

**TRIPHLEBA VITRINERVIS (MALLOCH), AN UNRECOGNIZED
SPECIES OF CRINOPHLEBA BORGMEIER
(DIPTERA: PHORIDAE)**

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Abstract.—*Triphleba vitrinervis* (Malloch) belongs to the genus *Crinophleba* Borgmeier (new combination), based on a comparison with the male of *C. angustifrons* Gotô. The male terminalia are illustrated and characters are given to allow the recognition of male *Crinophleba* in the *Manual of Nearctic Diptera* key to Phoridae. *C. vitrinervis* may represent the undescribed male of *C. rostrata* Borgmeier, known only from female specimens.

Key Words: *Crinophleba*, *Triphleba*, Phoridae, Diptera, taxonomy

The taxonomy of phorid flies is plagued by genera described from one sex, leaving open the possibility that the male sex may be described in one genus and the female in another (e.g. Brown 1986). An example is the genus *Crinophleba* Borgmeier, described only from female specimens (Borgmeier 1967). It was compared to the genus *Anevrina*, based on the setulose Rs vein of the wing, but the female of *Crinophleba* had a much larger proboscis, shorter tergite 6, different terminalia and weaker tibial setae than *Anevrina*. No described males of North American phorids could be linked with *Crinophleba*, and it was not until a second species from Japan, *C. angustifrons* Gotô, was described from both sexes (Gotô 1983) that a male was known. The newly described male had several distinctive characters, including a narrowed frons and a lack of cerci, that were not known in any North American species of phorid. Examination of the terminalia of *T. vitrinervis*, however, showed that it was a male *Crinophleba* (NEW COMBINATION). That this was not recognized earlier is not surprising, since *C. vi-*

trinis lacks the narrowed frons of *C. angustifrons* and since in the past characters of the male terminalia were not used extensively.

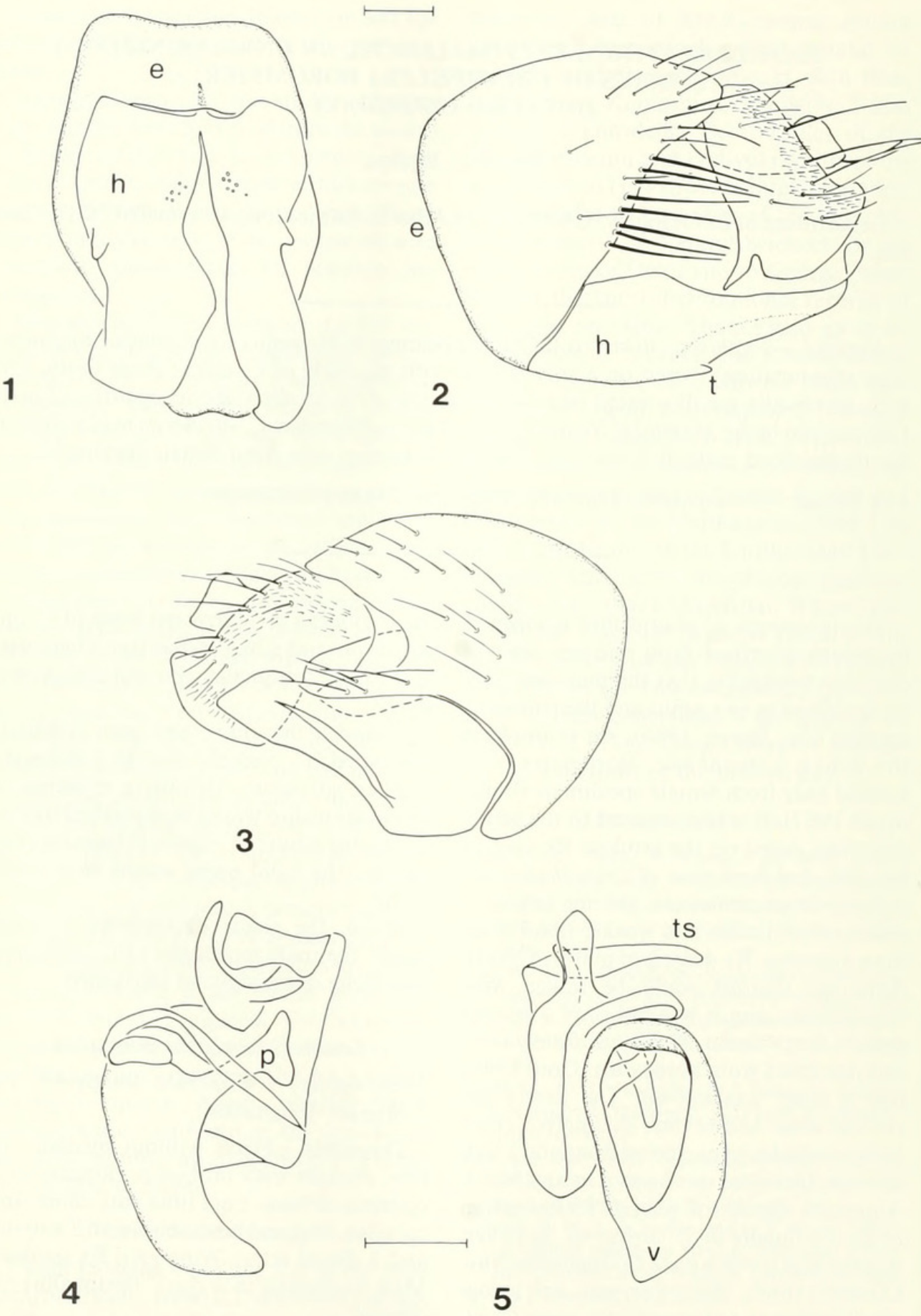
Although they have not been definitely associated, *C. rostrata* may be conspecific with *C. vitrinervis*. Definitive evidence of this relationship would be furnished by collecting the adults *in copula*. If they are conspecific, the valid name would be *C. vitrinervis*.

