Synopsis of the Agathidinae (Hymenoptera: Braconidae) of America north of Mexico

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Конспект таксонов подсемейства Agathidinae (Hymenoptera: Braconidae) фауны Америки севернее Мексики

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Abstract. The species of the Agathidinae of America north of Mexico are reviewed and a check list is provided. A total of 99 species are recognized. One new synonymy is proposed: Agathis malvacearum Latreille 1805 = Agathis metzneriae Muesebeck 1967, syn. n. One name is replaced: Agathis yui, new name for Bassus brevicornis Muesebeck, 1927. Seven new combinations are proposed: Bassus aciculatus (Ashmead), Bassus cupressi (Muesebeck et Walkley), Bassus semirubra (Brullé), Coccyygidiuim arizonensis (Ashmead), Coccyygidiuim fascipennis (Cresson), Earinus rufofemoratus (Muesebeck). Earinus unicolor (Schrottky). Crempnops desertor (Linnaeus) is recorded in the New World for the first time. A key to genera occurring in the region is provided and each genus is given a brief overview. The limits of the genus Earinus are expanded to include some species that lack a complete RS+M vein in the forewing.

Key words. Hymenoptera, Agathidinae, genera, species, new synonym, new combinations, America north of Mexico.

Резюме. Дается список 99 видов подсемейства Agathidinae, отмеченных в Америке севернее Мексики. Установлен новый синоним: Agathis malvacearum Latreille 1805 = Agathis metzneriae Muesebeck 1967, syn. n. Заменено видовое название: Agathis yui Sharkey, новореактивировано Bassus brevicornis Muesebeck, 1927. Предложены семь новых комбинаций: Bassus aciculatus (Ashmead), Bassus cupressi (Miesebeck et Walkley), Bassus semirubra (Brullé), Coccyygidiuim arizonensis (Ashmead), Coccyygidiuim fascipennis (Cresson), Earinus rufofemoratus (Muesebeck) и Earinus unicolor (Schrottky). Crempnops desertor (Linnaeus) впервые упоминается для фауны Нового Света. Дается определительная таблица родов этого региона, каждый род кратко обсуждается. Расширились границы рода Earinus благодаря включению в него нескольких видов без жилки RS+M в переднем крыле.

Ключевые слова. Hymenoptera, Agathidinae, роды, виды, новый синоним, новые комбинации, Америка севернее Мексики.

Introduction

Taxonomic studies of the insect fauna of the Nearctic region have largely been restricted to regional treatments delimited by the borders of Canada and the continental United States. There were cultural and practical reasons for restricting research to the confines of these political borders. These coun-
tries share a common language and a long history of taxonomic study. Furthermore, since the Canadian fauna is generally a subset of the fauna of the United States, it is relatively simple for American taxonomists to include the Canada fauna. Finally, restricting a study region to political borders is much easier than deciding on the southern limits of the Nearctic realm. To perpetuate this practice is not my wish but rather I attempt to summarize the current state of agathidinae taxonomy in the region. Hopefully, in the future, students interested in North American Agathidinae and other braconid subfamilies will revise the fauna of monophyletic taxa or natural regions such as the New World or Nearctic realms. This appears to be the new paradigm, for example, Sharkey (1988) revised the species of Alabagrus of the New World. Pucci and Sharkey (2004) revised the species of Agathirsia of the New World, and a revision of Crassomicroodus of the New world is in progress (Figueroa, in prep.).

Starting points for systematic studies of the North American agathidinae fauna are still Muesebeck's (1927) species-level revision of the subfamily, and Marsh's (1979) catalogue of the braconid fauna of North America north of Mexico. Since these publications appeared many new species have been described and generic concepts and nomenclature have changed, making Muesebeck's (1927) keys and Marsh's catalogue rather obsolete.

The purposes of this paper are to provide a new key to the agathidinae genera found in the United States and Canada, to formally re-assign all described species to reflect modern generic concepts, and to list all species of Agathidinae known to occur in the region. Generic concepts are discussed below under each currently recognized genus. Seven new combinations, one new synonymy, and one new record for the fauna of Canada and the USA are reported.

This paper is dedicated to Professor Vladimir I. Tobias in recognition of the many important contributions that he has made towards our understanding of the biological and taxonomic diversity of the Braconidae.

