

## Appendix D. Photographs of Stream Fauna

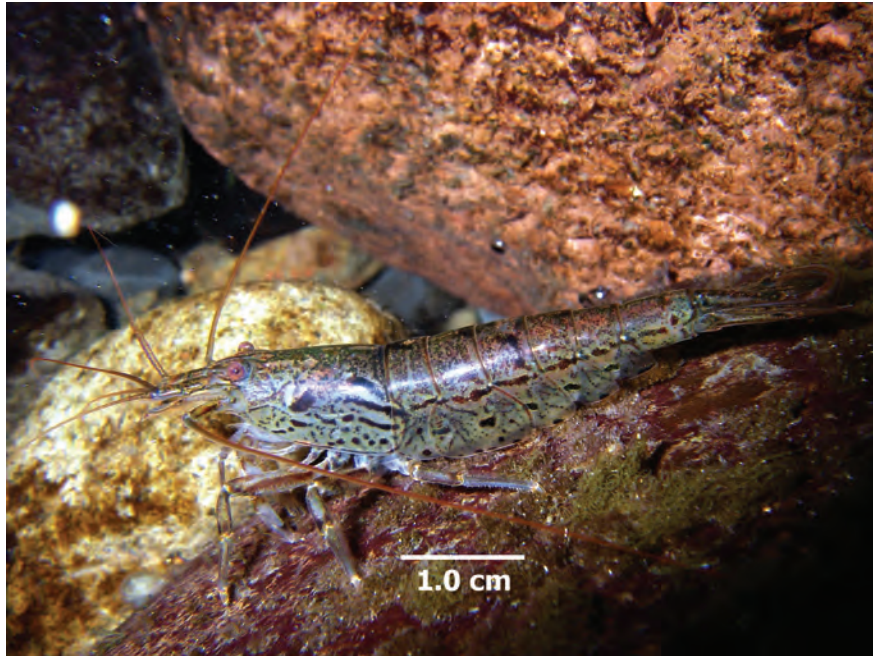


Figure D1. *Atyoida bisulcata* (‘ōpaekala‘ole) adult.



Figure D2. *Atyoida bisulcata* (‘ōpaekala‘ole) recruits.



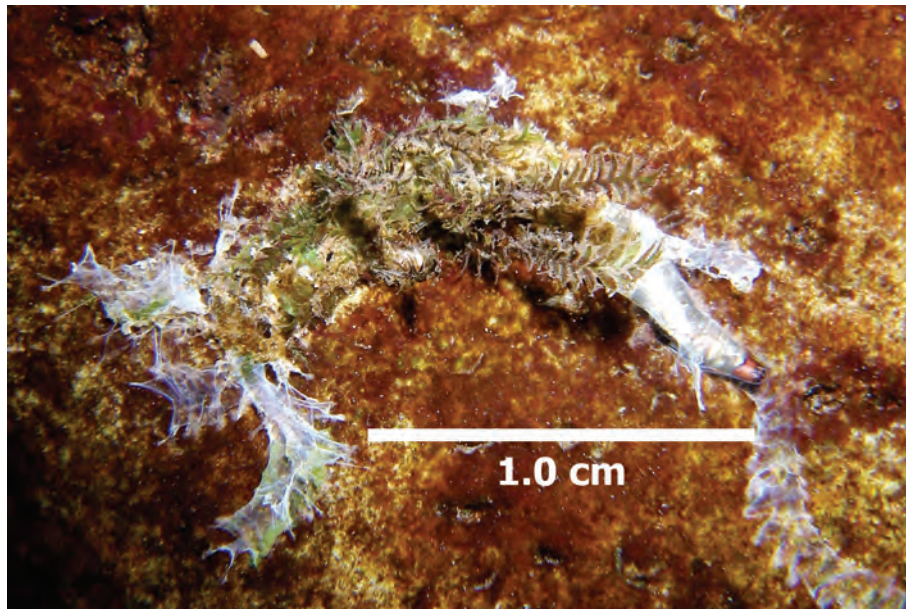
**Figure D3.** *Atyoida bisulcata* (‘ōpaekala’ole) larvae. Specimens preserved in 70-percent methanol.



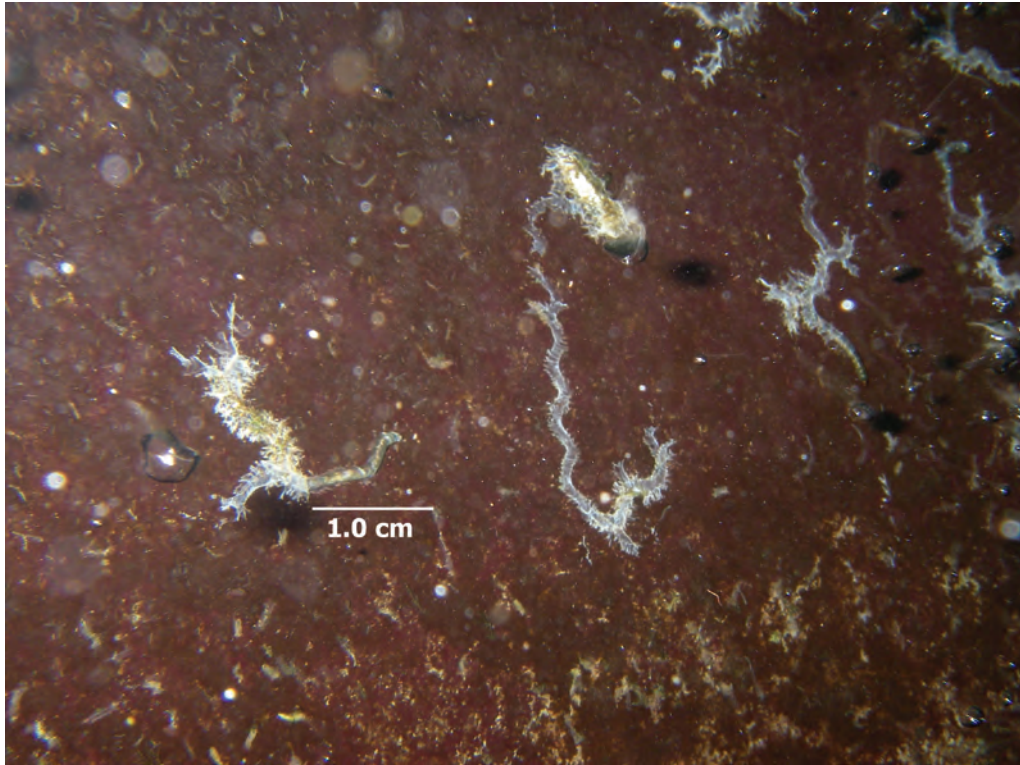
**Figure D4.** *Neritina granosa* (hihiwai); *Sicyopterus stimpsoni* (‘o’opu nōpili).



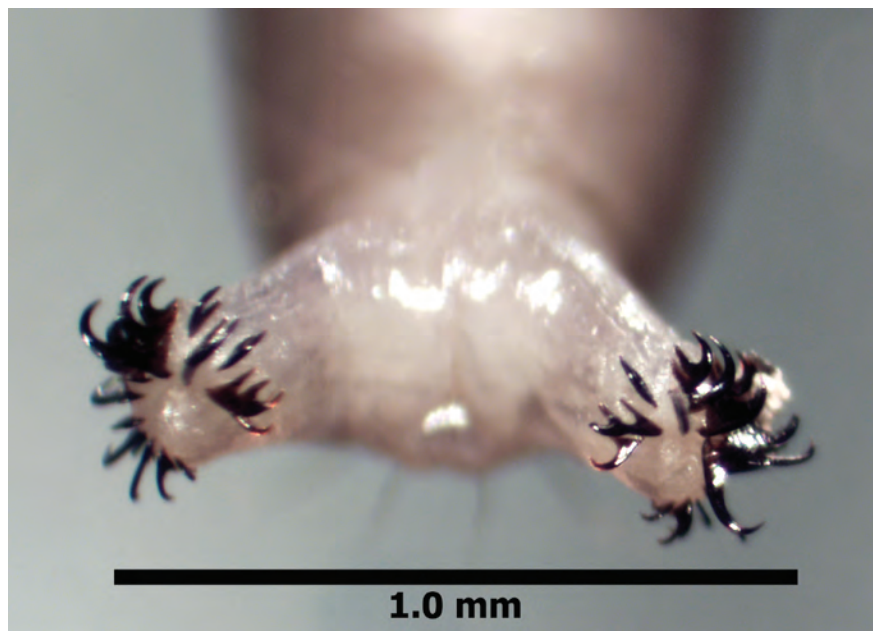
**Figure D5.** *Telmatogeton* sp. larvae. Specimens preserved in 70-percent methanol.



