

**Preliminary Key to Species for Larvae of Florida *Hydropsyche*
(Trichoptera: Hydropsychidae)***

Rick Abad & Andy Rasmussen**

1. Dorsum of abdominal segments with minute spines on at least segments I-III (Fig. 2); scale hairs present on at least the last 3 abdominal segments; parietals without dark stripes ventrally (Genus *Hydropsyche*) ... 2



Fig. 1. Abdominal segments I-II.

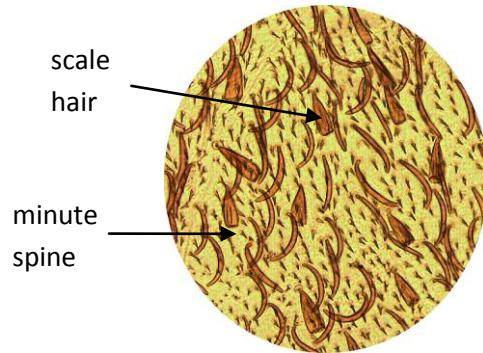


Fig. 2. Abdominal segment III showing triangular scale hairs and minute spines.

Dorsum of abdomen lacking minute spines (Fig. 4); dorsum of abdomen (Fig. 3) lacking scale hairs, club hairs present (Fig. 4); parietals each with dark stripe ventrally (Fig. 5B) *Hydropsyche sparna* (Ross)



Fig. 3. Abdominal segments I-II.

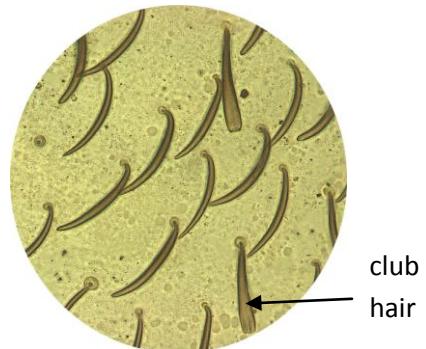


Fig. 4. Abdominal segment III.



A



B

Fig. 5. *Hydropsyche sparna* head, A) dorsal aspect, B) ventral aspect.

2(1) Anterior margin of frontoclypeus with 2 upturned tubercles (Fig. 6) *H. incommoda* Hagen



Fig. 6. *Hydropsyche incommoda* head, A) dorsal aspect, B) lateral aspect.

Anterior margin of frontoclypeus without 2 upturned tubercles (Fig. 7) 3

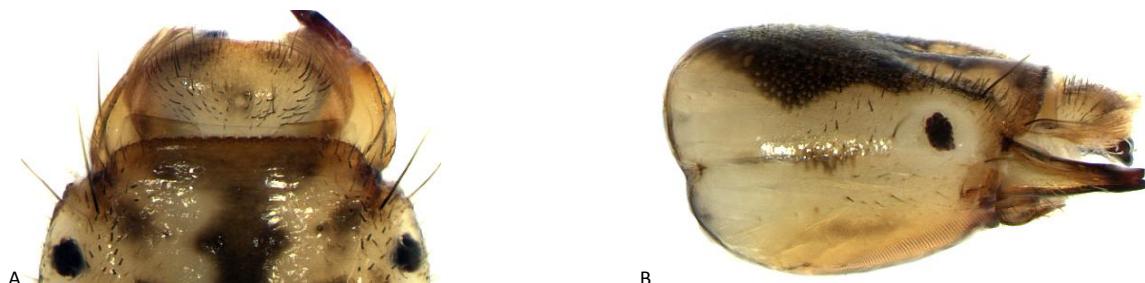


Fig. 7. Head, A. dorsal aspect, B. lateral aspect.

3(2) Anterior margin of frontoclypeus with deep crenulations (Figs. 8A, 8C); restricted to the Chipola River and Econfina Creek watersheds (presumed) *H. alabama* Lago & Harris



Fig. 8. *Hydropsyche alabama* head, A) dorsal aspect, B) ventral aspect, C) frontoclypeus, anterior close-up.

Anterior margin of frontoclypeus with shallow crenulations or smooth (Figs. 11-13, 15, 17) 4

- 4(3) Posterior angle of frontoclypeus with elevated mound or tubercle (best seen in lateral or posterior aspect of head) (Figs. 9, 12a) 5



Fig. 9. Head, lateral aspect.

- Posterior angle of frontoclypeus level with remaining posterior part of sclerite, mound or tubercle absent (Fig. 10) 6



Fig. 10. Head, lateral aspect.

- 5(4) Sides of head evenly curved; head typically unicolored dark brown to black except for light area around eye and occasionally behind eye (Figs. 9, 11) *H. betteni* Ross



Fig. 11. *Hydropsyche betteni* head, dorsal aspect.