Key to genera of Agathidinae

1. Foreclaw cleft (Fig. 2, d) .......................................................... 2
   - Foreclaw simple (Fig. 2, c) or with a squared or rounded lobe (Fig. 2, b) .................. 3

2(1). Face elongate (Figs. 2, a; 8): base of foreclaw pectinate (Fig. 2, d), ovipositor sheath longer than half length of metasoma (Fig. 8) ........................................ Cremnops
   - Face not elongate (Fig. 7): base of foreclaw not pectinate; ovipositor sheath shorter than half length of metasoma (Fig. 7) ........................................ Cocygidium

3(1). Forewing vein (RS+M)a complete (Fig. 9) ........................................ Earias s. str.
   - Forewing vein (RS+M)a mostly absent (Fig. 6) ........................................ 4

4(3). Notauli completely absent (Fig. 9) ........................................ 5

Fig. 1. Wings: a — Agathirsia testacea; b — Crassomicroodus divisus.
Overview of Genera

Agathirsia Westwood, 1882 (Fig. 1, a)

Members of the genus Agathirsia are found only in the New World and the distribution of the genus is restricted to the United States and Mexico. Pucci and Sharkey (2004) revised the 31 known species.
eight of which are found in the United States, and included an updated key to distinguish Bassus, Crassonicrodus, Agathis, and Agathirsia from other agathidine genera found in the Nearctic region. This publication resolved some confusion concerning the limits between Agathirsia and Crassonicrodus and autapomorphies were proposed for each genus for the first time.

Agathis Latreille, 1804 (Fig. 4)

*Agathis* appears to be cosmopolitan, but I am unaware of any species from Australia and members may not occur there. Generally *Agathis* and *Bassus* have been treated as distinct genera; however Muesebeck (1927) synonymized the two and the Nearctic fauna have been treated together with *Bassus* under the name *Agathis* by Muesebeck (1927), Shenefelt (1970) and Marsh (1979). Recent studies of the Palearctic fauna (Telenga. 1955; Tobias. 1986; Nixon, 1986; Chou, Sharkey, 1989; Simbolatti, Achterberg, 1992, 1999; Sharkey, 1996) treat *Agathis* and *Bassus* as separate genera. Sharkey (1985) discussed the morphological characteristics of *Bassus* and *Agathis* and went as far as to place the genera in separate tribes in his analysis of the subfamily (Sharkey, 1992). The check-list in this paper separates the North American species into the genera *Agathis* and *Bassus* for the first time. Most species under *Agathis* in Marsh’s (1979) catalogue are members of *Bassus*.

Since Muesebeck’s (1927) paper, Sharkey and Mason (1986) synonymized *Anigmostomus* and its only included species *A. longipalpus* under *Agathis*.

Only seven species of *Agathis* are recorded in North America and this represents less (perhaps much less) than half of the common species. For this reason Muesebeck’ (1927) key is quite inadequate. I warn the prospective student that the species limits of members of this genus may be difficult to ascertain.

Due to convergent morphologies, a few species of *Bassus* and *Agathis* are difficult to assign to genus. For example, I consider *Agathis pumilus* to be a member of *Agathis* whereas European authors (Nixon, 1986; Simbolatti, Achterberg, 1992, 1999) place it in *Bassus*. Undoubtedly, molecular studies will resolve this issue in the near future.

Alabagrus Enderlein, 1918 (Fig. 5)

Members of *Alabagrus* are restricted to the New World and are primarily Neotropical in distribution. *Alabagrus* was synonymized under *Agathis* until Sharkey (1988) revised the genus. In Muesebeck’s (1927) key to *Agathis*, couplets 2–6 refer to species of *Alabagrus* but some of these names have been

![Fig. 3. Posterior views of mesosoma (hind legs and metasoma removed and darkened areas are the cavities — foramina — into which the legs and metasoma attach): a — typical of *Agathis* and *Eurinus*, the metasomal and hind coxal cavities are united; b — *Bassus* sp., showing strong scleritization (and carina) between the hind coxa cavities and that of the metasoma, in most species of *Bassus* the sclerite is not so wide.](image-url)
synonymized by Sharkey (1988) and the key from this paper should be consulted for identification. Of the 104 included species only six have been found in the United States.

**Bassus Fabricius, 1804 (Fig. 6)**

In Muesebeck's (1927) key to "Agathis", the species of couplets 2–6 have been transferred to *Alabagrus* (Sharkey, 1988); those of couplets 31–32 are members of *Agathis* s. str.; and *A. rufofemoratus* (Muesebeck, 1927, couplet 10) is here transferred to *Eurinus*. All other species belong to the poorly delimited, polyphyletic genus *Bassus*. Eleven species of *Bassus* have been added as newly described species or as introduced exotics since Muesebeck’s (1927) publication so it is of limited value.