**Figure D6.** *Telmatogeton* sp. larva in case.



**Figure D7.** *Telmatogeton* sp. larvae in cases.



**Figure D8.** *Telmatogeton* sp. larva, posterior. Specimen preserved in 70-percent methanol.



Figure D9. *Telmatogeton* habitat 1.



Figure D10. *Telmatogeton* habitat 2.



**Figure D11.** *Megalagrion nigrohamatum nigrolineatum* (Blackline Hawaiian damselfly) adult.



**Figure D12.** *Megalagrion blackburni* (Blackburn's Hawaiian damselfly) adult.



**Figure D13.** *Megalagrion nigrohamatum nigrohamatum* (Blackhook Hawaiian damselfly) adult.



**Figure D14.** *Megalagrion* sp. naiad. Specimen preserved in 70-percent methanol.

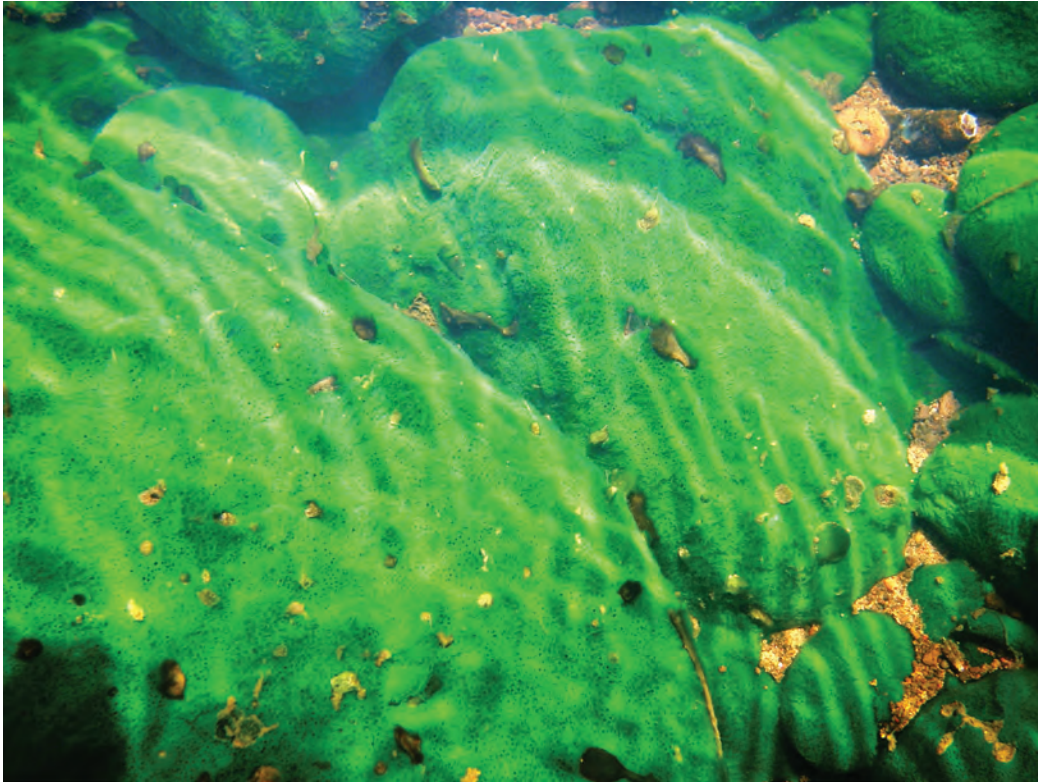
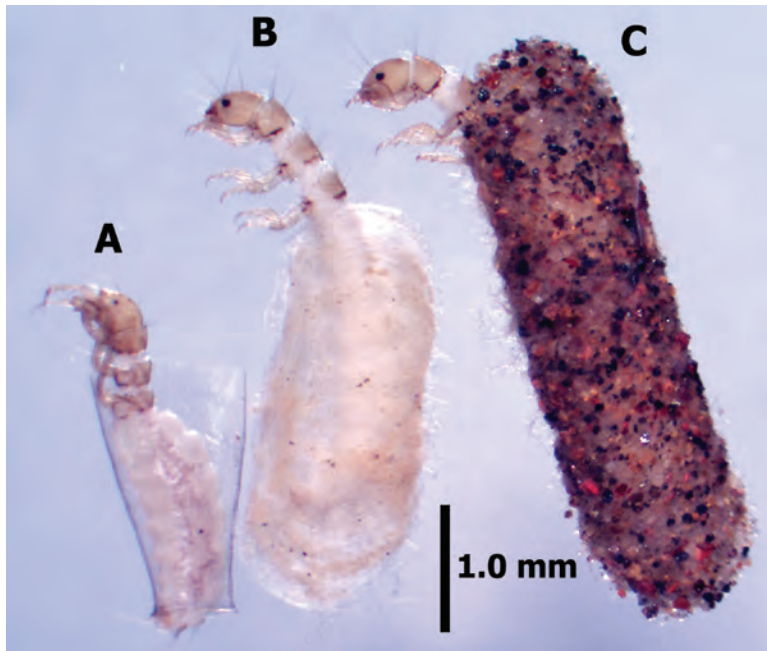


Figure D15. *Heteromeyenia baileyi* (native freshwater sponge).



Figure D16. Trichoptera larvae: (A) *Cheumatopsyche analis*; (B) *C. analis*; (C) *Hydroptila icona*; (D) *Hydroptila potosina*; (E) *Oxyethira maya*. Specimens preserved in 70-percent methanol. Scale in millimeters.

