

NOTES ON NEOTROPICAL EUMENINAE I
(HYMENOPTERA: VESPIDAE)

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Abstract.- Two taxa presently treated as subspecies are raised to species rank: *Alphamenes richardsi* Soika **n. stat.**, and *Pseudacaromenes johnsoni* (Cameron) **stat. rev.** Two new synonymies are proposed: *Nortonia difficilis* Bertoni = *Pseudacaromenes johnsoni* (Cameron) **n. syn.** and *Pachymenes picturatus nigrinus* Soika = *Pachymenes laeviventris* (Fox) **n. syn.** The possible synonymy of *Alphamenes insignis loquax* Soika under *Alphamenes richardsi* Soika is left open to future confirmation.

Resumen.- Dos taxones hasta ahora tratados como subespecies son elevados al nivel de especie: *Alphamenes richardsi* Soika **n. stat.**, and *Pseudacaromenes johnsoni* (Cameron) **stat. rev.** Dos nuevas sinonimías son propuestas: *Nortonia difficilis* Bertoni = *Pseudacaromenes johnsoni* (Cameron) **n. syn.** and *Pachymenes picturatus nigrinus* Soika = *Pachymenes laeviventris* (Fox) **n. syn.** La posible sinonimía de *Alphamenes insignis loquax* Soika bajo *Alphamenes richardsi* Soika es dejada en tela de juicio para una futura confirmación.

These are the first results from a recent study of eumenine material from the collections of A.W. Bertoni, W.J. Fox, The Natural History Museum of London, and material collected by the author. Two primary motivations for the production of this paper were my ongoing curatorial work with the collection of A.W. Bertoni (Garcete Barrett 1996 and 1998), deposited in the Museo Nacional de Historia Natural del Paraguay (IBNP), and the opportunity I had to study the collections of the American Museum of Natural History (AMNH) and The Natural History Museum of London (BMNH), thanks to a grant from the Darwin Initiative.

***Alphamenes richardsi* Soika n. stat.**

Alphamenes insignis richardsi Soika, 1978, Boll. Mus. Civ. Stor. Nat. Venezia 29: 333 (key), 357, holotype female - [Brasil] “Mato Grosso, 12°50’ S, 51°47’ W.” (BMNH) [examined].

?*Alphamenes insignis loquax* Soika, 1978, Boll. Mus. Civ. Stor. Nat. Venezia 29: 333 (key), 357, male - Paraguay: “San Louis” (coll. Soika).

Carpenter and Vecht (1991) mention the names *richardsi* and *loquax* as probable synonyms of *insignis*, since Soika (1978) separated them based solely on color. After the examination of the type series of *insignis richardsi*, comparing it with specimens of typical *insignis* I was able to find also structural differences supporting a specific separation:

- 1.- Tegula only finely punctured. Pronotum and mesopleuron with macropunctures moderate, separated by flat interspaces of at least half or the same as the puncture diameter. Coarse punctures becoming sparser to absent towards the middle of pronotum. Clypeus (Fig. 1) as broad as long and in contact with the eyes. Temples narrower (Fig. 2).....***insignis* (Fox)**
- Tegula with several coarse punctures. Pronotum and mesopleuron with coarser punctures, separated by convex interspaces of less than half the puncture diameter. Coarse punctures continuous over all the pronotum, including the middle. Clypeus (Fig. 3) broader than long (1 : 0.8) and separated from eyes. Temples a bit broader (Fig. 4).....***richardsi* Soika**

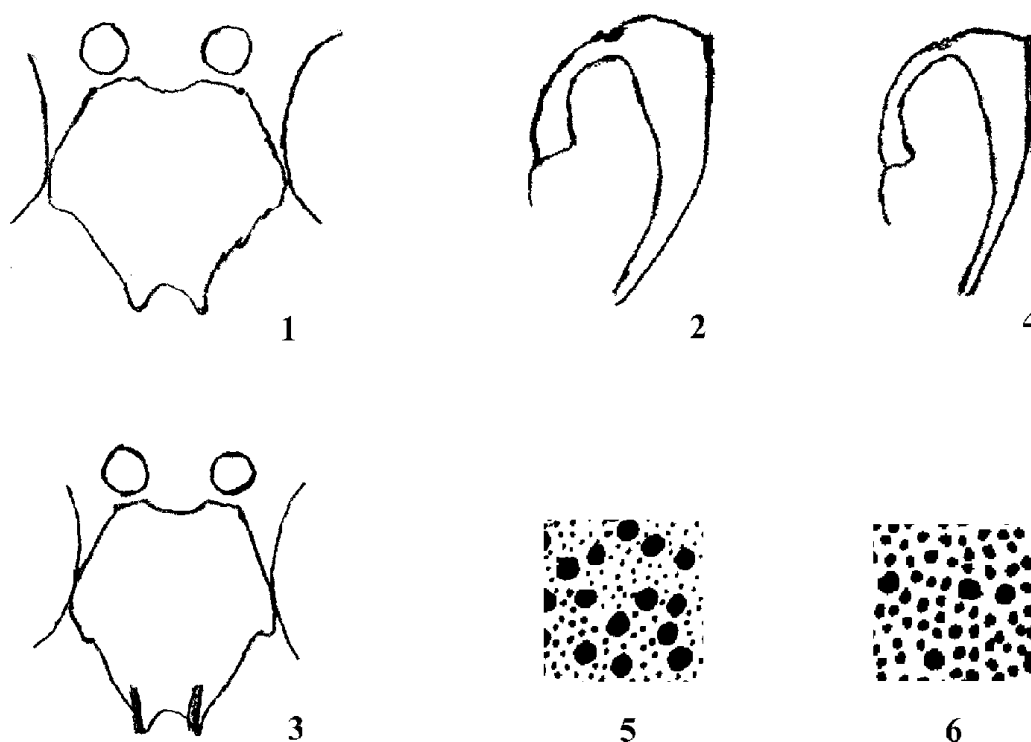
I was not able to examine the type of *insignis loquax*, but I am quite sure it will be proven that it is a male of the present species.

