

PROCEEDINGS
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THE GENUS *VELOIDEA* GOULD (HEMIPTERA:
VELIIDAE)

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The Genus *Veloidea* Gould (1934) was created to hold *Rhagovelia gigantea* Gould (1928) from Colombia and *Velia vivida* Buchanan-White (1878) from Nicaragua; *Rhagovelia reposita* Drake and Harris (1931) was suppressed therein as a synonym of *vivida* White. Since 1934, only *Veloidea venezolana* Drake and Roze from Venezuela has been described.

Veloidea vivida (Buchanan-White) (fig. 1) is known solely from the type specimen, an apterous female, in the British Museum (Natural History). Mr. Arthur Smith, artist, of the above museum has kindly figured the type for us. This specimen has also been seen by the senior author.

Although closely related and rather similar in general aspect, *Veloidea reposita* (Drake and Harris) differs from *V. vivida* (Buchanan-White) in having the seventh connexival segments on each side prolonged backwards into a sharp spine, instead of truncated (fig. 1). The armature on the inferior side of the hind femora of the female (figs. 1 and 9) is also slightly different in the two species. The male of *vivida* is unknown, also the alate female. On account of these differences, the authors are here restoring *V. reposita* to the specific status.

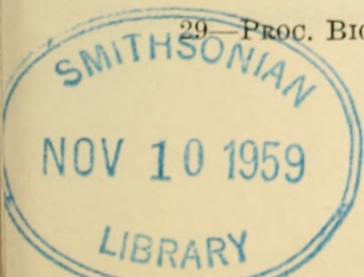
Genus *Veloidea* Gould

Veloidea Gould, Jr. Kansas Ent. Soc., Vol. 7, p. 57, 1934.

