

First record of the genus *Myllaena* Erichson from Brazil, description of a new species and annotated catalog of *Myllaena* species from the Neotropical region (Coleoptera, Staphylinidae, Aleocharinae)¹

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ABSTRACT. First record of the genus *Myllaena* Erichson from Brazil, description of a new species and annotated catalog of *Myllaena* species from the Neotropical region (Coleoptera, Staphylinidae, Aleocharinae). The genus *Myllaena* Erichson, 1837, of the tribe Myllaenini Ganglbauer, 1895, is recorded from Brazil for the first time. A new species, *Myllaena brasiliensis* **sp. nov.**, is described and illustrated; it is closely related to the *insomnis* species group, described from the Nearctic region. A short diagnosis of the genus and an annotated catalog of *Myllaena* species from the Neotropical region are also provided.

KEYWORDS. Brazil; distribution; rove beetles; taxonomy.

RESUMO. Primeiro registro do gênero *Myllaena* Erichson no Brasil, descrição de uma nova espécie e catálogo comentado das espécies de *Myllaena* da região Neotropical (Coleoptera, Staphylinidae, Aleocharinae). O gênero *Myllaena* Erichson, 1837, da tribo Myllaenini Ganglbauer, 1895, é registrado pela primeira vez no Brasil. Uma nova espécie, *Myllaena brasiliensis* **sp. nov.**, é descrita e ilustrada; esta espécie é proximamente relacionada ao grupo de espécies *insomnis*, descritas da região Neártica. Uma breve diagnose do gênero e um catálogo comentado das espécies de *Myllaena* da região Neotropical são também fornecidos.

PALAVRAS-CHAVE. Brasil; distribuição; estafilínídeos; taxonomia.

The tribe Myllaenini Ganglbauer, 1895 is a monophyletic taxon embracing a group of species whose position appears to be solidly established within the 'higher' Aleocharinae (Ahn & Ashe 2004; Ashe 2005). *Myllaena* Erichson, 1837 is a small genus with some 205 species worldwide (Newton & Thayer 2005), and 30 species recorded from the Neotropical region (Newton *et al.* 2005). The species occur in riparian habitats predominantly associated with edges of streams, rivers and lakes (Klimaszewski 1982).

In the present paper, a new species of *Myllaena* is described and illustrated and the genus is for the first time recorded in Brazil. A short diagnosis of the genus and an annotated catalog of *Myllaena* species from the Neotropical region are also provided.

MATERIAL AND METHODS

Dried specimens were first macerated in boiling water for five minutes and then cleared in boiling 10% KOH for two minutes. The micro dissections were carried out under the stereoscopic microscope, Zeiss Stemi SV6, and the drawings were made using the same equipment and Zeiss Standard 20 optical microscope with attached drawing tube. Photographs were taken using a stereoscopic microscope Leica MZ 16 with

a Leica DFC 500 digital camera. The images were captured with computer software IM 50 (Image Manager) and combined using the image processing software Auto-Montage Pro 5.03.0040. The final versions of drawings and photographs were prepared using Adobe Photoshop software, version 7.0.

Measurements were done using the micrometric ocular in the stereoscopic microscope Wild M5. The following abbreviations were used: BL, body length (from anterior margin of head to posterior margin of tergite VIII); BW, body width (across humeral region); PL, pronotum length (maximum); PW, pronotum width (maximum); EL, elytra length (maximum).

The terminology used in the text is adopted from Blackwelder (1936) and Klimaszewski (1982).

Specimens are deposited in the Coleção de Entomologia Pe. J.S. Moure, Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Brazil (DZUP); Museu Nacional do Rio de Janeiro, Rio de Janeiro, Brazil (MNRJ); Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (MZSP); Museu de Ciências Naturais da Fundação Zoológica do Rio Grande do Sul, Porto Alegre, Brazil (MCNZ); Field Museum of Natural History, Chicago, United States (FMNH); and the Insectarium R. Martineau, Laurentian Forestry Centre, Quebec, Canada (LFC).

RESULTS AND DISCUSSION

Myllaena Erichson, 1837
(Figs. 1-2, 4-8, 10, 13)

Myllaena Erichson 1837: 382. For review of literature see Klimaszewski (1982).