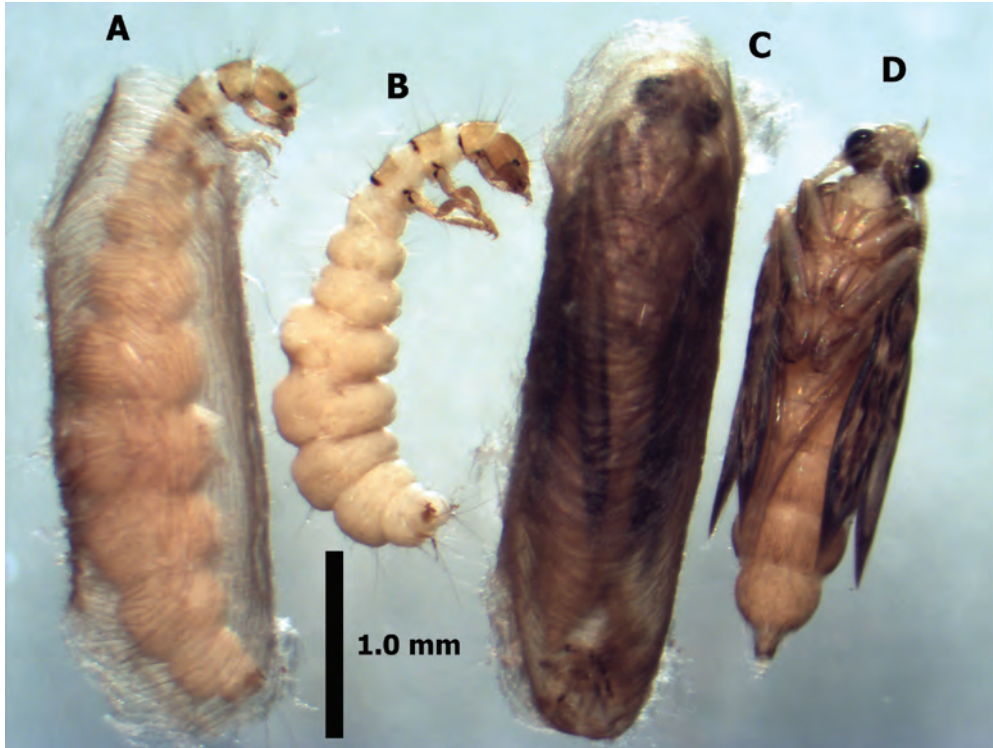




**Figure D17.** Hydroptilidae larvae: (A) *Oxyethira maya*; (B) *Hydroptila icona*; (C) *Hydroptila potosina*. Specimens preserved in 70-percent methanol.



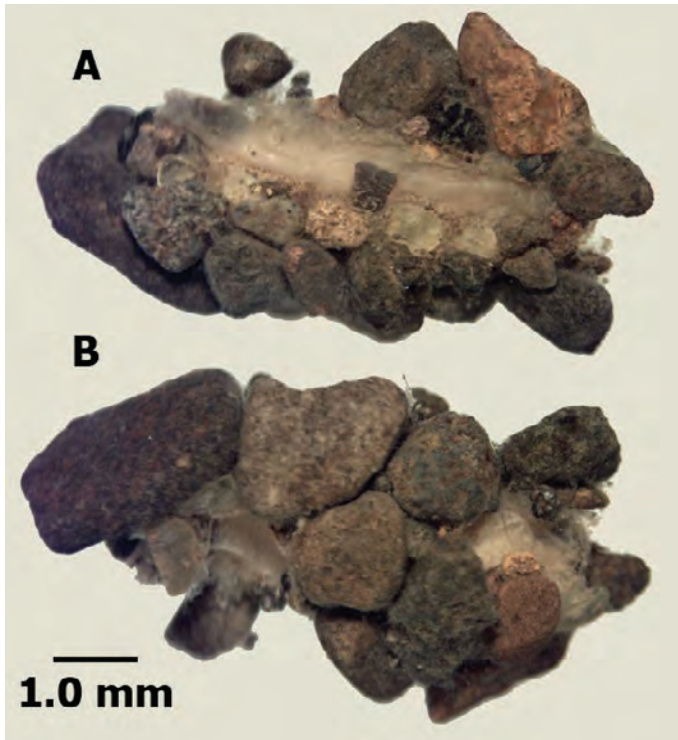
**Figure D18.** Hydroptilidae larvae: (A) *Hydroptila potosina*; (B) *Hydroptila icona*; (C) *Oxyethira maya*. Specimens preserved in 70-percent methanol.



**Figure D19.** *Hydroptila icona*: (A) larva in case; (B) larva; (C) pupa in cocoon; (D) pupa. Specimens preserved in 70-percent methanol.



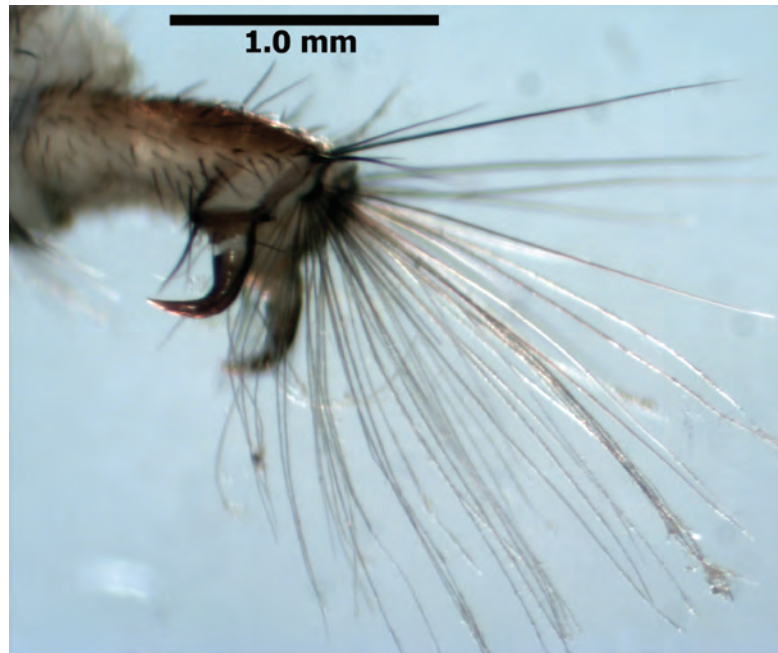
**Figure D20.** *Cheumatopsyche analis* larva. Specimens preserved in 70-percent methanol.



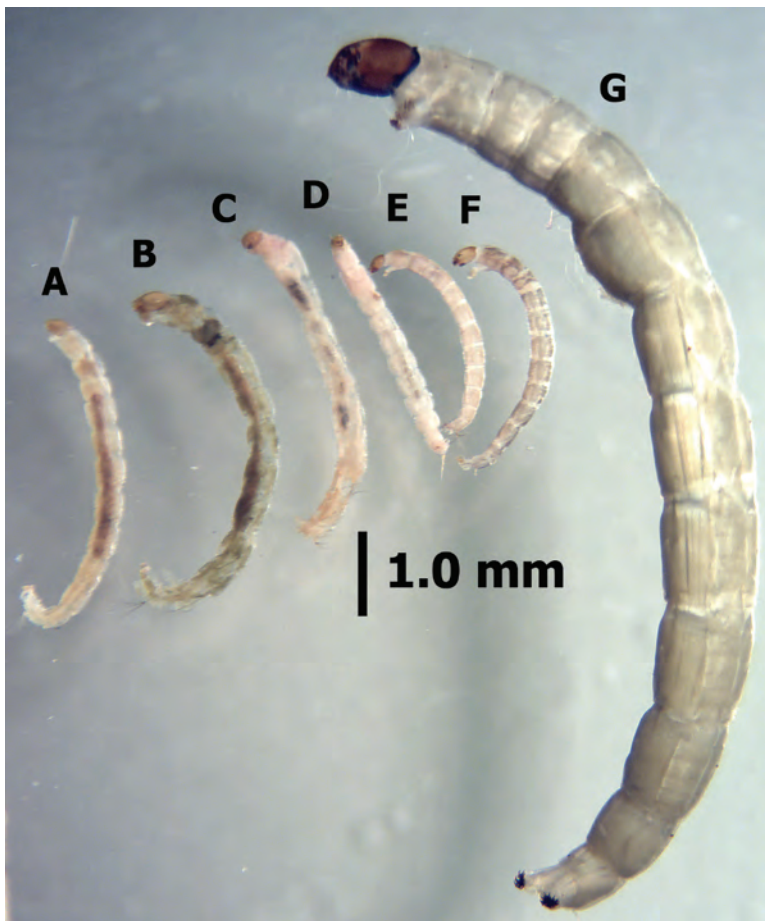
**Figure D21.** *Cheumatopsyche analis* case: (A) ventral view; (B) dorsal view. Specimens preserved in 70-percent methanol.