Sides of head widened anteriorly (in dorsal aspect), posterior area of head not as wide as anterior (Fig. 12B); head mostly dark brown with pair of large, diagonal, tear-shaped spots; sides and top of head near epicranial stem with several dark brown, oval muscle scars (Fig. 12B) *H. elissoma* Ross



Fig. 12 *Hydropsyche elissoma* head, A) lateral aspect, B) dorsal aspect.

- 6(4) Frontoclypeus with many stout, bristle-like setae conspicuous on body of sclerite, most abundant on posterior half of sclerite (Fig. 13B) [Note: *H. rossi* sometimes has a few bristles present on the posterior half of the sclerite near the frontoclypeal sutures] *H. mississippiensis* Flint



Fig. 13. *Hydropsyche mississippiensis* head, A) dorsal aspect, B) frontoclypeus, posterior.

Bristle-like setae if present, restricted to anterolateral corners of frontoclypeus; posterior half of sclerite may have minute, clear, spine-like setae, but lacks larger bristle-like setae) [Note: *H. rossi* sometimes has a few bristles present on the posterior half of the sclerite near the frontoclypeal sutures] 7

7(6) Scale hairs sparse on at least abdominal segments I-IV (Fig. 14); head with numerous dark brown muscle scars posteriorly (Fig. 15) *H. decalda* Ross

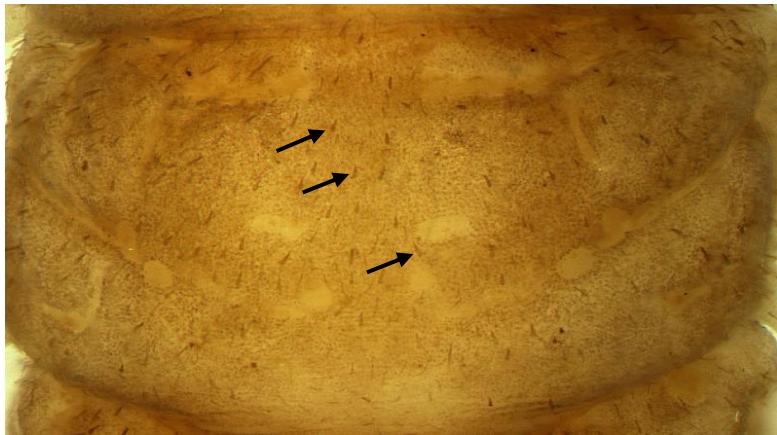


Fig. 14. *Hydropsyche decalda* abdominal segment IV.



Fig. 15. *Hydropsyche decalda* head, dorsal aspect.

Scale hairs abundant on abdominal segments I-IV (Fig. 16); head with pale muscle scars posteriorly (Fig. 17) *H. rossi* Flint et al.

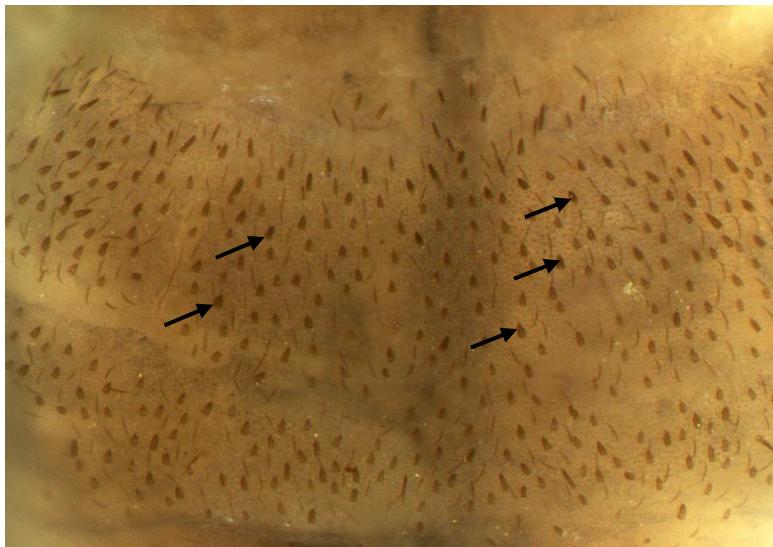


Fig. 16. *Hydropsyche rossi* abdominal segment IV.



Fig. 17. *Hydropsyche rossi* head, dorsal aspect.

* Key adapted from Schuster & Etnier (1978)

** Email correspondence may be sent to: Rick.Abad@dep.state.fl.us; Andrew.Rasmussen@famu.edu