Type species: *Aleochara dubia* Gravenhorst 1806: 173, by subsequent designation.

Diagnosis. Body fusiform, abdomen tapering from base to apex (Fig. 1), flattened and bearing long macrosetae, integument with short and dense microsetae adhering to the body surface. Tarsal formula 4-4-5. Head hypognathous. Labrum transverse (Fig. 4), anterior margin slightly emarginated. Epipharynx with sensory pores asymmetrically distributed, and with series of small denticles in lateral region (Fig. 5). Mandibles symmetrical, long with curved apex, with smooth inner margin and well developed prostheca (Fig. 6). Maxilla slender and elongate, lacinia and galea of the same length, galea narrower than lacinia, with series of subapical bristles, maxillary palpus with four articles, article 1st vestigial, 2nd the longest, 3rd ovate and 4th medially divided into pseudosegments (Fig. 7). Glossae extremely elongate (Fig. 8). Mentum trapezoidal, anterior angles prolonged into spinose processes (Fig. 8). Pronotal hypomera not visible in lateral view (Fig. 2). Procoxae conical. Prosternum transverse. Mesosternal process about half length of mesocoxae (Fig. 10), mesocoxae contiguous, mesocoxal cavities not margined posteriorly. Metacoxae flattened and transverse. Tergite IX in both sexes separated by tergite X (Fig. 13). Tergite X deeply emarginated medially (Fig. 13).

Myllaena brasiliensis sp. nov.
(Figs. 1-16)

Type material. Holotype (male): BRAZIL, *Rio Grande do Sul*, Rio Grande, Praia do Cassino, 20-I-1993, Gianuca col. (DZUP). Paratypes: same locality and collector, 06-I-1993 (1 male and 2 sex undetermined, FMNH), 20-I-1993 (2 sex undetermined, DZUP), 27-I-1993 (2 males, 1 female and 1 sex undetermined, DZUP; 2 sex undetermined, MCNZ; 1 female and 1 sex undetermined, MZSP; 1 female and 1 sex undetermined, MNRJ; 1 male, 1 female and 3 sex undetermined, LFC), 10-II-1993 (1 male and 2 females, DZUP).

Description. BL: 1.40-1.74 mm; BW: 0.56-0.64 mm.

Head and abdomen dark brown (segments III-VI); antennae, mouthparts, pronotum, elytra, legs and apex of abdomen (segment VII-VIII) light brown (Figs. 1, 2). Head about as long as wide and without differentiated neck. Eyes large, covering most of the visible lateral region of head. Antennae reaching the base of elytra, scape broad and slightly elongate, pedicel the longest, articles 3-10 elongate but gradually decreasing in length toward antennal apex, the last article somewhat clavate (Fig. 3). Mentum with two short anterior teeth medially (Fig. 8). Pronotum convex, wider than long (Fig. 9) (PW/PL: 1.44), widest behind the middle, posterior margin sinuate. Elytra wider than long (BW/EL: 1.54). Hind wings fully developed. Abdomen with numerous prominent macrosetae. **MALE.** Tergite VIII elongate, broadly rounded apically and slightly pointed



Figs. 1-2. *Myllaena brasiliensis* sp. nov. 1. dorsal view; 2. lateral view.