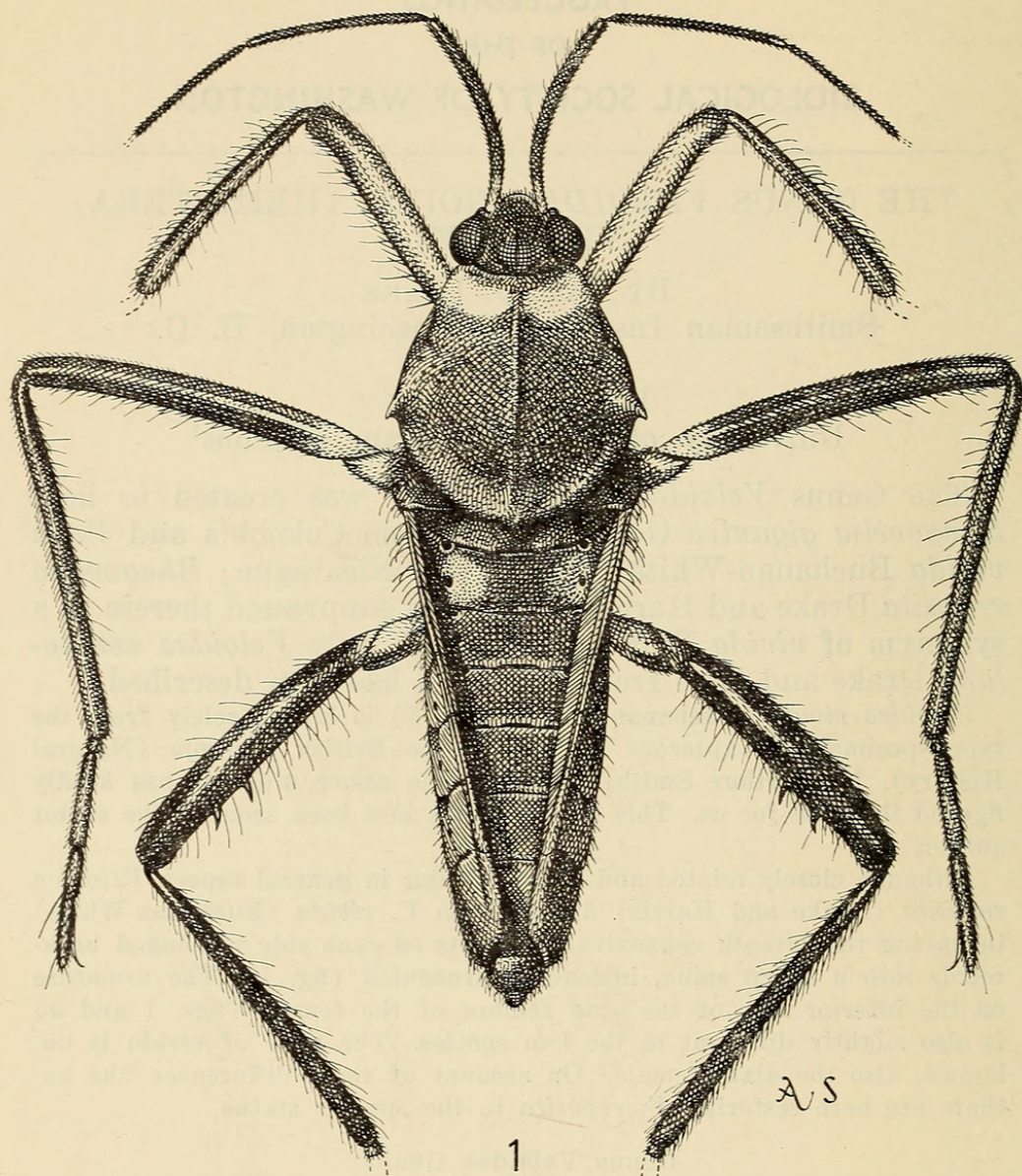
Veloidea is an American genus of water-striders inhabiting the Neotropical Region. The members of this genus are quite large and robust. The structural characteristics are very pronounced, especially the modified tarsal claws of the middle and hind legs (fig. 5) and the male genital segments (figs. 2-4) as shown in the illustrations. The species of other American genera of water-striders furnished with blade-like, tarsal structures (*Euvelia* Drake, *Oiovelia* Drake and Hottes, and *Husseyella* Herring) are much smaller, are less robust, and have very different genital structures.

Veloidea is closely related to the genera *Velia* Latreille (1804) and *Rhagovelia* Mayr (1865). Its members can be separated at once from those of the latter genera by having four, broad, thin, laminate or

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blade-like structure (fig. 5) on the third tarsal segments of the middle and hind pairs of legs, instead of the paired claws.