**Coccygidiun Saussure, 1892 (Fig. 7)**

This is a large cosmopolitan genus, primarily tropical in distribution, with only a small percentage of species occurring in temperate regions. Only two species are recorded from the United States. Both

Fig. 4. Lateral habitus of *Agathis* sp.
were placed in the genus *Zelomorpha*, which Chou and Sharkey (1989) synonymized under *Coccygidiium*. Sarmiento (in prep.) is currently revising the New World members of the genus and estimates (pers. comm.) that five to ten species occur in southern areas of the United States.

*Crassonicrodus* Ashmead, 1900 (Fig. 1. b)

Members of *Crassonicrodus* are found almost exclusively in North America with the highest species diversity occurring in Mexico. One undescribed species is found in the dry northeastern coastal region of Colombia, and presumably adjacent regions of northwestern Venezuela. Eight species are re-

Fig. 5. Lateral habitus of *Alabagrus texanus*. 139
corded in North America, with seven described and keyed in Muesebeck's (1927) key. All species of *Cressonomicrodos* are currently being revised (Figueroa, in prep.), and this revision will result in the synonymy of two presently recognized species found in the United States and 8 to 10 newly described species for the United States (Figueroa, pers. comm.).

*Cremnops* Förster, 1862 (Fig. 8)

The North American members of this large cosmopolitan genus have been revised twice, once by Morrison (1917) under the name *Bracon* and the second time by Marsh (1961). Fifteen species are currently recognized in the United States and Canada. All are described and keyed in Marsh's (1961) revision except for *Cremnops desertor*, a Palearctic species recorded here for the first time as occurring in the New World. Specimens have been collected in Ottawa, Canada, and Washington, D.C. USA. Marsh's (1961) key works well for those species with distinct morphological autapomorphies; however, I have difficulty placing many of the specimens that I try to identify.

*Earinus* Wesmael, 1837 (Fig. 9)

The traditional limits of *Earinus* have confined members to those that occur in the Holarctic region and that have a complete Rs+M vein in the forewing. A complete Rs+M vein, since it is found in all near relatives of the Agathidinae including members of *Pselaphanus* and Siganophinae, is almost certainly a plesiomorphic character state within the context of the Agathidinae. The sole autapomorphies for the Einini, to which *Earinus* belongs, are the absence of notaali and the loss of the posterior transverse carinae of the propodeum. The later is shared with the Agathidini, but perhaps convergently (Sharkey, 1992). The only genera presently included in the Earini are *Sesioctonus* and *Earinus*. Briccio (2003) revised the species of *Sesioctonus*, an exclusively Neotropical genus. Species of *Sesioctonus* share a derived condition of the tarsal claws which are long and simple, lacking a basal lobe. All other species of

![Fig. 6. Lateral habitus of *Bassus spiracularis.*](image_url)
Fig. 7. Lateral habitus of Coecygidium sp.
the Earinini I place in the genus *Eurinus* which is not diagnosed by autapomorphic characters. They can be separated from all other Agathidinae, including *Sesioctomus* with the following combination of characters: third labial palpomere not greatly reduced, at least half as long as the fourth palpomere; notauli absent (Fig. 9); hind coxa and metasoma sharing a common opening on the mesosoma (Fig. 3. a); tarsal claws with a basal lobe (Fig. 2, b). As defined here, the species diversity of *Eurinus* is highest in northern and southern temperate regions as well as high altitude areas of the Neotropical region.

There were two described species of *Eurinus* in Canada and the USA but the aforementioned modification of the genus concept adds another two species. Intraspecific variation of north-temperate species of *Eurinus* is high and there may several more undescribed species in the United States and Canada.

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Fig. 8. Lateral habitus of *Cremnops* sp.
Species check-list

A total of 99 species of Agathidinae are recognized belonging to the genera Agathirsia (8). Agathis (8), Alabagrus (6), Bassus (48), Crassomerodus (8), Coecygidium (2), Cremnops (15), and Earinus (4).

A species name with an asterisk (*) beside it refers to one that is also found in the Palaeartic region.