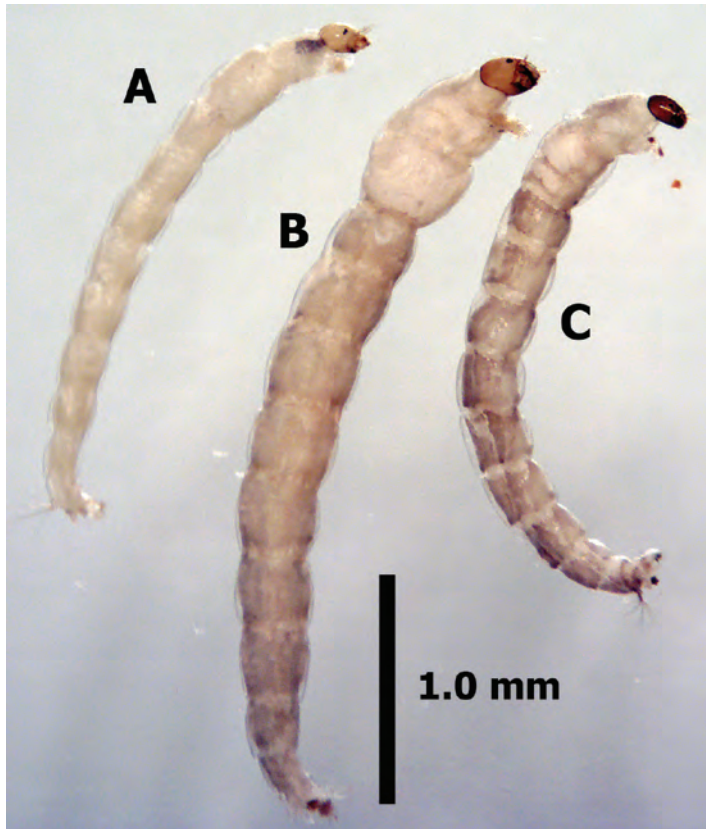
**Figure D22.** *Cheumatopsyche analis* larva.



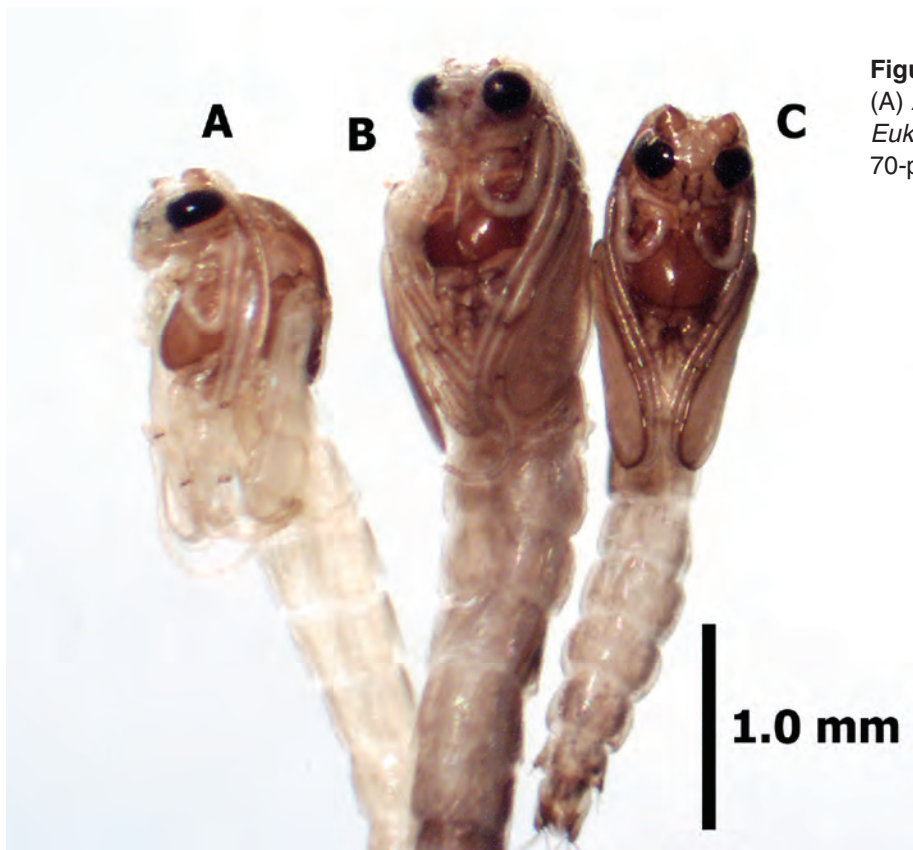
**Figure D23.** *Cheumatopsyche analis* larva, posterior. Specimens preserved in 70-percent methanol.



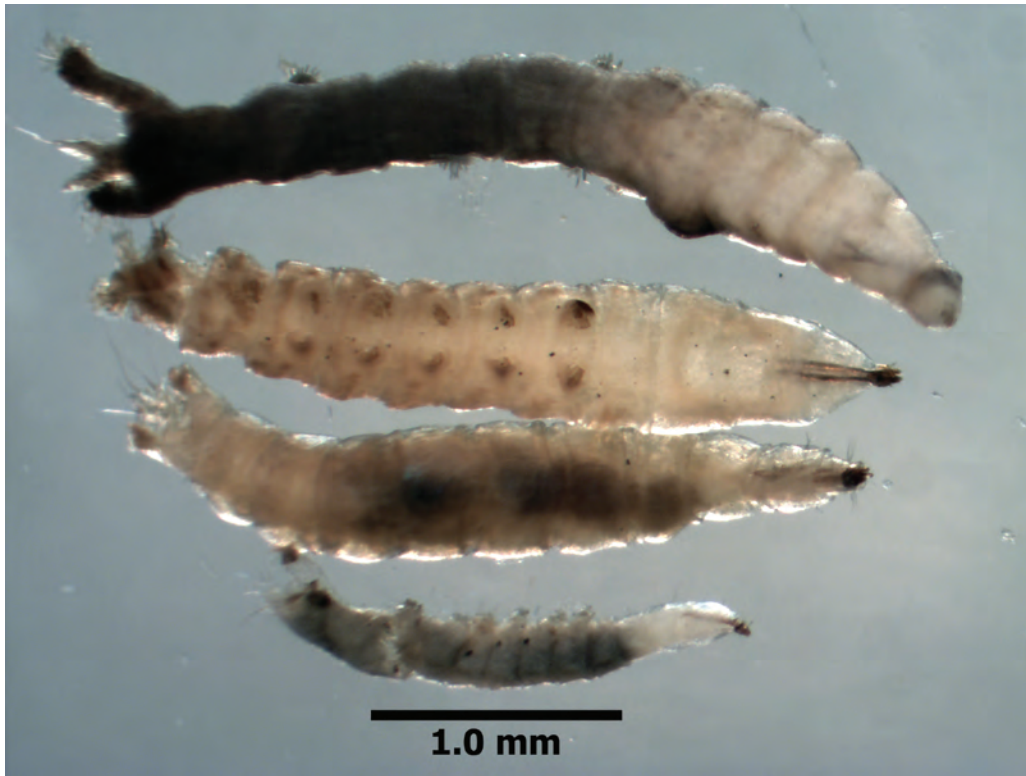
**Figure D24.** Assorted Chironomidae larvae: (A) *Polypedilum* sp.; (B) *Goeldichironomus* sp.; (C) *Tanytarsus* sp.; (D) *Apedilum* sp.; (E) *Eukiefferiella* sp.; (F) *Cricotopus* sp.; (G) *Telmatogeton* sp. Specimens preserved in 70-percent methanol.



**Figure D25.** Assorted Chironomidae larvae: (A) *Apedilum* sp., (B) *Cricotopus* sp., (C) *Eukiefferiella* sp. Specimens preserved in 70-percent methanol.



**Figure D26.** Assorted Chironomidae pupae: (A) *Apedilum* sp., (B) *Cricotopus* sp., (C) *Eukiefferiella* sp. Specimens preserved in 70-percent methanol.



