whitfield, 1992: 274 [possibly a nomen nudum].
Excluded names (not Braconidae):
Hybrizonites Blanchard, 1845: 155 [belongs to Ichneumonidae, as senior synonym of Paxyllommatinai Foerster].

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**APPENDIX 1**


Acampsoni van Achterberg and Austin, 1992 (Sigaliphinae)
Acampsophelenonini Tobias, 1987 (Cenocoeliinae)
Acanthobraconini Fahringer, 1928 (Bracoininae)
Acanthodorictina Belokobylskij, 1992 (Doryctinae)