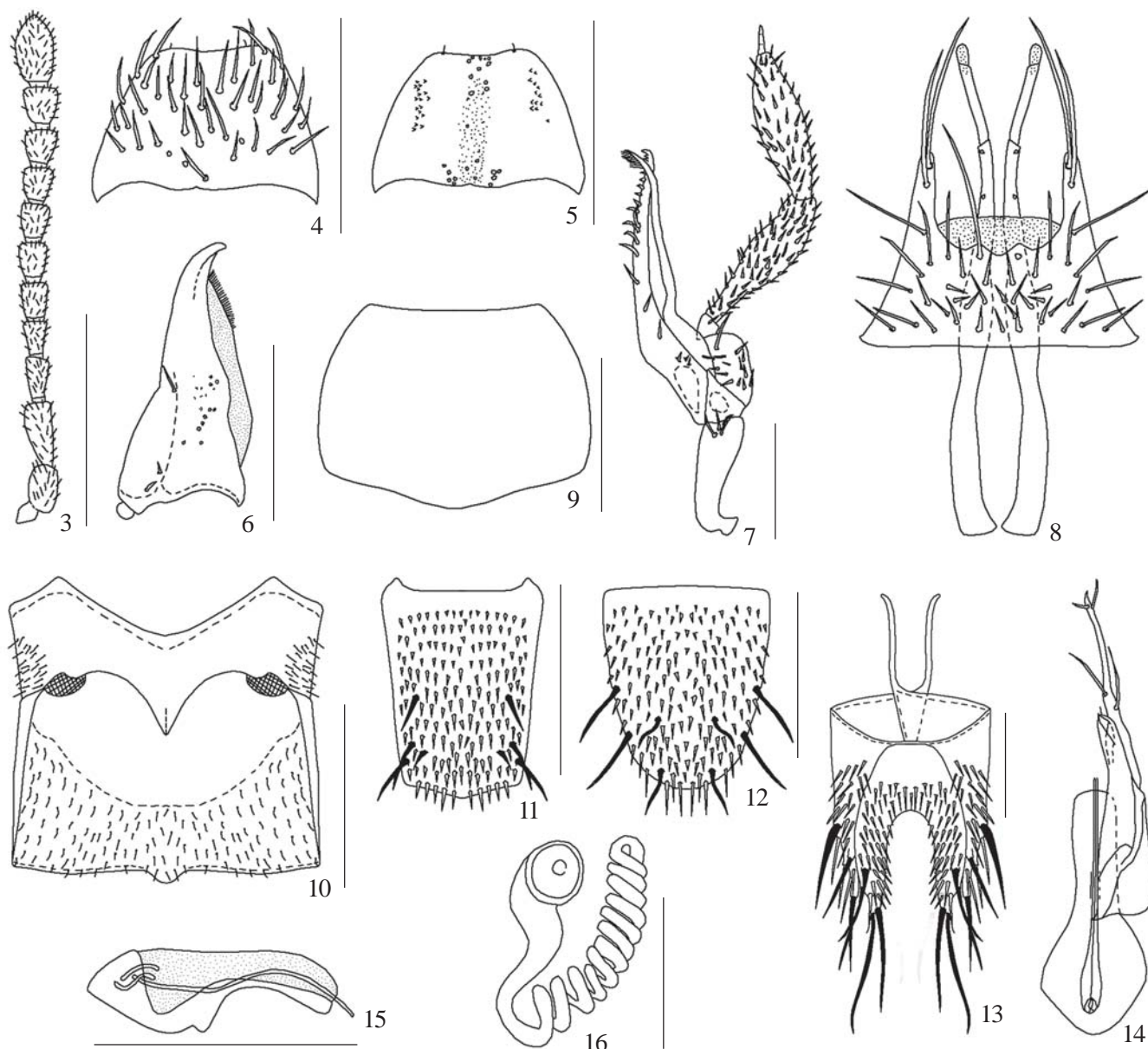
medially (Fig. 11), with four pairs of prominent setae distributed latero-posteriorly. Sternite VIII elongate and rounded posteriorly with four pairs of prominent setae distributed latero-posteriorly (Fig. 12). Median lobe of aedeagus approximately round, moderately sized bulbus, and narrowly elongate tubus with truncate apex (Fig. 14). Internal sac with flagellum as long as the median lobe (Figs. 14, 15). Paramere as illustrated (Fig. 14). **FEMALE.** Sternite VIII and tergite X similar to those of male. Spermatheca with pitcher-shaped tubular capsule, median invagination moderately deep, stem long with multiple coils (Fig. 16).

Etymology. The specific name derives from Brasil, the name of the country where the type series was discovered.

Distribution. Southeastern Brazil (*Rio Grande do Sul*: *Rio Grande*: Praia do Cassino).