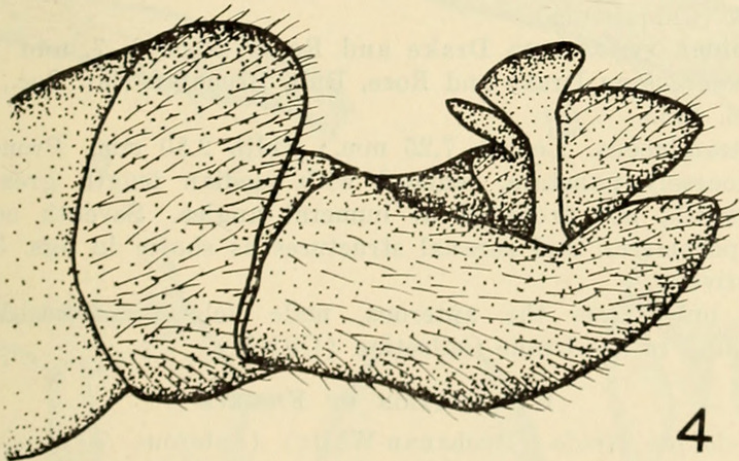
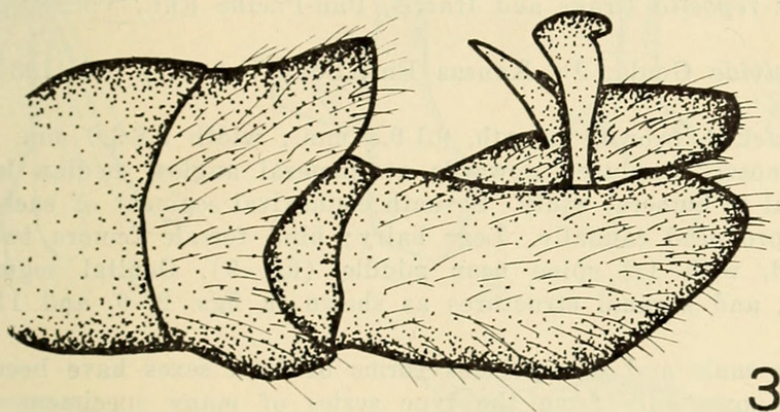
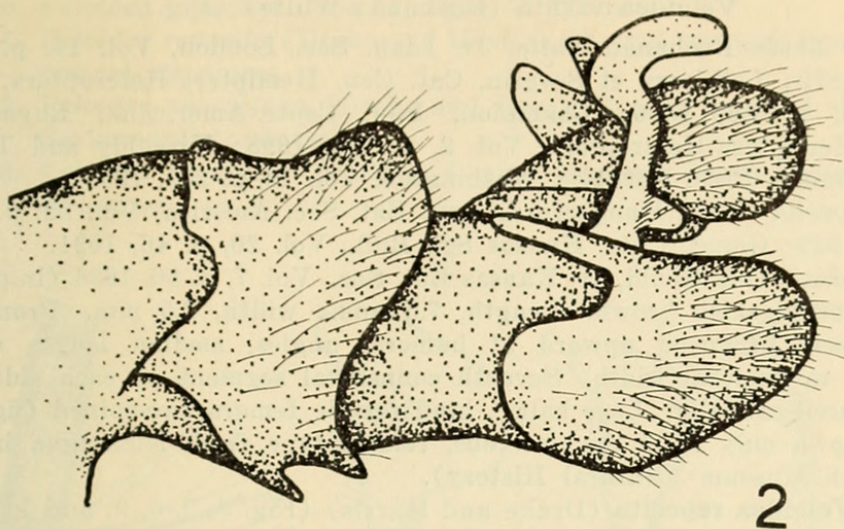
None of the four described species of *Veloidea* is represented in our collections by all of the pterygopolymorphic forms, and the male of one species and the female of another are unknown. On this account, we have prepared a brief compendium with illustrations of each species for specific differentiation.

***Veloidea gigantea* (Gould) (Figs. 4, 8, 10, and 13)**

Rhagovelia gigantea Gould, Ann. Ent. Soc. Amer., Vol. 21, p. 417, 1928;
Univ. Kansas Sci. Bull. Vol. 20, p. 46, pl. 5, fig. 1, 1931.

***Veloidea gigantea* Gould, Jr. Kansas Ent. Soc., Vol. 7, p. 59, 1934**

Color stramineous to brown. Length, 8.4 mm.; width 2.2 mm. Pronotum slightly elevated at humeral angles, but not spinosely produced.



median length about equal to humeral width. Seventh connexival segment of each side spinosely produced caudally. Legs hairy, hind femora of female two-spined (fig. 10) as in *V. vivida* (Buchanan-White). Genital segments, parameres, and suranal structures as shown in figs. 4, 8, and 13, respectively.

The apterous and macopterous forms of both sexes are known. Specimens are known only from Colombia (Cincinnati and Sierra S. Lorenz).

***Veloidea vivida* (Buchanan-White) (Fig. 1)**

Velia vivida Buchanan-White, Jr. Linn. Soc. London, Vol. 14, p. 486, 1879; Lethierry et Severin, Cat. Gen. Hemiptera-Heteroptera, Vol. 3, p. 58, 1896; Champion, Biol. Centr.-Americana, Rhynchota Hemiptera-Heteroptera, Vol. 2, p. 143, 1898; Kirkaldy and Terrebueno, Proc. Ent. Soc. Washington, Vol. 10, p. 205, 1909.