*Agathirsia* Westwood, 1882

*bifidilingua* Pucci and Sharkey


![Lateral habitus of *Earinus* sp.](image-url)
*cressoni* Muesebeck and Walkley
  _Agathisria cressoni_ Muesebeck and Walkley, 1951: 116.
  _Microdus thoracicus_ Cresson, 1872: 181 (preoccupied by Nees von Esenbeck, 1834).

*davidi* Pucci and Sharkey
  _Agathisria davidi_ Pucci and Sharkey, 2004: 91.

*foveiseries* Pucci and Sharkey
  _Agathisria foveiseries_ Pucci and Sharkey, 2004: 92.

*nigricauda* (Viereck)
  _Crassonicorpus nigricaudus_ Viereck, 1905: 288.

*nineseven* Pucci and Sharkey

*testacea* Muesebeck
  _Agathisria testacea_ Muesebeck, 1927: 13.

*tiro* Pucci and Sharkey
  _Agathisria tiro_ Pucci and Sharkey, 2004: 105.

_Agathis_ Latreille, 1804

_Doubtful record:_ _Agathis arenolata_ Spinola, 1851. Recorded by Tooker and Hanks (2000) based on historical records. The species is otherwise known only from its type locality in Chile. The record is almost certainly based on a misidentification.

*gibbosus* (Say)
  _Bassus gibbosus_ Say, 1835: 250.
  = _Microdus castaneocinctus_ Viereck 1905: 276.
  = _Microdus meridionalis_ Viereck, 1903: 95.
  = _Microdus pygmaeus_ Cresson, 1872: 182.
  = _Agathis scrutator_ Provancher, 1886: 137.

*longipalpus* (Cresson)
  _Microdus longipalpus_ Cresson, 1865: 299.

*malvacearum* Latreille*
  _Agathis malvacearum_ Latreille, 1805: 175.
  _Ichneumon panzeri_ Jurine, 1807: 113 (unnecessary new name for _A. malvacearum_).

*Note.* I have compared the type species with numerous specimens from Europe identified as _A. malvacearum_. The host plant (the common burdock) and host moth, _Metzneria lappella_ L. of the Nearctic wasps are both Palearctic natives, and _A. malvacearum_ is recorded (Shenefelt, 1970) as a parasitoid of the same species of moth in Europe.

*pumilus* (Ratzburg)*
  _Microdus pumilus_ Ratzburg, 1844: 57.

*Note.* European authors (Nixon, 1986; Simbolotti, Acherberg, 1992) consider this species to be a member of _Bassus_.

*rubripes* Cresson
  _Agathis rubripes_ Cresson, 1872: 183.

*thompsoni* Sharkey
  _Agathis thompsoni_ Sharkey, 1987.
tibialis Provancher
  Agathis tibialis Provancher. 1880: 177.
  = Agathis parvis Vieereck, 1903: 95.

yui, new name
  Replacement name for B. brevicornis Muesebeck 1927: B brevicornis preoccupied in Bassus by brevicornis. Nees von Esenbeck, 1812 (now in Dinothema).

Note. Named in honor of Dicky Yu, for his diligent work on a catalog of the Braconidae, and for pointing out this homonym to me.

Alabagus Enderlein, 1918

Doubtful record: Alabagus varipes (Cresson) from Mount Washington. New Hampshire by Slosson (1892) as Agathis varipes. Records for this species are otherwise restricted to the Greater Antilles, and the implied disjunct is unlikely. The record is almost certainly the result of a misidentification.

imitatus (Cresson)
  Microdes imitatus Cresson, 1873: 51.
  = Microdes nigrotrachanicus Vieereck, 1905: 275.

marginatifrons (Muesebeck)
  Bassus marginatifrons Muesebeck, 1927: 30.

sanctus (Say)
  Bassus sanctus Say, 1935: 249.

stingma (Brullé)
  Agathis stingma Brullé, 1846: 501.
  = Microdes stingmaterus Cresson, 1865: 65.
  = Microdes diatraeae Turner, 1918: 82.
  = Alabagus citreistigma Enderlein, 1920: 203.
  = Microdes cruzii Brethes, 1927: 163.
  = Microdes sacchari Myers, 1931: 274.

texanus (Cresson)
  Microdes texanus Cresson, 1872: 181.

xolotl Sharkey

Bassus Fabricius, 1804

abdominalis Muesebeck
  Bassus abdominalis Muesebeck, 1927: 35.

aciculatus (Ashmead), comb. n.
  Microdes aciculatus Ashmead, 1889: 639.

acrobasidis (Cushman)
  Bassus acrobasidis Cushman, 1920: 289.