Remarks. The shape of the aedeagus (Figs. 14, 15) and the shape of the spermatheca (Fig. 16) of *Myllaena brasiliensis* sp. nov. are similar to those of the *insomnis* species group described from the Nearctic region (*M. audax* Casey, 1911; *M. brevicollis* Casey, 1911; *M. decreta* Casey, 1911; *M. hopkinton* Klimaszewski, 1982; *M. insomnis* Casey, 1911; and *M. magnolia* Klimaszewski, 1982). The morphology of the median lobe of the aedeagus and the multiply coiled stem of the spermatheca are matching characteristics of the *insomnis* group and therefore we regard our newly described species as affiliated to this group.

Many species of *Myllaena* from the Neotropical region are poorly diagnosed and illustrated. This raises the need of revising all species of this group from the entire region. We



Figs. 3-16. *Myllaena brasiliensis* sp. nov. 3. antenna; 4. labrum, dorsal view; 5. epipharynx, ventral view; 6. left mandible, dorsal view; 7. maxilla, dorsal view; 8. labium, ventral view; 9. pronotum, dorsal view, setae removed; 10. meso-metathorax, ventral view; 11. tergite VIII, male, dorsal view; 12. sternite VIII, male, ventral view; 13. tergite IX-X, male, dorsal view; 14. aedeagus, ventral view, left paramere removed; 15. median lobe, lateral view; 16. spermatheca. Scale: Figs. 3, 9-12, 15 = 0.25mm; 4-8, 13, 14, 16 = 0.15mm.

did not hesitate to describe *M. brasiliensis* as a new species because it is the only known species of this genus from all of Brazil.

Annotated catalog of species of *Myllaena* Erichson, 1837 from Neotropical region

Myllaena Erichson, 1837

Myllaena Erichson 1837: 382. For review of literature see Klimaszewski (1982).

Type species: *Aleochara dubia* Gravenhorst 1806: 173, by subsequent designation.

1. *Myllaena araucaniensis* Pace, 1987

Myllaena araucaniensis Pace 1987b: 470-472 [original description, illustrated; comparison with *M. dilutipes* Fairmaire & Germain, 1861 and *M. parvicollis* Kraatz, 1859]. Pace 1999: 121 [new records from Chile]; 140, 142 [comparison with *M. gonzalezi* Pace, 1999]. Type locality: "Araucanie" (Pace 1987b).

Distribution: Chile (Pace 1987b).

2. *Myllaena arcana* Casey, 1911

Myllaena arcana Casey 1911: 239 [original description]. Notman 1920: 708 [characters in key]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog, as synonym of *M. minuta* (Gravenhorst, 1806)]. Scheerpeltz 1934: 1529 [in world catalog, as synonym of *M. minuta* (Gravenhorst, 1806)]. Blackwelder 1944: 153 [in checklist from Neotropical region, as synonym of *M. minuta* (Gravenhorst, 1806)]. Moore & Legner 1975: 454 [in Nearctic catalog, as synonym of *M. minuta* (Gravenhorst, 1806)]. Klimaszewski 1982: 220-221 [redescription, as valid species; lectotype designated]: 183 [in checklist from Nearctic region, as valid species]; 186 [geographic distribution]: 191 [characters in key]: 216 [in *cuneata* species group]: 217 [distribution map]: 193, 222-223, 240 [illustrations]. Klimaszewski & Génier 1986: 35 [new records from USA]. Klimaszewski & Frank 1992: 400-401 [new records from USA]. Pace 1997: 102 [characters; comparison with *M. cornelli* Pace, 1997]. Navarrete-Heredia *et al.* 2002: 191 [in checklist from Mexico].

Type locality: "USA, Iowa, Cedar Rapids" (Klimaszewski 1982).

Myllaena immunda Casey 1911: 240 [original description]. Notman 1920: 709 [characters in key]. Bernhauer & Scheerpeltz 1926: 507 [in world catalog, as synonym of *M. infuscata* Kraatz, 1853]. Scheerpeltz 1934: 1528 [in world catalog, as synonym of *M. infuscata* Kraatz, 1853]. Moore & Legner 1975: 454 [in Nearctic catalog, as synonym of *M. infuscata* Kraatz, 1853]. Klimaszewski 1982: 220 [lectotype designated, as synonym of *M. arcana* Casey, 1911]: 183 [in checklist from Nearctic region, as synonym of *M. arcana* Casey, 1911].