Rhagovelia vivida Hungerford, Ann. Ent. Soc. America, Vol. 22, p. 761, 1929; Gould, Univ. Kansas Sci. Bull., Vol. 20, p. 46, 1931.

Veloidea vivida Gould, Jr. Kansas Ent. Soc., Vol. 7, p. 56, 1934 (in part).

Color blackish brown. Length, 7.5 mm.; width, 2.5 mm. Pronotum spinosely produced upward at humeral angles, median length about equal to humeral width. Seventh connexival segment of each side not produced caudally. Legs hairy; hind female femora two-spined (fig. 1).

Known only from the apterous, female type from Nicaragua in the British Museum (Natural History).

***Veloidea reposita* (Drake and Harris) (Fig. 2, 5, 6, 9, and 11)**

Rhagovelia reposita Drake and Harris, Pan-Pacific Ent., Vol. 8, p. 33, 1931.

Veloidea vivida Gould, Jr. Kansas Ent. Soc., Vol. 7, p. 56, 1934 (in part).

Color blackish brown. Length, 9.1-9.8 mm.; width 2.8-3.0 mm. Pronotum spinosely produced upwards at humeral angles, median length about equal to humeral width. Seventh connexival segment of each side spinosely produced caudally. Legs hairy; hind female femora two- to four-spined, with 1st spine near middle (fig. 9). Genital segments, parameres, and suranal structures as shown in figs. 2, 6, and 11, respectively.

Apterous male and macopterous forms of both sexes have been described. Known only from the type series of many specimens from Guatemala (Chiquimula).

***Veloidea venezolana* Drake and Roze (Figs. 3, 7, and 12)**

Veloidea venezolana Drake and Roze, Bull. Brooklyn Ent. Soc., Vol. 50, p. 106, 1955.

Color stramineous. Length 7.25 mm.; width 2.30 mm. Pronotum extremely coarsely punctate, reduced with median length greater than humeral width, not produced at humeral angles. Seventh connexival segment, parameres, and suranal structures as shown in figs. 3, 7, and 12, respectively.

Known only from the apterous, male holotype from Venezuela (Quinagvina) in the Drake Collection (USNM).

