

An up-to-date key to the species of the genus *Agrioleptes* (Heteroptera: Reduviidae: Apiomerinae) Una clave actualizada a las especies del género *Agrioleptes* (Heteroptera: Reduviidae: Apiomerinae)

DIMITRI FORERO¹

Revista Colombiana de Entomología 28 (2): 207-209 (2002)

Summary. An up-to-date key to the species of the genus *Agrioleptes* is given to separate all the known taxa. A checklist with the known distribution records is given, as well as a synonym list.

Key words: Taxonomy. List of species. Distribution. Neotropical region.

Resumen. Se brinda una clave actualizada a las especies del género *Agrioleptes* para identificar todos los taxones conocidos. Se da una lista de las especies con sinonimias y su distribución geográfica.

Palabras clave: Taxonomía. Lista de especies. Distribución. Región Neotropical.

Introduction

The Apiomerinae subfamily is characterized by an apical notch on the anterior tibiae for the reception of the tarsi, although in *Micrauchenus* Amyot & Serville, 1843 it is reduced; reduced anterior tarsi; anterior tibiae usually longer than femora and somewhat curved, sometimes with dense erect pubescence (Maldonado *et al.* 1993).

The genus *Agrioleptes* Stål, 1866 has a Neotropical distribution and has eight described species (Maldonado 1990; Forero and Giacchi 2001). Within the subfamily Apiomerinae, *Heniartes* Spinola, 1837 is the only genus resembling *Agrioleptes*, but the latter has the head longer than the pronotum, the corium with waxy secretions, the membrane not completely dark but with some pale areas, and the middle tibia not so recurved (Wygodzinsky 1947; Costa Lima *et al.* 1948); all these characteristics separate it from *Heniartes*.

Recently, Forero and Giacchi (2001) synonymized *Agrioleptes zischkai* Wygodzinsky, 1953 under *A. wygodzinskyi* Prosen and Martínez, 1953, a species from Cochabamba, Bolivia. Unfortunately, a key to facilitate separation of the species of *Agrioleptes* was not feasible because the original description of *A. salvatorianus* Carcavallo and Martínez, 1960, a species from Colombia, was unavailable. Now with the paper of Carcavallo and Martínez (1960) at hand, it is possible to give an up-to-date key to the species of the genus, also, a checklist of the species within the genus, their synonyms, and their known distribution.

Species included

Stål (1866) erected the monotypic genus *Agrioleptes* that included only *A. albosparsus* (Stål, 1854). Wygodzinsky (1946)

redescribed the genus and added two new species: *A. schubarti* and *A. stali*. Later Wygodzinsky (1953) described four new species: *A. bahianus*, *A. bergi*, *A. dietrichi* and *A. zischkai*. At the same year, Prosen and Martínez (1953) described *A. wygodzinskyi*. Some years later, Carcavallo and Martínez (1960) described *A. salvatorianus*, a new species from Colombia. Recently, Forero and Giacchi (2001) synonymized *A. zischkai* under *A. wygodzinskyi*. No further species has been described after *A. salvatorianus*, neither no new information about this genus has been mentioned anywhere (Maldonado 1990).