Type locality: "Canada, Ontario, Ottawa" (Klimaszewski 1982).

Distribution: Canada; USA; Mexico (Klimaszewski 1982).

3. *Myllaena celerrima* Cameron, 1922

Myllaena celerrima Cameron 1922: 650 [original description; comparison with *M. mollis* Sharp, 1883]: 651 [comparison with *M. diversicornis* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 505 [in world catalog]. Blackwelder 1943: 534 [citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region].

Type locality: "Grenada, St. Vincent" (Cameron 1922).

Distribution: Grenada; Saint Vincent Island (Saint Vincent and the Grenadine) (Cameron 1922).

4. *Myllaena chibcha* Pace, 1996

Myllaena chibcha Pace 1996: 399-400 [original description; comparison with *M. insipiens* Casey, 1911]: 401 [illustrations]. Newton *et al.* 2005: 27 [in checklist from Colombia].

Type locality: "Kolumbien, Punta de Betin, Sta. Marta" (Pace 1996).

Distribution: Colombia (Pace 1996).

5. *Myllaena coyhaiquensis* Pace, 1999

Myllaena coyhaiquensis Pace 1999: 140-141 [original description, illustrated; comparison with *M. leleupi* Pace, 1985]: 121 [citation]. Type locality: "S Chile, Umg. Coyhaique" (Pace 1999).

Myllaena coyhaiquensi Pace 1999: 140 [misspelling].

Distribution: Chile (Pace 1999).

6. *Myllaena curticornis* Cameron, 1922

Myllaena curticornis Cameron 1922: 651 [original description; comparison with *M. diversicornis* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 505 [in world catalog]. Blackwelder 1943: 534

[citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region].

Type locality: "Grenada" (Cameron 1922).

Distribution: Grenada (Cameron 1922).

7. *Myllaena debilicornis* Sharp, 1883

Myllaena debilicornis Sharp 1883: 286 [original description; comparison with *M. mollis* Sharp, 1883, *M. fragilis* Sharp, 1883 and *M. intermedia* Erichson, 1837]. Bernhauer & Scheerpeltz 1926: 505 [in world catalog]. Blackwelder 1944: 153 [in checklist from Neotropical region].

Type locality: "Guatemala, San Gerónimo" (Sharp 1883).

Distribution: Guatemala (Sharp 1883).

8. *Myllaena difficilis* Cameron, 1922

Myllaena difficilis Cameron 1922: 651 [original description; comparison with *M. diversicornis* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 505 [in world catalog]. Blackwelder 1943: 534 [citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region].

Type locality: "Jamaica" (Cameron 1922).

Distribution: Jamaica (Cameron 1922).

9. *Myllaena dilutipes* Fairmaire & Germain, 1861

Myllaena dilutipes Fairmaire & Germain 1861: 424 [original description; comparison with *M. glauca* Aubé, 1850]. Fauvel 1864: 124 [citation, as synonym of *M. parvicollis* Kraatz, 1859]. Lynch 1884: 99 [citation, as synonym of *M. parvicollis* Kraatz, 1859]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog, as synonym of *M. parvicollis* Kraatz, 1859]. Blackwelder 1944: 153 [in checklist from Neotropical region, as synonym of *M. parvicollis* Kraatz, 1859]. Coiffait & Saiz 1967: 61-63 [redescription, as valid species; illustrated]: 60-61 [characters in key]: 63 [comparison with *M. ferrugata* Fairmaire & Germain, 1861 and *M. parvicollis* Kraatz, 1859]: 64 [comparison with *M. extracta* Coiffait & Saiz, 1967]. Pace 1987b: 472 [comparison with *M. araucaniensis* Pace, 1987b]. Pace 1999: 121 [citation, as synonym of *M. parvicollis* Kraatz, 1859].

Type locality: "Quillota" (Fairmaire & Germain 1861).

Distribution: Chile (Fairmaire & Germain 1861).