**Figure D27.** *Hemerodromia stellaris* larval stages. Specimens preserved in 70-percent methanol.



**Figure D28.** *Hemerodromia stellaris* pupal stages. Specimens preserved in 70-percent methanol.



Figure D29. *Macrobrachium lar* (Tahitian prawn) adult.



Figure D30. *Macrobrachium grandimanus* (‘ōpae ‘oeha’a) adult.

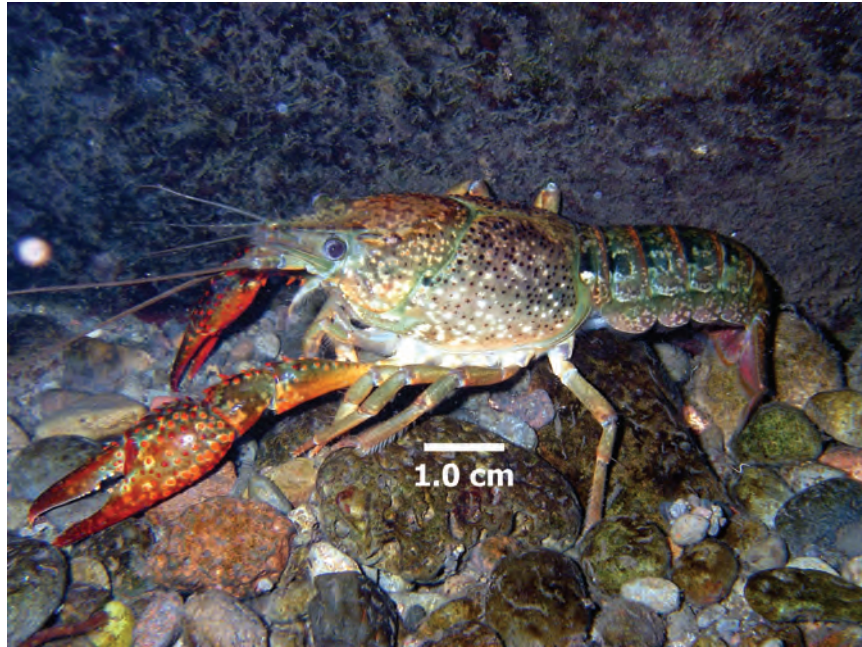


Figure D31. *Procambarus clarkii* (Louisiana swamp crayfish) adult.



Figure D32. *Neocaridina denticulata sinensis* (Taiwan blue shrimp) adult. Specimen preserved in 70-percent methanol.



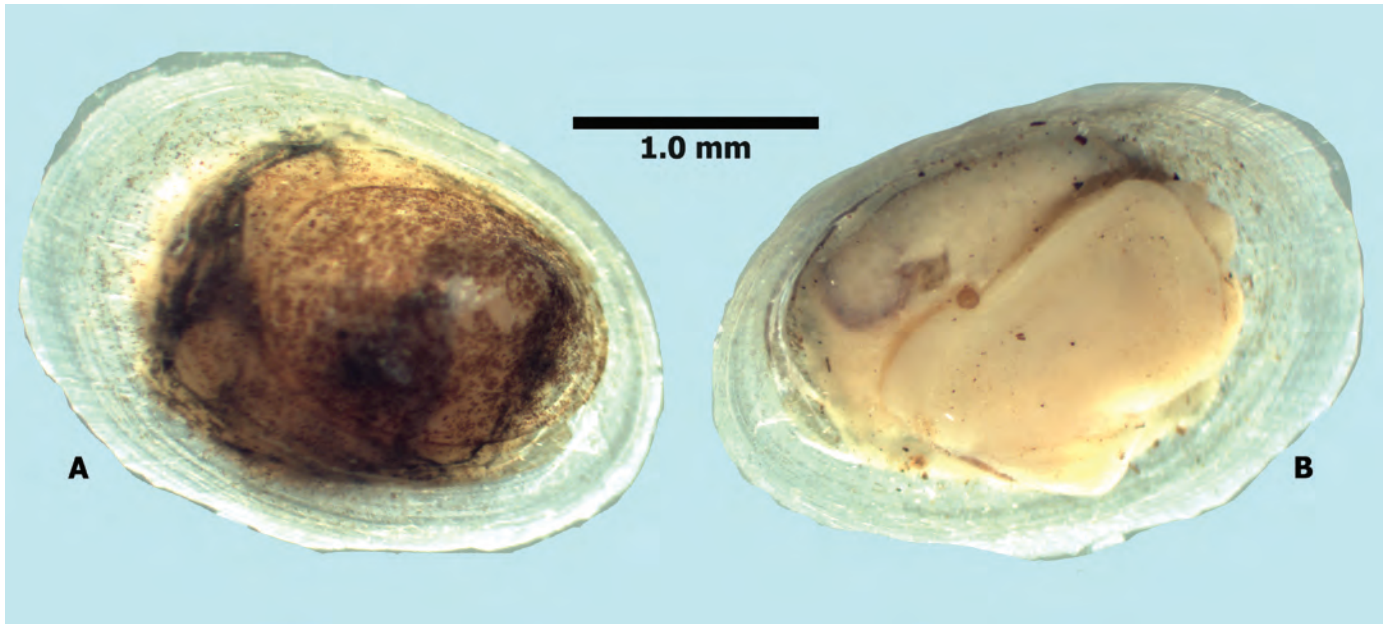


Figure D33. *Ferrissia sharpi*: (A) dorsal view; (B) ventral view. Specimen preserved in 70-percent methanol.



Figure D34. *Corbicula fluminea* (Asian clam).



**Figure D35.** Oligochaeta (worms). Specimens preserved in 70-percent methanol.



**Figure D36.** Oligochaeta (worms). Specimens preserved in 70-percent methanol.



**Figure D37.** *Pseudosuccinea columella* (nonnative Lymnaeidae). Specimen preserved in 70-percent methanol.



**Figure D38.** Physidae snail.



**Figure D39.** *Melanoides tuberculata* (Red-rimmed melania).



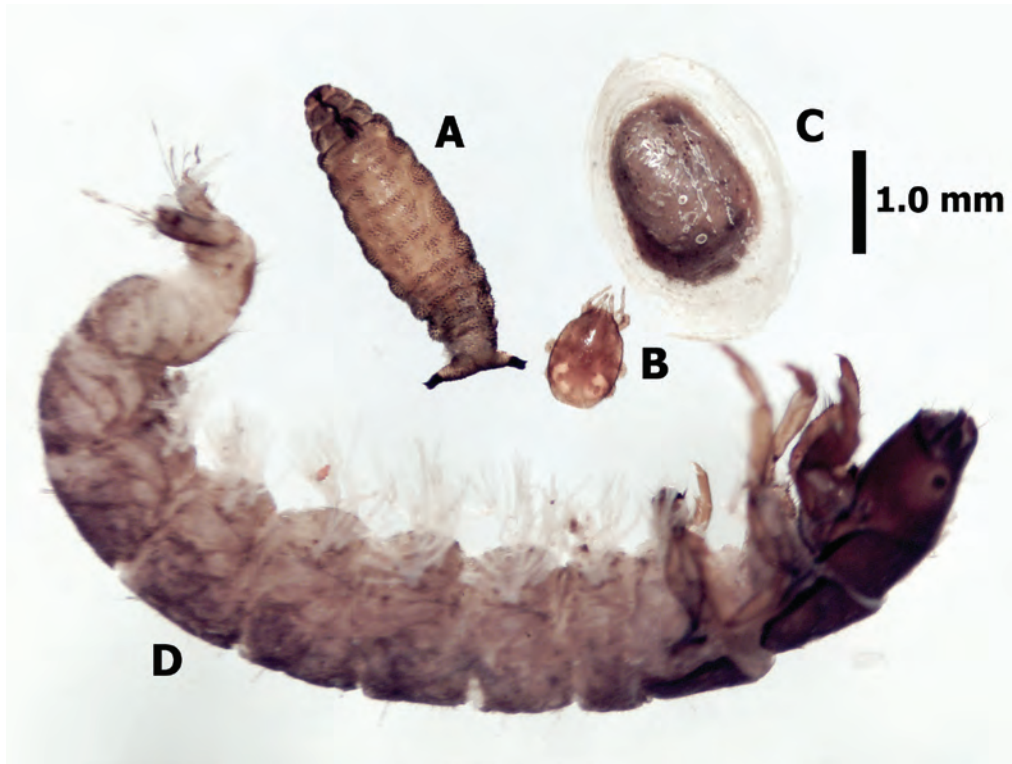
**Figure D40.** *Planorbella duryi* (Seminole rams-horn snail). Specimen preserved in 70-percent methanol.