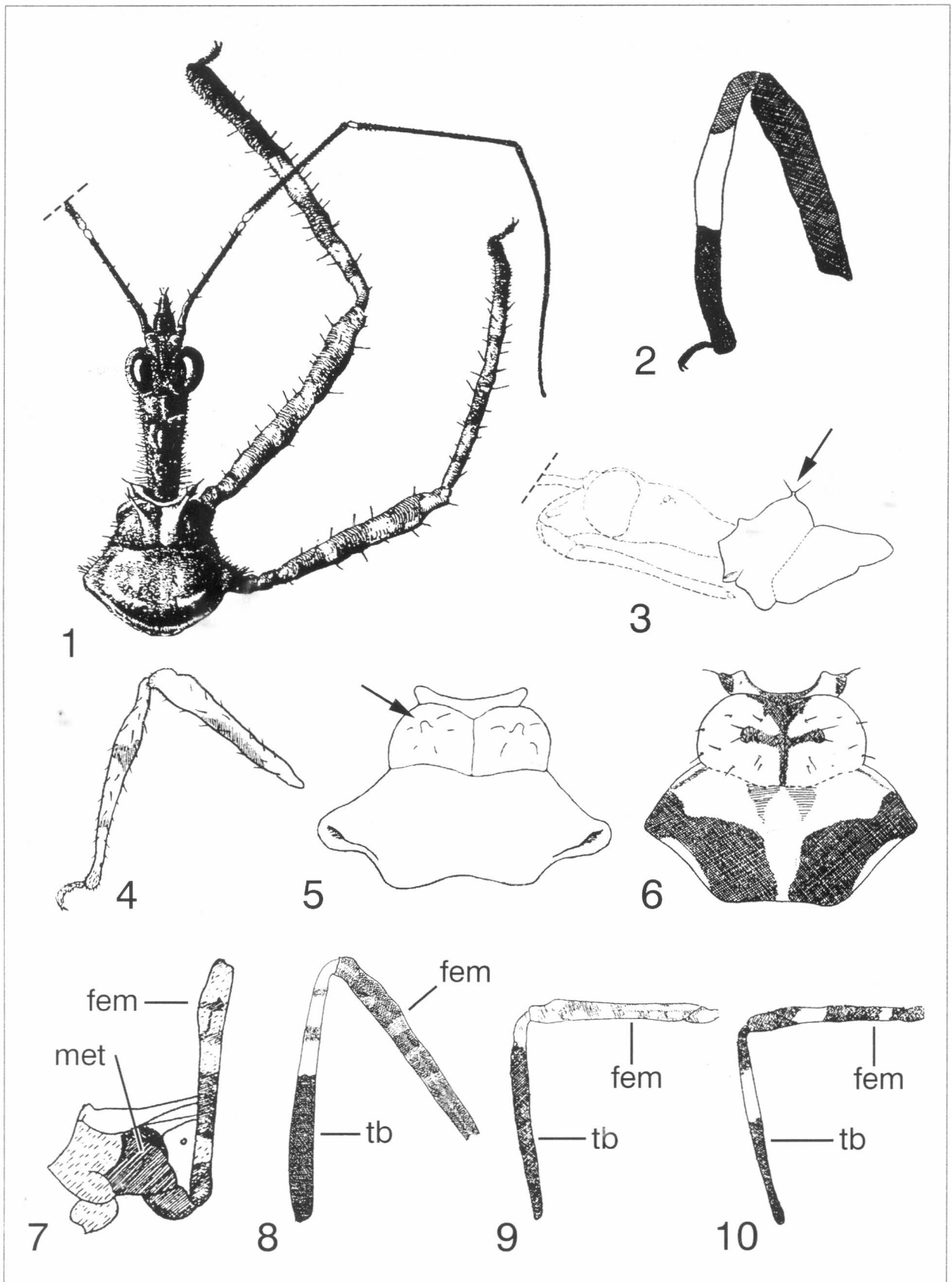
Color pattern and male genitalia characters are used for the separation of species within *Agrioleptes* (Wygodzinsky 1946, 1953). Although male genitalia is very useful in various groups of Reduviidae to separate species (Coscarón 1983; Maldonado and Santiago-Blay 1992; Jurberg and Galvão 1997; Gil-Santana and Alencar 2001), in *Agrioleptes* the male genitalia is rather homogenous within species-groups and somewhat different between them (Wygodzinsky 1953), and so not so useful to identify particular species. Color pattern, in contrast, is very constant within species (Wygodzinsky 1953) and helpful to distinguish them.

Key to the species of *Agrioleptes*

Wygodzinsky (1946) gave a key to separate three species, and later he gave a key to separate seven species (Wygodzinsky 1953). Nevertheless, one of the species keyed in the latter was recently synonymized (Forero and Giacchi 2001), and a new species was described later (Carcavallo and Martínez 1960) without including any key to accommodate it. The key presented below is based mainly on Wygodzinsky's key (1953).