10. *Myllaena diversicornis* Cameron, 1922

Myllaena diversicornis Cameron 1922: 650-651 [original description; comparison with *M. celerrima* Cameron, 1922, *M. curticornis* Cameron, 1922 and *M. difficilis* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 505 [in world catalog]; Blackwelder 1943: 534 [citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region]. Pace 1987a: 188 [comparison with *M. guadalupensis* Pace, 1987a].

Type locality: "Grenada, St. Vincent" (Cameron 1922).

Distribution: Grenada; Saint Vincent Island (Saint Vincent and the Grenadines) (Cameron 1922).

11. *Myllaena extracta* Coiffait & Saiz, 1967

Myllaena extracta Coiffait & Saiz 1967: 63-64 [original description; comparison with *M. dilutipes* Fairmaire & Germain, 1861]: 61 [characters in key].

Type locality: without locality. Note: "Holotype: une femelle du Museo Nacional de Chile, sans date ni localite" in Coiffait & Saiz 1967, page 63.

Distribution: Chile (?) (Coiffait & Saiz 1967).

12. *Myllaena ferrugata* Fairmaire & Germain, 1861

Myllaena ferrugata Fairmaire & Germain 1861: 424-425 [original description]. Lynch 1884: 99 [citation, as synonym of *M. parvicollis* Kraatz, 1859]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog, as synonym of *M. parvicollis* Kraatz, 1859]. Blackwelder 1944: 153 [in checklist from Neotropical region, as synonym of *M. parvicollis* Kraatz, 1859]. Coiffait & Saiz 1967: 63 [redescription, as valid species; comparison with *M. dilutipes* Fairmaire & Germain, 1861]: 62 [illustration]: 60-61 [characters in key]. Type locality: "Quillota" (Fairmaire & Germain 1861).

Distribution: Chile (Fairmaire & Germain 1861).

13. *Myllaena fragilis* Sharp, 1883

Myllaena fragilis Sharp 1883: 286 [original description; comparison with *M. intermedia* Erichson, 1837, *M. mollis* Sharp, 1883 and *M. debilicornis* Sharp, 1883]. Bernhauer & Scheerpeltz 1926: 506 [in world catalog]. Blackwelder 1943: 534-535 [new record from Saint Lucia]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region]. Type locality: "Guatemala, San Gerónimo" (Sharp 1883).

Distribution: Guatemala (Sharp 1883); Saint Lucia (Blackwelder 1943).

14. *Myllaena gonzalezi* Pace, 1999

Myllaena gonzalezi Pace 1999: 140-142 [original description, illustrated; comparison with *M. araucaniensis* Pace, 1987b]: 121 [citation]. Type locality: "Chile, Algarrobo" (Pace 1999).

Distribution: Chile (Pace 1999).

15. *Myllaena granulata* Cameron, 1922

Myllaena granulata Cameron 1922: 652 [original description; comparison with *M. mollis* Sharp, 1883]. Bernhauer & Scheerpeltz 1926: 507 [in world catalog (error: Cameron 1922: 651)]. Blackwelder 1943: 535 [citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region (error: Cameron 1922: 651)]. Type locality: "Jamaica" (Cameron 1922).

Distribution: Jamaica (Cameron 1922).

16. *Myllaena guadalupensis* Pace, 1987

Myllaena guadalupensis Pace 1987a: 187-188 [original description; comparison with *M. potawatomi* Klimaszewski, 1982 (error: *M. potawatomi* Klimaszewski, 1984) and *M. diversicornis* Cameron, 1922]: 197 [illustrations]. Type locality: "Guadeloupe" (Pace 1987a).

Distribution: Guadeloupe (Pace 1987a).

17. *Myllaena hopi* Klimaszewski, 1982

Myllaena hopi Klimaszewski 1982: 206-208 [original description, illustrated]: 184 [in checklist from Nearctic region]: 186 [geographic distribution]: 187, 193, 240 [illustrations]: 191 [characters in key]: 192 [in *potawatomi* species group]: 202 [distribution map]. Navarrete-Heredia *et al.* 2002: 191 [in checklist from Mexico]. Type locality: "USA, [Arizona] Cochise Co., Chiric Mts., Herb Martyr Cmp., 6 mi SW Portal, 6000 ft" (Klimaszewski 1982).