agathoides Newton et Sharkey

agilis (Cresson)
  Microdes agilis Cresson, 1873: 52.
  = Agathis quaesitor Provancher, 1880: 176.
annulipes (Cresson)
  Microdus annulipes Cresson, 1873: 53.
  = Microdus albocinctus Ashmead, 1889: 639.
  = Microdus earinoides Cresson, 1873: 54.
  = Microdus grapholithae Ashmead, 1889: 639.
  = Bassus waldeni Viereck, 1917: 229.

atripes (Cresson)
  Agathis atriipes Cresson, 1865: 296.

arthurellus Sharkey
  Bassus arthurellus Sharkey, 1985: 1500.

azygos (Viereck)
  = Microdus agathoides Viereck, 1905: 277.

bakeri Muesebeck
  Bassus bakeri Muesebeck, 1927: 42.

binominatus (Muesebeck)
  Agathis binominata Muesebeck, 1958: 26 (replacement name for M. bicolor Provancher).
  Microdus bicolor Provancher, 1880: 179 (occupied by M. bicolor Brullé).

brooksi Sharkey

butricki Viereck
  Bassus (Lytopylus) butricki Viereck, 1917: 229.

calcaratus (Cresson)
  Microdus calcaratus Cresson, 1873: 51.

californicus Muesebeck
  Bassus californicus Muesebeck, 1927: 64.

cinctus (Cresson)
  Microdus cinctus Cresson, 1873: 53.
  Microdus pimploides Viereck, 1905: 276.

cingulipes (Nees von Esenbeck)*
  Microdus cingulipes Nees von Esenbeck, 1812: 189.

Note. Introduced to Canada, establishment not confirmed.

coleophorae Rohwer

conspicuus (Wesmael)*
  Microdus (Therophilus) conspicuus Wesmael, 1837: 17.
  = Earinus zonatus Marshall, 1883: 268.
  = Bassus cardopcapse Cushman, 1915: 508.

crassicornis Muesebeck
  Bassus crassicornis Muesebeck, 1927: 43.

cupressi (Muesebeck and Walkley), comb. n.
  Bassus parvus Muesebeck, 1932: 331 (preoccupied in Agathis by A. parvus Viereck).
  Agathis cupressi Muesebeck et Walkley, 1951: 119 (replacement name).
difficultis Muesebeck
  Bassus difficultis Muesebeck, 1927: 46.

dimidiator (Nees von Esenbeck)*
  Microdot dimidiator Nees von Esenbeck, 1834: 146.
  = Microdot cingulator Ratzburg, 1852: 46.
  = Microdot laticinctus Cresson, 1873: 53.
  = Microdot earinoides Du Porte, 1915: 76.
  = Microdot ocellanae Richardson, 1913: 211.

discolor (Cresson)
  Microdot discolor Cresson. 1873: 52.
  = Bassus brittoni Viereck. 1917: 37.

erythrogastrer Viereck
  Bassus (Aerophilopsis) erythrogastrer Viereck. 1913: 555.

festivas (Muesebeck)*
  Agathis festiva Muesebeck, 1953: 149.
  = Microdot oranae Watanabe, 1970: 123.

immaculatus Gahan
  Bassus immaculatus Gahan, 1919: 118.

laticeps Muesebeck
  Bassus laticeps Muesebeck, 1927: 27.

malivorellae Shenefelt
  Agathis malivorellae Shenefelt, 1970: 342 (new name for B. brevicauda Muesebeck, not B. brevicauda Reinhard).
  Bassus brevicauda Muesebeck, 1932: 332.

nigricaus (Provancher)

nigripes (Cresson)
  Agathis nigripes Cresson, 1865: 297.
  = Agathis nigriceps Provancher, 1895: 97.
  = Agathis wyomingensis Viereck, 1905: 284.

ninanae Muesebeck

nuicola Muesebeck
  Bassus nuicola Muesebeck, 1940: 91.

perforator Provancher
  Agathis perforator Provancher, 1880: 177.
  = Bracon branfordensis Viereck. 1917: 231.
  = Agathis femorator Provancher, 1880: 177.

petiolatus Muesebeck

pini Muesebeck
  Bassus pini Muesebeck, 1940: 92.
quebecensis (Provancher)
Microodus quebecensis Provancher, 1880: 178.

reticulatus Muesebeck
Bassus reticulatus Muesebeck, 1932: 332.