1. Anterior pronotal lobe completely, or mostly, orange or reddish 2
 - Anterior pronotal lobe completely brownish-black or deep black 7
2. Antennae completely darkened 3
 - Base and apex of some antennae segments pale (Fig. 1) 4
3. Femora uniformly darkened (Fig. 2); vertical processes of anterior lobe of pronotum short, not longer than wide at base (arrow, Fig. 3) *A. schubarti*
 - Femora yellowish brown with pale annuli (Fig. 4); vertical processes of anterior lobe of pronotum slightly broadened and rounded at apex, teat-like (arrow, Fig. 5) *A. salvatorianus*
4. Anterior pronotal lobe with a black cross-like design, posterior pronotal lobe with two darkened markings near its posterior margin (Fig. 6) *A. dietrichi*
 - Neither anterior nor posterior pronotal lobe with dark markings 5
5. Metapleura and posterior coxae much darker than the anterior and median ones; femora with a wide sub-basal dark annuli (Fig. 7) *A. bahianus*
 - Metapleura and posterior coxae not conspicuously darker than anterior and median ones; femora with a different color pattern 6
6. Base of tibiae yellowish, with conspicuous deep dark annuli; femora yellowish with dark annuli (Fig. 1); pleura mostly reddish with diffuse dull brown areas *A. albosparsus*
 - Base of tibiae practically yellowish, just with two not so well defined, slightly darker annuli; femora uniformly light brown, with diffuse yellowish annuli (Fig. 8); meso and metapleura deep brownish-black *A. stali*

¹ Biologist. Associate curator of the Hemiptera collection, Laboratorio de Entomología, Museo Javeriano de Historia Natural, Pontificia Universidad Javeriana. A. A. 53207, Bogotá, D.C., Colombia. E-mail: dimitriforero@tutopia.com



Figures 1-10. Morphology and color patterns of *Agriocleptes* species. **1:** Head, pronotum and legs of *A. albosparsus* (left anterior and medium legs are not shown; left antennae segments partially shown) [after Wygodzinsky (1946)]. **2:** Medium leg of *A. schubarti* [after Wygodzinsky (1946)]. **3:** Pronotum of *A. schubarti*, lateral view (punctuated head to show position in relation to pronotum, antennae not shown) [after Wygodzinsky (1946)]. **4:** Posterior leg of *A. salvatorianus* [after Carcavallo and Martínez (1960)]. **5:** Pronotum of *A. salvatorianus*, dorsal view [after Carcavallo and Martínez (1960)]. **6:** Pronotum of *A. dietrichi*, dorsal view [after Wygodzinsky (1953)]. **7:** Metapleura and posterior femur of *A. bahianus* [after Wygodzinsky (1953)]. **8:** Anterior leg of *A. stali* [after Wygodzinsky (1946)]. **9:** Posterior leg of *A. bergi* [after Wygodzinsky (1953)]. **10:** Posterior leg of *A. wygodzinskyi* [after Wygodzinsky (1953)]. Abbreviations: fem, femur; met, metapleura; tb, tibia.

| Species | Known Distribution |
|---|---|
| A. albosparsus (Stål, 1854) <i>Harpactor albosparsus</i> Stål, 1854 <i>Agrioleptes alboconspersus</i> Stål, 1866 <i>Agrioleptes albosparsus</i> Stål, 1872 <i>Trichoscelis alboconspersus</i> Walker, 1873 <i>Agriocoris</i> (sic) <i>alboconspersus</i> Walker, 1873 <i>Sthienera albosparsa</i> Walker, 1873 <i>Heniartes erythromerus</i> Berg, 1879 (nec Spinola) [misidentified] <i>Agrioleptes alboconspersus</i> Wygodzinsky, 1946 | Brazil (Amazonas, Goiás, Minas Gerais, Rio de Janeiro, São Paulo), Suriname, Paraguay |
| A. bahianus Wygodzinsky, 1953 | Brazil (Bahia) |
| A. bergi Wygodzinsky, 1953 <i>Heniartes erythromerus</i> Berg, 1879 (nec Spinola) | Argentina (Misiones), Brazil (Minas Gerais, Rio Grande do Sul) |
| A. dietrichi Wygodzinsky, 1953 | Brazil (Minas Gerais) |
| A. salvatorianus Carcavallo & Martínez, 1960 | Colombia (Boyacá) |
| A. schubarti Wygodzinsky, 1946 | Brazil (Pernambuco) |
| A. stali Wygodzinsky, 1946 | Brazil (Mato Grosso) |
| A. wygodzinskyi Prosen & Martínez, 1953 <i>Agrioleptes zischkai</i> Wygodzinsky, 1953 | Bolivia (Cochabamba) |

Figure 11. Checklist of the *Agrioleptes* species.

7. Tibiae with pale bases; femora light brown with dark annuli not so conspicuous (Fig. 9) *A. bergi*
- Tibiae, each with one large basal dark annulus; femora black, with one or two pale annuli (Fig. 10) *A. wygodzinskyi*

Checklist of the *Agrioleptes* species

The checklist (Fig. 11) is based on the material examined by Wygodzinsky (1946, 1953) and Carcavallo and Martínez (1960). Synonyms follow Maldonado (1990) and Forero and Giacchi (2001).