Below, the genus *Crinophleba* is diagnosed; the male terminalia of *C. vitrinervis* are briefly described and illustrated.

Genus *Crinophleba* Borgmeier

Type species *C. rostrata* Borgmeier (by original designation).

Diagnosis.—Frons without median furrow. Female with proboscis elongate. Anepisternum bare. Fore tibia with short, apical setae. Mid and hind tibiae with 2 anterior and 1 dorsal setae. Wing vein Rs setulose. Male terminalia lack cerci. Basiphallus expanded.



***Crinophleba vitrinervis* (Malloch)**

Trupheoneura vitrinervis Malloch 1912: 419.
Triphleba vitrinervis, Brues 1950: 41; Borgmeier 1963: 32.

Description.—*Male terminalia*: Epandrium continuous anteriorly, ring-shaped (Fig. 1). Left side of epandrium setose (Fig. 2); surstylus separate, with small ventral projection. Right side of epandrium (Fig. 3) setose, with posteroventral process. Hypandrium deeply cleft (Fig. 1), right lobe broader, each lobe with small lateral tooth. Basiphallus with expanded ventral portion (Fig. 5); posteriorly extended (Fig. 4). Sclerite behind basiphallus recurved above basiphallus, expanded into large lateral plate with two dorsal projections on left side and narrow lateral projection on right side. Posterior, transverse sclerite present. Cercus absent.

Material examined: CANADA. Alberta: Opal, 53°59'N, 113°13'W, 1 ♂, 20–22.vii.1989, B. V. Brown, Malaise trap, sand, jack pine. Ontario: Guelph, South Arboretum, 1 ♂, 11–16.v.1985, 1 ♂, 24–30.v.1985, 3 ♂, 19–24.vi.1985, 1 ♂, 6–10.viii.1985, Malaise trap, forest edge, 1 ♂, 7–11.vi.1985, Malaise trap, wet shrubby meadow, B. V. Brown; Stouffville, 2 ♂, 26.v.–2.vi.1985, B. V. Brown, Malaise trap (all specimens deposited in collection of the author). This species has also been collected in the states of Maryland, Michigan and New Hampshire in the U.S.A. (Borgmeier 1963).

Remarks: The wider frons of *C. vitrinervis* easily separate it from the male of *C. angustifrons*. Characters for separating female *C. rostrata* from *C. angustifrons* are given by Gotô (1983).

In order to facilitate recognition of the genus *Crinophleba* in the *Manual of Nearctic*

Diptera, Volume 2 key to Phoridae, couplet 8 should be changed to the following (figure numbers refer to figures in the *Manual of Nearctic Diptera*, Phoridae chapter):

8. Male lacking cerci. Female with proboscis greatly elongated, rigid (Fig. 4). Arista subapical. Scutellum with two strong posterior bristles and two much shorter coarse setae anteriorly. Tergite 6 of female short. Tibial bristles weak *Crinophleba* Borgmeier 2 spp.; widespread in Canada and northern U.S.A. Male with cerci present. Proboscis short, broad. Arista clearly dorsal (Fig. 35). Scutellum with four subequal bristles. Tergite 6 of female elongate. Tibial bristles strong (Fig. 65) *Anevrina* Lioy 9 spp.; widespread in Canada and U.S.A.

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Figs. 1–5. *Crinophleba vitrinervis*. Figs. 1–3, male terminalia (bar = 0.1 mm, all figs. to same scale). 1, ventral view. 2, left lateral view. 3, right lateral view. Figs. 4–5, aedeagus (bar = 0.1 mm, both figs. to same scale). 4, left lateral. 5, frontal. ABBREVIATIONS: e—epandrium, h—hypandrium, p—posterior extension of basiphallus, t—hypandrial tooth, ts—transverse sclerite, v—ventral expansion of basiphallus.



Brown, Brian Victor. 1990. "Triphleba vitrinervis (Malloch), an unrecognized species of Crinophleba borgmeier (Diptera : Phoridae)." *Proceedings of the Entomological Society of Washington* 92, 271–273.

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