**Figure D41.** Amphipod. Specimen preserved in 70-percent methanol.



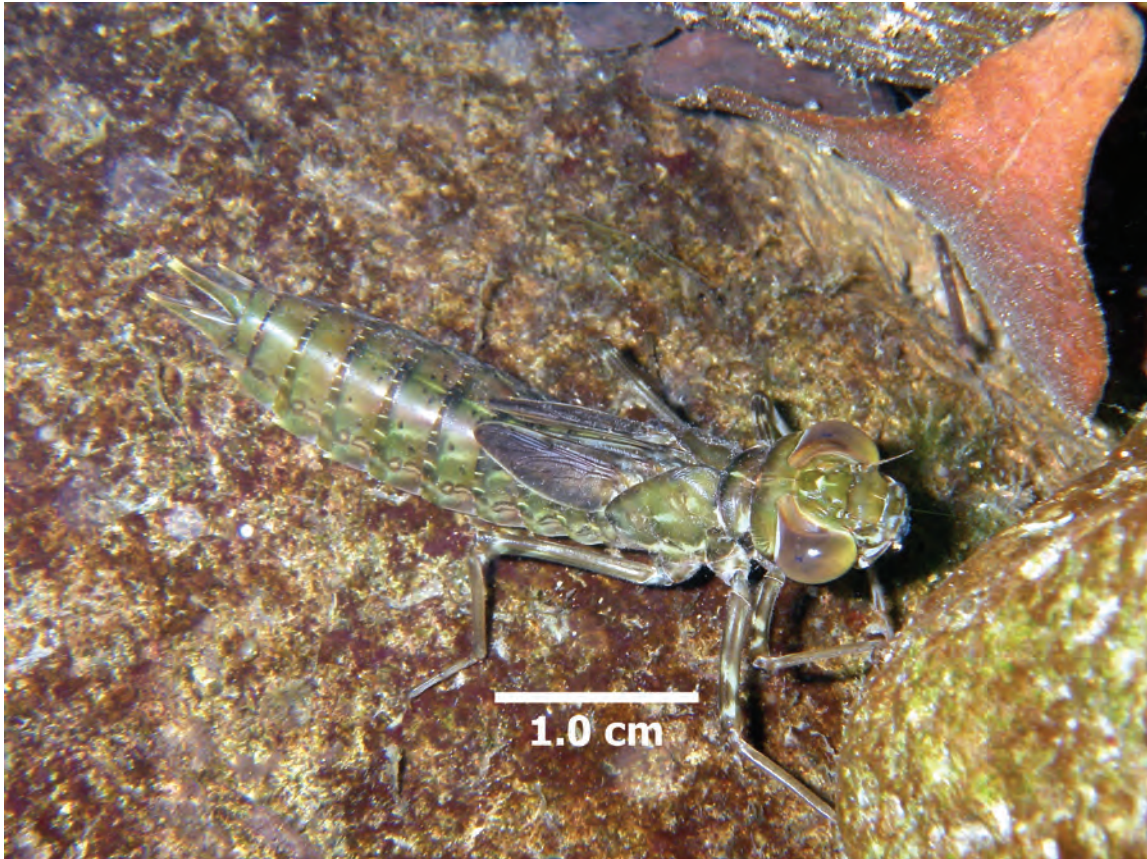
**Figure D42.** Turbellaria; Planarian (flatworm). Specimen preserved in 70-percent methanol. Scale in millimeters.



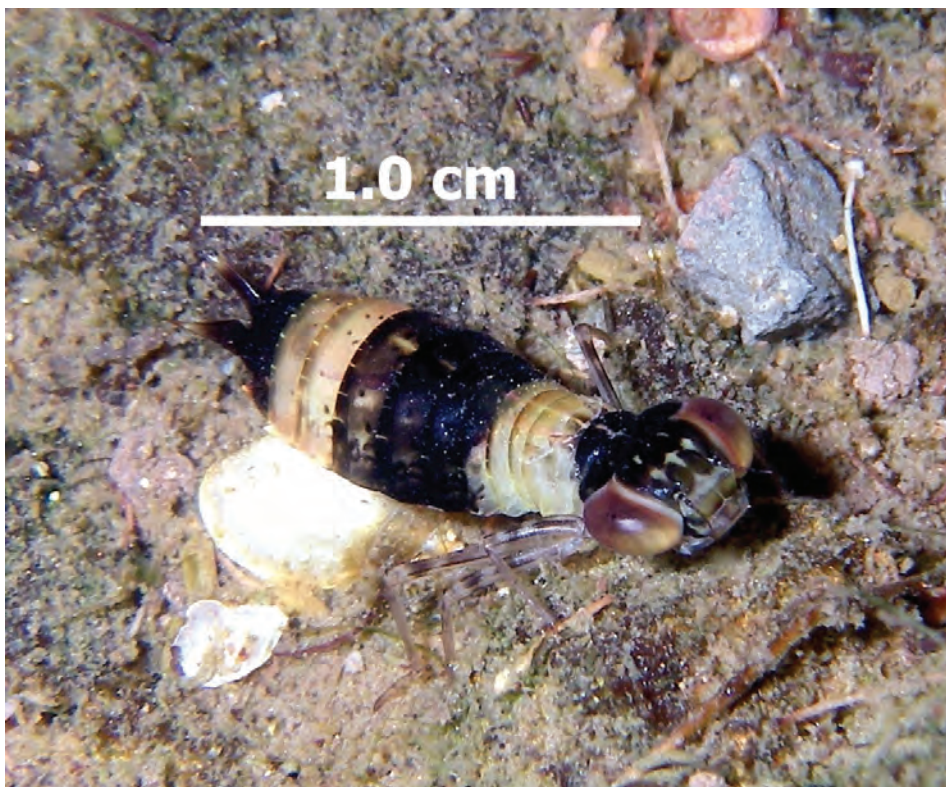
**Figure D43.** Assorted macroinvertebrates: (A) Ephydriidae larva; (B) mite; (C) *Ferrissia sharpi*; (D) *Cheumatopsyche analis* larva. Specimens preserved in 70-percent methanol.



**Figure D44.** *Anax strenuus* (native dragonfly) adult.



**Figure D45.** *Anax strenuus* (native dragonfly) naiad.



**Figure D46.** *Anax strenuus* (native dragonfly) naiad.



Figure D47. Mite adult. Specimen preserved in 70-percent methanol.