rufipes (Nees von Esenbeck)
Microodus rufipes Nees von Esenbeck, 1812: 189.
= Bassus diversus Muesebeck. 1933: 48.
= Braunsia germanica Enderlein, 1904: 436.

rugareolatus Viereck
Bassus (Lytopylus) rugareolatus Viereck. 1917: 229.

semirubra (Brullé). comb. n.
Agathis semirubra Brullé. 1846: 494.

similimus (Cresson)
Microodus similimus Cresson, 1873: 51.

spiracularis Muesebeck
Bassus spiracularis Muesebeck. 1927: 38.

tenuiceps Muesebeck
Bassus tenuiceps Muesebeck, 1927: 47.

terminatus (Cresson)
Microodus terminatus Cresson, 1865: 298.
= Orgilus terminalis Ashmead, 1889: 640.

timidulus (Nees von Esenbeck)*
Microodus timidulus Nees von Esenbeck, 1812: 189.
= Microodus annae Enderlein, 1908: 223.
= Microodus victoris Telenga. 1955: 288.
= Microodus anphrievi Tobias. 1986: 288.

Note. Introduced to Ontario, Canada, but establishment unconfirmed.

usitatus Gahan
Bassus usitatus Gahan, 1919: 119.

verticalis (Cresson)
Microodus verticalis Cresson, 1872: 182.

Cocygidium Saussure, 1892

arizonensis (Ashmead), comb. n.
Zelomorpha arizonensis Ashmead. 1900: 129.

fascipennis (Cresson), comb. n.
Microodus fascipennis Cresson, 1865: 65.

Crassomicrodus Ashmead, 1900

apicipennis Muesebeck
Crassomicrodus apicipennis Muesebeck, 1927: 18.

divisus (Cresson)
Microodus divisus Cresson, 1873: 52.
= Orgilus rileyi Ashmead, 1889: 640.
fulvescens (Cresson)
  *Microdus fulvescens* Cresson, 1863: 297.

medius (Cresson)
  *Microdus mediua* Cresson, 1865: 298.

musebecki Marsh

nigriceps (Cresson)
  *Microdus nigriceps* Cresson, 1872: 182.

nigrithorax Muesebeck
  *Crassomicrodus nigrithorax* Muesebeck, 1927: 17.

pallens (Cresson)
  *Microdus pallens* Cresson, 1873: 53.

Creminops Förster, 1862

ashmeadi (Morrison)

californicus (Morrison)
  *Bracon californicus* Morrison, 1917: 331.
  = *Bracon aionos* Shenefelt, 1937: 205.

comstocki (Morrison)
  *Bracon comstocki* Morrison, 1917: 323.

crassifemur (Muesebeck)

desertor (Linnaeus)*, new record.
  *Ichnemon desertor* Linnaeus, 1758: 563.
  *Bracon deflagrator* Spinola, 1808: 101 (unnecessary new name).

haematodes (Brullé)
  *Agathis haematodes* Brullé, 1846: 495.
  = *Agathis liberator* Brullé, 1846: 502.
  = *Agathis meablis* Cresson, 1872: 183.

kelloggi (Morrison)
  *Bracon kelloggi* Morrison, 1917: 327.

melanoptera Ashmead
  *Creminops melanoptera* Ashmead, 1895: 125.

montrealensis (Morrison)
  *Bracon montrealensis* Morrison, 1917: 326.

nigrosterum (Morrison)
  *Bracon nigrosterum* Morrison, 1917: 322.

shenefelti Marsh

slossonae (Morrison)
virginiensis (Morrison)

*vulgaris* (Cresson)
   *Agathis vulgaris* Cresson, 1865: 295.
   = *Agathis exoratus* Cresson, 1872: 182.
   = *Agathis media* Cresson, 1865: 295.

*washingtonensis* (Shenefelt)
   *Bracon washingtonensis* Shenefelt. 1937: 206.

*Earinus Wesmael, 1837*

*limitarisis* (Say)
   *Bassus limitarisis* Say, 1835: 250.

*rufofemoratus* (Muesebeck), comb. n.
   *Bassus rufofemoratus* Muesebeck, 1927: 36.

*unicolor* (Schrottky), comb. n.
   *Orgilus unicolor* Schrottky, 1902: 102.
   *Agathis unicolor* Shenefelt, 1970: 364 (Unnecessary new name for *O. unicolor* Schrottky).

*Note.* Argentinean species released in California but establishment not confirmed.

*zeirapherae* Walley

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