Acknowledgements

I am grateful to Hélcio R. Gil-Santana who kindly facilitated a copy of the obscure paper with the original description of *A. salvatorianus*, and thus made possible the construction of this key. Paulina Muñoz de Hoyos and an anonymous reviewer offered useful suggestion for the improvement of the manuscript.

Literature cited

- CARCAVALLO, R. U.; MARTÍNEZ, A. 1960. Un nuevo *Agrioleptes* de Colombia (Hemiptera: Reduviidae: Apiomerinae). *Revista de la Cátedra de Microbiología y Parasitología*, Buenos Aires 28 (89): 31-35.
- COSCARÓN, M. C. 1983. Revisión del género *Rasahus* (Insecta, Heteroptera, Reduviidae). *Revista del Museo de la Plata (N. S.) (Secc. Zool)* 13 (136): 75-138.
- COSTA LIMA, A. DA; HATHAWAY, C. R.; CAMPOS SEABRA, C. A. 1948. Sobre algumas espécies de Apiomerinae representadas nas nossas coleções (Hemiptera: Reduviidae: Apiomerinae). *Memórias do Instituto Oswaldo Cruz* 45 (4): 761-772.
- FORERO, D.; GIACCHI, J. C. 2001. A new synonymy in the genus *Agrioleptes* (Heteroptera: Reduviidae: Apiomerinae). *Revista Colombiana de Entomología* 27 (3-4): 205-206.
- GIL-SANTANA, H. R.; ALENCAR, J. 2001. Sobre o gênero *Veseris* Stål, 1865, com *Eurylochus* Torre-Bueno, 1914, como sinônimo novo e chaves para identificação (Hemiptera, Reduviidae, Sphaeridopinae). *Entomología y Vectores* 8 (1): 95-104.
- JURBERG, J.; GALVÃO, C. 1997. *Hermanlenticia* n. gen. da tribo Triatomini, com um rol de espécies de Triatominae (Hemiptera, Reduviidae). *Memórias do Instituto Oswaldo Cruz* 92(2): 181-185.
- MALDONADO C., J. 1990. Systematic catalogue of the Reduviidae of the World. Special edition of the Caribbean Journal of Science. University of Puerto Rico, Mayagüez, Puerto Rico. 694 p.
- MALDONADO C., J.; SANTIAGO-BLAY, J. A. 1992. A new species of the Neotropical genus *Sphaeridops* Amyot & Serville, 1843 (Sphaeridopinae: Reduviidae). *Proceedings of the Entomological Society of Washington* 94 (4): 508-511.
- MALDONADO C., J.; SANTIAGO-BLAY, J. A.; POINAR, G. O. 1993. *Apricrenus fossilis* gen. & sp. n. (Heteroptera: Reduviidae: Apiomerinae) from Dominican amber (lower Oligocene-upper Eocene). *Entomologica scandinavica* 24 (2): 139-142.
- PROSEN, A. F.; MARTÍNEZ, A. 1953. Una nueva especie de *Agrioleptes* (Hemipt. Reduviidae, Apiomerinae). *Misión de Estudios de Patología Regional Argentina* 24 (83-84): 53-56.
- STÅL, C. 1866. Bidrag till Reduviidernas kännedom. *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar* (9): 235-302.
- WYGDZINSKY, P. 1946. Contribuição ao conhecimento do gênero *Agrioleptes* Stål, 1866 (Apiomerinae, Reduviidae, Hemiptera). *Revista Brasileira de Biologia* 6 (2): 149-157.
- WYGDZINSKY, P. 1947. Contribuição ao conhecimento do gênero *Heniartes* Spinola, 1837 (Apiomerinae, Reduviidae, Hemiptera). *Arquivos do Museu Nacional* 41: 11-64.
- WYGDZINSKY, P. 1953. Contribuição ao conhecimento dos gêneros *Heniartes* Spinola, 1837 e *Agrioleptes* Stål, 1866 (Apiomerinae, Reduviidae, Hemiptera). *Revista Brasileira de Biologia* 13 (4): 369-380.

Recibido: Mar. 14 / 2002

Aceptado: Jun. 07 / 2002