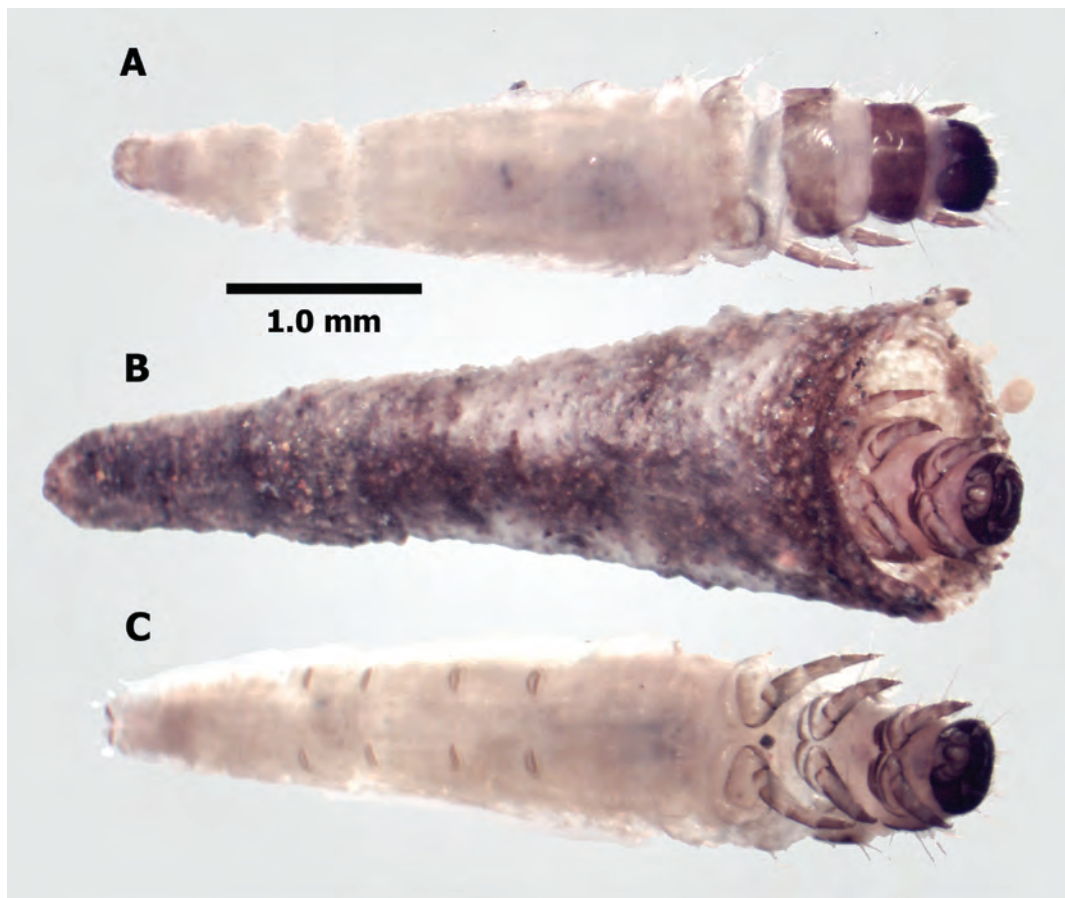
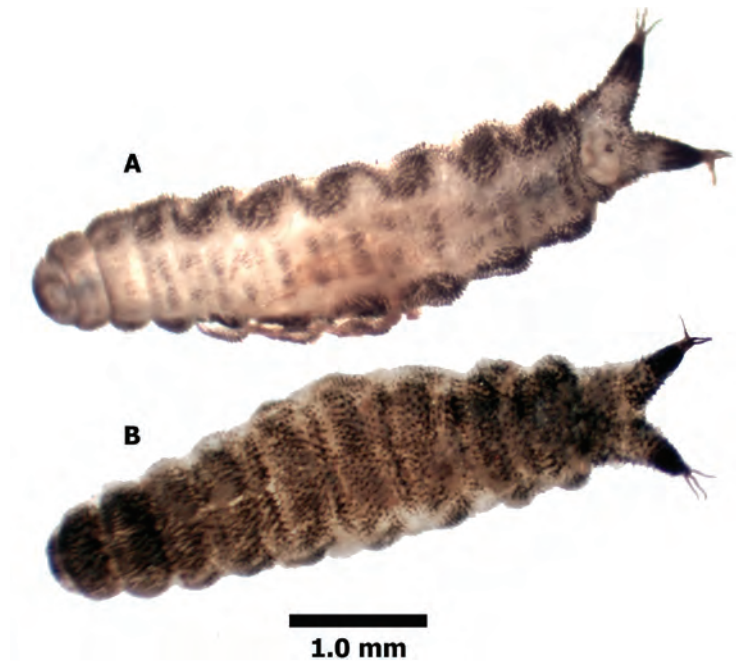
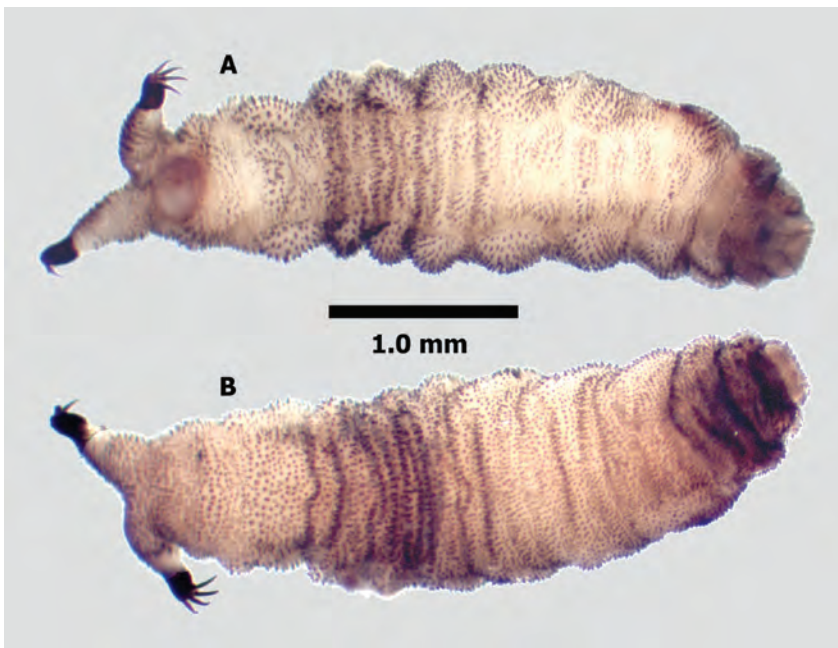


Figure D48. *Hyposmocoma* sp. (native Lepidoptera) larva: (A) dorsal view; (B) cocoon view; (C) ventral view. Specimen preserved in 70-percent methanol.

