

NOTE

Remarks on *Parvaverrucosa annulata* (= *Verrucosa annulata* Poinar and Brown 2005) (Hemiptera: Sternorrhyncha: Aphidoidea)

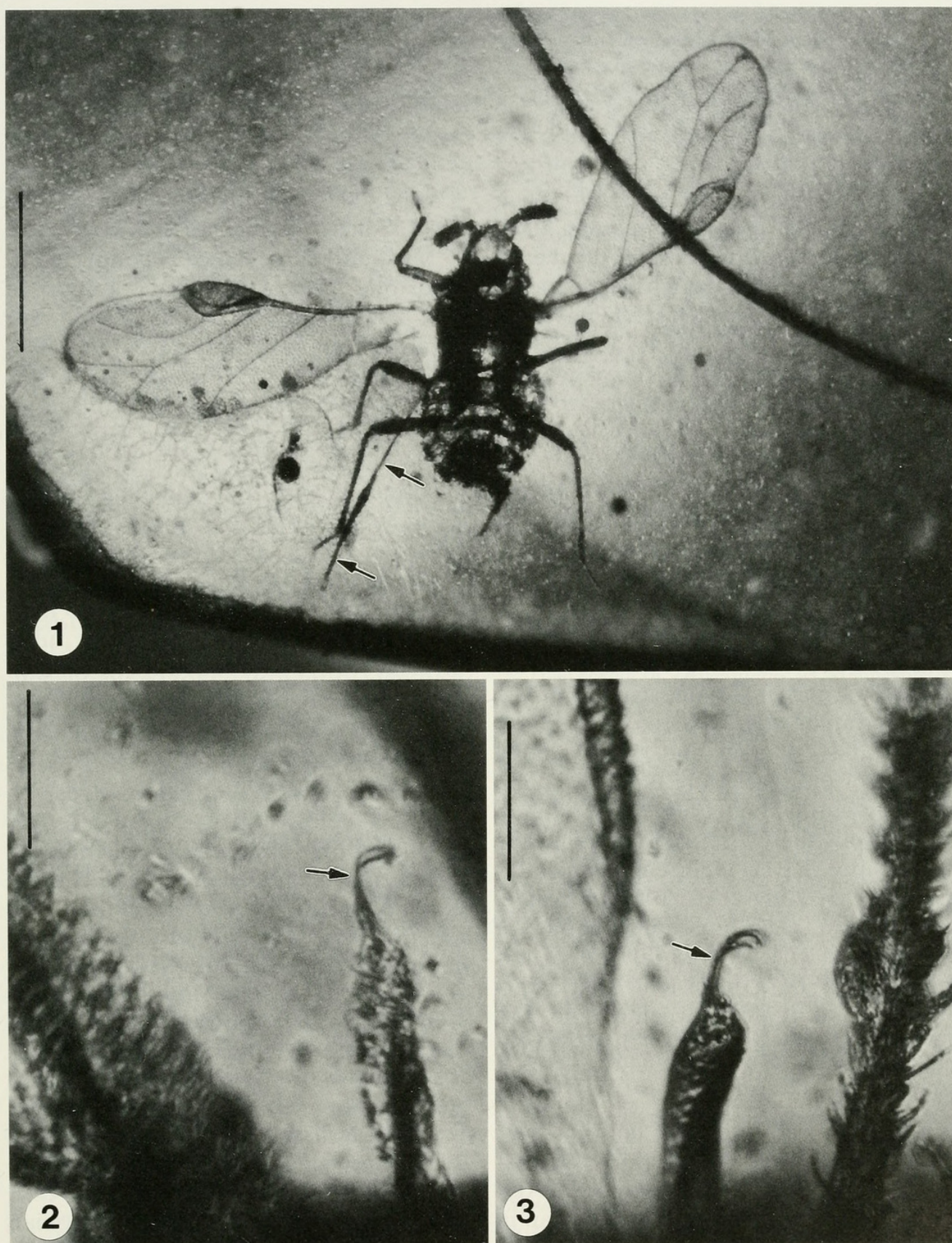
In a recent publication (Poinar and Brown 2005), a fossil aphid in Lower Cretaceous amber from Myanmar (Burma) was described in the genus *Verrucosa* Poinar and Brown. It was brought to our attention that this name is preoccupied by *Verrucosa* MacCook (1888), a genus of orb weaving spiders in the family Araneidae. As a **replacement name** for *Verrucosa* Poinar and Brown and the family Verrucosidae Poinar and Brown, we propose the genus and family name *Parvaverrucosa* and **Parvaverrucosidae**, respectively. “*Parva*” is from the Latin “*parvus*” for little (feminine); “*Verrucosus*” is Latin for “full of warts” (feminine) in reference to the size of the warts comprising the wing armature.

In the original description of *Parvaverrucosa annulata*, we did not observe the hind wings. However in a recently acquired specimen (B-He-13C deposited in the Poinar amber collection at Oregon State University) originating from the same locality as the holotype, the right hind wing is reduced to a stub or hamulohalter (Figs. 1–2). In re-examining the holotype, a similar structure was noted (Fig. 3). These hamulohalters are covered with warts, smaller than those on the forewings, and contain a pair of modified hamuli protruding near their tips. These hamuli are very similar to those on the hind wings of the western wheat aphid (*Diuraphis tritici* (Gillette)

(Ni et al. 2002). The other two described aphids from Burmese amber, *Burmitaphis prolatum* Poinar and Brown (2005) and *Caulinus burmitis* Poinar and Brown (2005), do not have hamuli on their hamulohalters. The presence of hamuli on *P. annulata* supports our view that the hamulohalter is a greatly reduced hind wing and that this condition is a secondary adaptation. It is interesting that these hamuli are so well developed in comparison to the reduced hind wings. Whether they still attach to the claval fold on the forewing during flight is unknown.

LITERATURE CITED

- MacCook, H. C. 1888. Necessity for Revising the Nomenclature of American Spiders. Proceedings of the Academy of Natural Sciences, Philadelphia, 1888: 74–79.
- Ni, X., G. D. Johnson, and S. S. Quisenberry. 2002. Comparison of hind wings hamuli from five species of cereal aphids (Hemiptera: Aphididae). Annals of the Entomological Society of America 95: 109–114.
- Poinar, Jr., G. O. and A. E. Brown. 2005. New Aphidoidea (Hemiptera: Sternorrhyncha) in Burmese amber. Proceedings of the Entomological Society of Washington 107: 835–845.
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Figs. 1-3. *Parvaverrucosa annulata*. 1, Dorsal view of specimen B-He-13C. Arrows show rostrum. Bar = 514 μ m. 2, Hamuli (arrow) on hamulohalter of specimen B-He-13C. Bar = 36 μ m. 3, Hamuli (arrow) on hamulohalter of holotype. Bar = 42 μ m.



Poinar, George O. and Brown, Alex E. 2006. "Remarks on *Parvaverrucosa annulata* (= *Verrucosa annulata* Poinar and Brown 2005) (Hemiptera: Sternorrhyncha: Aphidoidea)." *Proceedings of the Entomological Society of Washington* 108, 734–735.

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