***Pachymenes laeviventris* (Fox)**

Eumenes laeviventris Fox, 1899, Proc. Acad. Nat. Sci. Philad. 1899: 440, 460 (key), female, male - "Brazil: Corumba" (lectotype female Pittsburgh) [examined].

Pachymenes picturatus nigritus Soika, 1990, Boll. Mus. Civ. Stor. Nat. Venezia 39: 76 (key), 114, holotype male - "Colombia: Arauca, Tame" (BMNH) [examined]. **n. syn.**

Examination of the holotype of *picturatus nigritus* has proven it is merely a specimen of *Pachymenes laeviventris* (Fox).



Figs 1 - 6. Figs. 1 - 2, female *Alphamenes richardsi*: Fig. 1, clypeus; Fig. 2, left temple. Figs. 3 - 4, female *Alphamenes insignis*: Fig. 3, clypeus; Fig. 4, left temple. Fig. 5, female *Pseudacaromenes johnsoni*, sculpture of tergum II. Fig. 6, female *Pseudacaromenes alfkenii*, sculpture of tergum II.

***Pseudacaromenes johnsoni* (Cameron) stat. rev.**

Eumenes johnsoni Cameron, 1907, Invert. Pacif. 1: 185, female (in division *Pachymenes*) - "Br. Honduras: Belize" (BMNH, no. 18.183) [examined].

Nortonia difficilis Bertoni, 1918, An. Cient. Parag. (2) 3: 193, 207, Lectotype female, Paraguay, Pto. Bertoni, xi. 1910, 3056 (coll. Bertoni, IBNP), here designated. **n. syn.**

Pseudacaromenes alfkenii johnsoni; Soika, 1990, Boll. Mus. Civ. Stor. Nat. Venezia 39: 146 (female; Belize; Costa Rica). -Cooper, 1996, Entomologist's Monthly Magazine 132: 183, figs. 1-8 (male, female; Colombia; Paraguay).

[*Pseudacaromenes alfkenii*; West-Eberhard *et al.*, 1995, Hym. Costa Rica: 574 (Costa Rica). Missidentification].

The two known species of *Pseudacaromenes* Soika can be separated using the following key:

- 1.- Metasoma brick orange with diffuse yellow marks on tergum I. Wings mostly subhyaline. Mesoscutum with dense appressed blackish brown pubescence as well as sparse outstanding long erect pale hairs. Tergum II covered by dense thick golden pubescence. Tergum II with dense medium size micropunctation that obscures the somewhat larger punctures amongst them (Fig. 6).....*alfkenii* (Ducke)
- Metasoma black with pale yellow marks on tergum I. Wings deeply infusate with violaceous reflections. Mesoscutum with only sparse, decumbent pale hairs. Tergum II covered by sparser fine pale pubescence (turning to brown depending on the angle from which they are viewed). Tergum II with evenly dense micropunctures and discernible larger punctures among them (Fig. 5).....*johnsoni* (Cameron)

Material examined: *Pseudacaromenes johnsoni*: BELIZE: P. Cameron coll. (1 female BMNH, holotype of *Eumenes johnsoni*). PARAGUAY: Alto Paraná, Puerto Bertoni, xi. 1910, Bertoni coll., 3056 (2 females IBNP, Lectotype and Paralectotype of *Nortonia difficilis*). *Pseudacaromenes alfkenii*: BRASIL: Santarem (1 female BMNH).

ACKNOWLEDGMENTS

I thank Jim Carpenter, Ian Gauld and Sondra Ward for their assistance during my stay at New York and London. Special thanks to the first one for his continuous help with comments, literature and unpublished data.

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