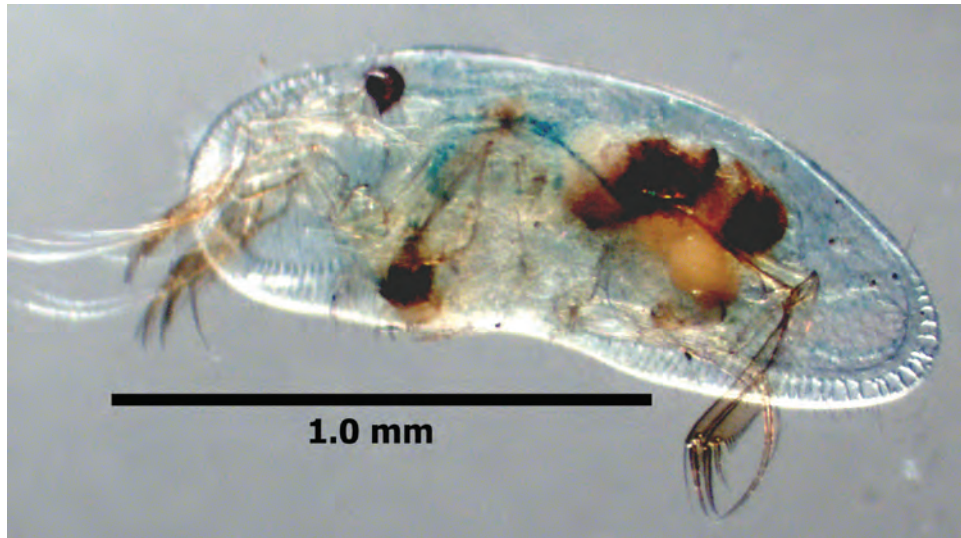




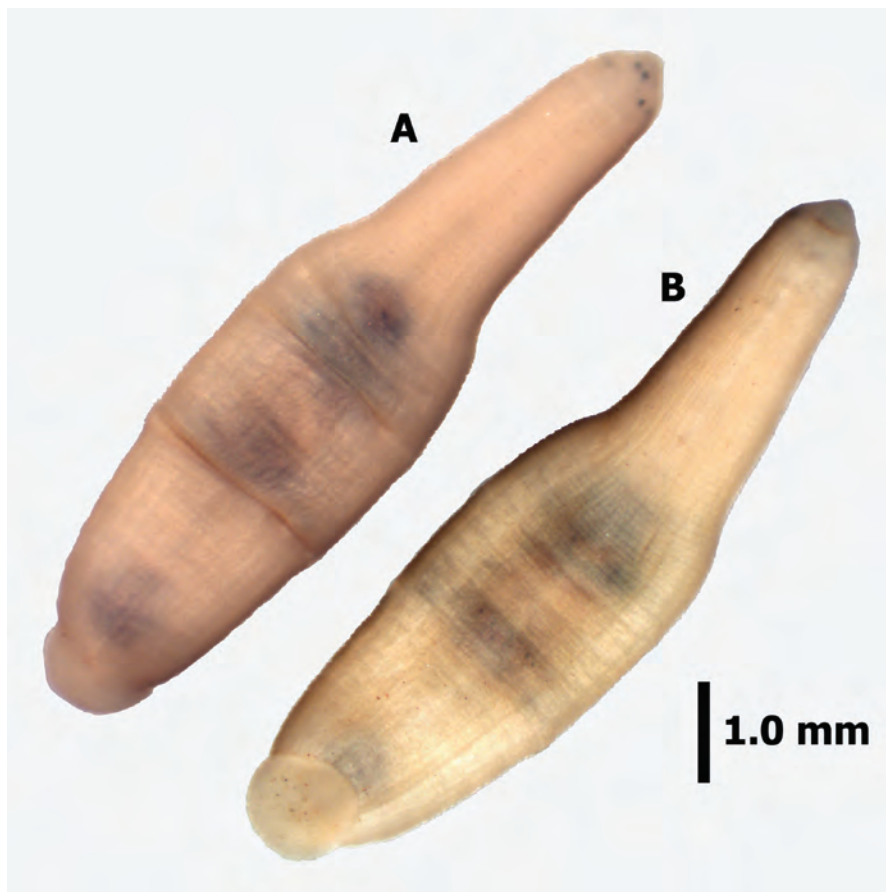
**Figure D49.** Canacidae larva: (A) ventral view; (B) dorsal view. Specimen preserved in 70-percent methanol.



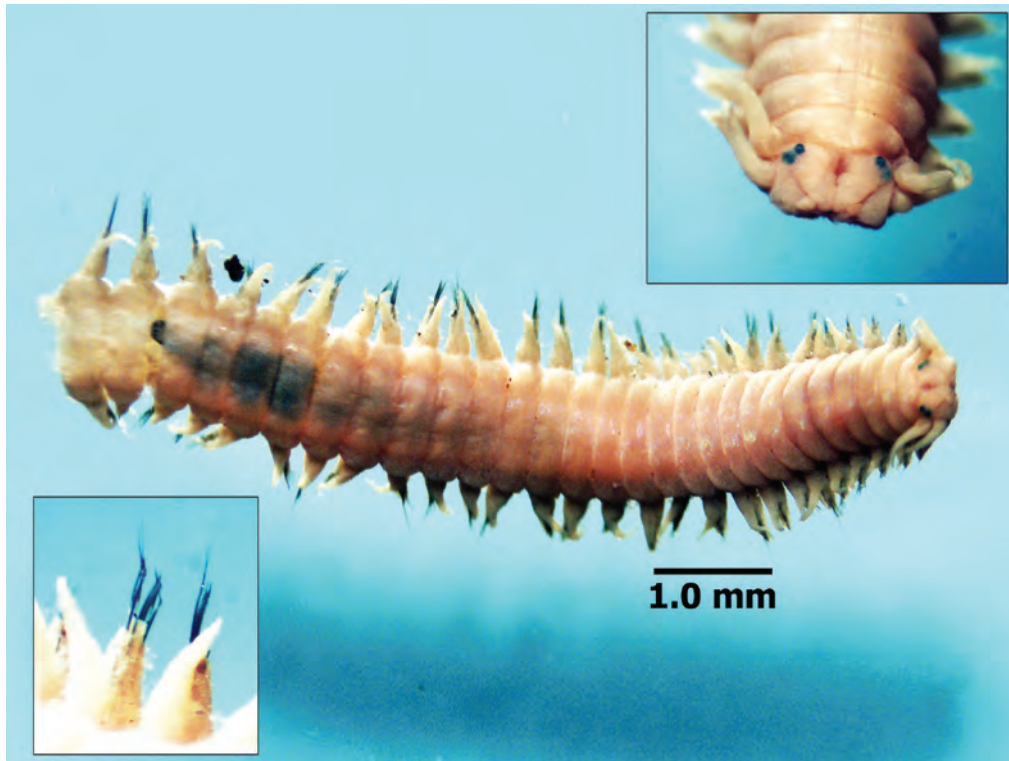
**Figure D50.** Ephydriidae larva: (A) ventral view; (B) dorsal view. Specimen preserved in 70-percent methanol.



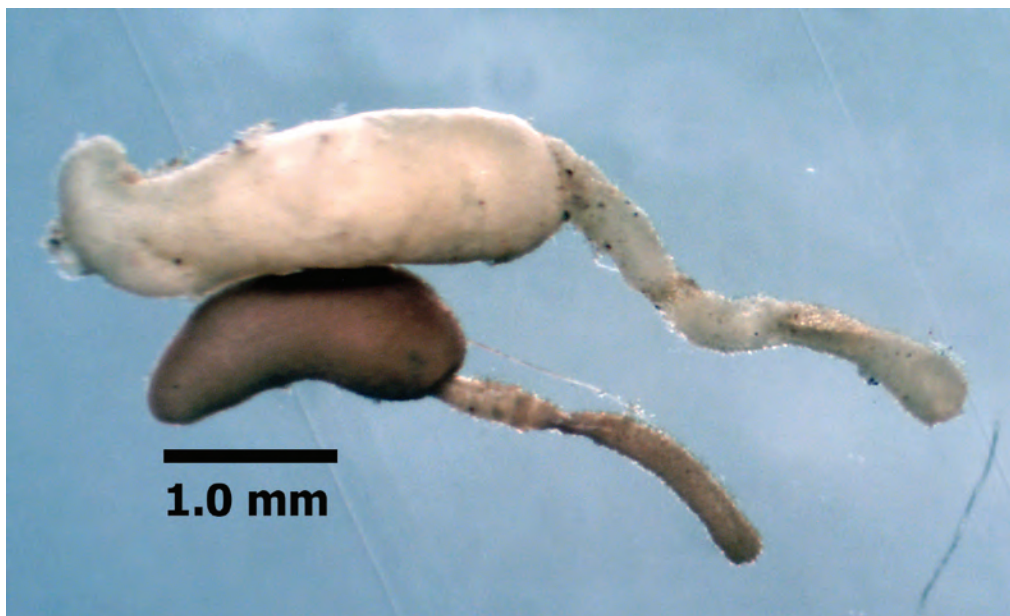
**Figure D51.** Ostracoda adult. Specimen preserved in 70-percent methanol.



**Figure D52.** Glossiphoniidae (leech) adult: (A) dorsal view; (B) ventral view. Specimen preserved in 70-percent methanol.



**Figure D53.** *Namalycastis abiuma* (native Polychaeta) adult. Specimen preserved in 70-percent methanol.



**Figure D54.** *Prostoma* sp. (Proboscis worms). Specimens preserved in 70-percent methanol.