Distribution: USA; Mexico (Klimaszewski 1982).

18. *Myllaena indefatigabilis* Cameron, 1922

Myllaena indefatigabilis Cameron 1922: 651 [original description; comparison with *M. infuscata* Kraatz, 1853 and *M. obscura* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 507 [in world catalog (error: Cameron 1922: 650)]. Blackwelder 1943: 535 [citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region (error: Cameron 1922: 650)].

Type locality: "St. Lucia" (Cameron 1922).

Distribution: Saint Lucia (Cameron 1922).

19. *Myllaena leleupi* Pace, 1985

Myllaena leleupi Pace 1985: 450 [original description; comparison with *M. cuneata* Notman, 1920]: 451 [illustrations]. Klimaszewski & Peck 1998: 227 [redescription; comparison with *M. cuneata* Notman, 1920]: 246 [distribution]: 250, 252 [illustrations]. Pace 1999: 140 [comparison with *M. coyhaiquensis* Pace, 1999]. Type locality: "I. Isabela Sud, à 4 km de la côte, tamisage" (Pace 1985).

Distribution: Isabela Island (Galapagos Islands, Ecuador) (Pace 1985).

20. *Myllaena lynchi* Fauvel, 1888

Myllaena lynchi Fauvel 1888: 24 [citation as new species from *M. parvicollis* identified by Lynch (Lynch 1884: 99-100)]. Bernhauer & Scheerpeltz 1926: 507 [in world catalog]. Blackwelder 1944: 153 [in checklist from Neotropical region]. Type locality: "Chacabuco" (Lynch 1884).

Distribution: Argentina (Lynch 1884).

21. *Myllaena mollis* Sharp, 1883

Myllaena mollis Sharp 1883: 285-286 [original description; comparison with *M. intermedia* Erichson, 1837, *M. debilicornis* Sharp, 1883 and *M. fragilis* Sharp, 1883]. Cameron 1922: 650 [comparison with *M. celerrima* Cameron, 1922]: 652 [comparison with *M. granulata* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog]. Blackwelder 1944: 153 [in checklist from Neotropical region]. Type locality: "Guatemala, near the city" (Sharp 1883).

Distribution: Guatemala (Sharp 1883).

22. *Myllaena muelleri* Pace, 1996

Myllaena muelleri Pace 1996: 400 [original description; comparison with *M. currax* Notman, 1920]: 401 [illustrations]. Newton *et al.* 2005: 27 [in checklist from Colombia]. Type locality: "Kolumbien, Punta de Betin, Sta. Marta" (Pace 1996).

Distribution: Colombia (Pace 1996).

23. *Myllaena obscura* Cameron, 1922

Myllaena obscura Cameron 1922: 651-652 [original description; comparison with *M. indefatigabilis* Cameron, 1922]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog]. Blackwelder 1943: 535 [citation]: 579 [in checklist from West Indies]. Blackwelder 1944: 153 [in checklist from Neotropical region]. Type locality: "Haiti" (Cameron 1922).

Distribution: Haiti (Cameron 1922).

24. *Myllaena obtusa* Sharp, 1883

Myllaena obtusa Sharp 1883: 286 [original description; comparison with *M. glauca* Aubé, 1850]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog]. Blackwelder 1944: 153 [in checklist from Neotropical region].

Type locality: "Guatemala, Torola 1000 feet" (Sharp 1883).

Distribution: Guatemala (Sharp 1883).

25. *Myllaena pallida* Bernhauer, 1941

Myllaena pallida Bernhauer 1941: 290 [original description]. Bernhauer 1951: 279-280 [original description; Note: republication of Bernhauer 1941 (Herman 2001)].

Type locality: "Südperu: Aina, 1400 m" (Bernhauer 1941).

Distribution: Peru (Bernhauer 1941).

Note: page of original description, type locality and distribution from Bernhauer 1941 by Dr Alfred F. Newton, FMNH (pers. comm.).