EXPLANATION OF FIGURES

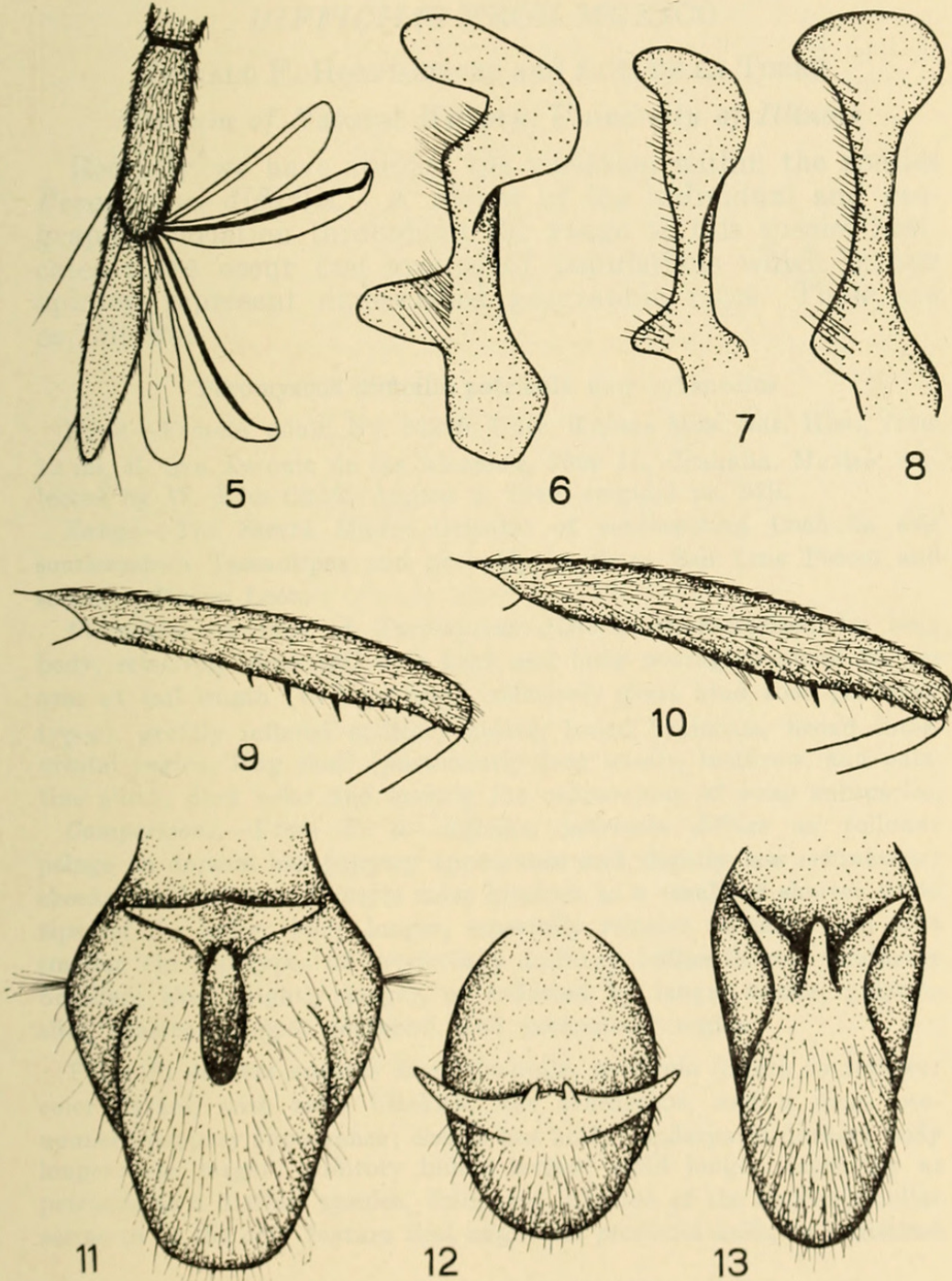
- Fig. 1. *Veloidea vivida* (Buchanan-White) (apterous ♀ type).
- Fig. 2. *Veloidea reposita* (Drake and Harris), ♂ genital segments.
- Fig. 3. *Veloidea venezolana* (Drake and Roze), ♂ genital segment.
- Fig. 4. *Veloidea gigantea* (Gould), ♂ genital segment.
- Fig. 5. *Veloidea reposita* (Drake and Harris), hind tarsus showing lamillate plates.
- Fig. 6. *Veloidea reposita* (Drake and Harris), right ♂ paramere.
- Fig. 7. *Veloidea venezolana* Drake and Roze, right ♂ paramere.
- Fig. 8. *Veloidea gigantea* (Gould), right ♂ paramere.
- Fig. 9. *Veloidea reposita* (Drake and Harris), right ♀ femur.

Fig. 10. *Veloidea gigantea* (Gould), right ♀ femur.

Fig. 11. *Veloidea reposita* (Drake and Harris), ♂ anal segment showing suranal structures.

Fig. 12. *Veloidea venezolana* (Drake and Roze), ♂ anal segment showing suranal structures.

Fig. 13. *Veloidea gigantea* (Gould), ♂ anal segment showing suranal structures.





Drake, Carl J. and Lauck, D R. 1959. "The genus *Veloidea* Gould (Hemiptera: Veliidae)." *Proceedings of the Biological Society of Washington* 72, 161–165.

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