26. *Myllaena parvicollis* Kraatz, 1859

Myllaena parvicollis Kraatz 1859: 15-16 [original description; comparison with *M. dubia* (Gravenhorst, 1806)]. Fairmaire & Germain 1861: 423-424 [redescription; comparison with *M. dubia* (Gravenhorst, 1806)]. Fauvel 1864: 124 [citation]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog]. Scheerpeltz 1934: 1529 [in world catalog]. Blackwelder 1944: 153 [in checklist from Neotropical region]. Lynch 1884: 99 [misidentification from *M. lynchi* Fauvel, 1888]. Coiffait & Saiz 1967: 63 [characters; comparison with *M. dilutipes* Fairmaire & Germain, 1861]: 61 [characters in key]. Scheerpeltz 1972: 27-28 [new records from Argentina]. Pace 1987b: 472 [comparison with *M. araucaniensis* Pace, 1987b]. Pace 1999: 121 [new records from Chile]. Type locality: type locality not given.

Distribution: Chile (Fairmaire & Germain 1861); Argentina (Scheerpeltz 1972). Note: the record of *M. parvicollis* Kraatz, 1859 from Chacabuco, Argentina by Lynch (1884) is in fact *M. lynchi* Fauvel, 1888 (Fauvel 1888). But *M. parvicollis* was subsequently recorded from Rio Negro, Argentina by Scheerpeltz, 1972 (Dr Alfred F. Newton, FMNH, pers. comm.).

27. *Myllaena potawatomi* Klimaszewski, 1982

Myllaena potawatomi Klimaszewski 1982: 192-195 [original description, illustrated; in *potawatomi* species group; map distribution]: 184 [in checklist from Nearctic region]: 186 [geographic distribution]: 240 [illustration]: 191 [characters in key]. Pace 1987a: 188 [comparison with *M. guadalupensis* Pace, 1987a]. Klimaszewski & Frank 1992: 398 [new records from USA]. Navarrete-Heredia *et al.* 2002: 191 [in checklist from Mexico]. Type locality: "USA: Wisconsin, Waukesha Co., Kettle Moraine St. F., 0.7 mi W Park HQ" (Klimaszewski 1982).

Distribution: USA; Mexico; Jamaica; Haiti (Klimaszewski 1982).

28. *Myllaena puthzi* Pace, 1996

Myllaena puthzi Pace 1996: 400 [original description; comparison with *M. currax* Notman, 1920]: 403 [illustrations]. Newton *et al.*

2005: 27 [in checklist from Colombia].

Type locality: "N Kolumbien, Nordwestl. Sierra Nevada de Sta. Marta, ca. 1000 m, nahe San Pedro de la Sierra" (Pace 1996).

Distribution: Colombia (Pace 1996).

29. *Myllaena robusta* Sharp, 1883

Myllaena robusta Sharp 1883: 287 [original description]. Bernhauer & Scheerpeltz 1926: 508 [in world catalog]. Blackwelder 1944: 153 [in checklist from Neotropical region].

Type locality: "Guatemala, near the city" (Sharp 1883).

Distribution: Guatemala (Sharp 1883).

30. *Myllaena serrano* Klimaszewski, 1982

Myllaena serrano Klimaszewski 1982: 210 [original description]: 204 [map distribution (error: legend)]: 209, 240 [illustrations]. Navarrete-Heredia *et al.* 2002: 191 [in checklist from Mexico]. Type locality: "USA: California, San Bernardino Mts., nr 23661" (Klimaszewski 1982).

Distribution: USA; Mexico (Klimaszewski 1982).

Note: Blackwelder (1944) quoted *Myllaena minuta* (Gravenhorst, 1806) with doubtful distribution in the Neotropical region ("Venezuela, U.S.A., Old World" in Blackwelder 1944, page 153). In this paper, we excluded *M. minuta* from the list of species occurring in the Neotropical region.

Acknowledgments. We wish to thank to Dr. Alfred F. Newton (FMNH) for valuable information about *Myllaena* species from the Neotropical region; Dr. Cibele S. Ribeiro-Costa (UFPR) and two anonymous reviewers for discussion and suggestions about this paper; Dr. Carla de Lima Bicho (UFPR) for providing the specimens of *M. brasiliensis* sp. nov.; the Biological Collection Network of Paraná (Taxon-line, UFPR) for the photographs; and the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the Scholarships to the first author.

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