

Notes on *Anacaena*, *Crenitulus* and *Paracymus*

(JH Epler, March 2015)

Crenitulus has been considered a synonym of *Anacaena* for some time, but was recently reinstated as a full genus by Fikáček & Vondráček (2014). Recent work by Fikáček & Vondráček (2014) and Archangelsky & Fikáček (2004) has provided a better understanding of the separation of the larvae of *Anacaena*, *Crenitulus* and *Paracymus*.

Komarek (2005) separated the widespread (Canada to Argentina) *Anacaena suturalis* and four other Neotropical species into a “*suturalis*-group”; Fikáček & Vondráček (2014) reinstated the name *Crenitulus* for this group. It is doubtful that *Anacaena* occurs in Florida, but the single possible species, *A. limbata* (Fabricius), is keyed on p. 12.17. Just remember that the first taxon keyed there is now called *Crenitulus suturalis* (LeConte).

Archangelsky & Fikáček (2004) found that the larvae of *Anacaena* and *Paracymus* have been misidentified for a considerable time, going back to Richmond (1920), who interchanged the larval descriptions of the two genera. Other authors had followed suit; see Archangelsky & Fikáček (2004) for a more complete listing of these errors. Note that the larva described as *Paracymus subcupreus* in Archangelsky (1997: 124-125) is that species, but the larva illustrated as “*Anacaena infuscata*” (pp. 130-131) is a *Paracymus*. Thus my couplet 18 (Epler 2010: 12.8) just keys *Paracymus* twice! ***A corrected key separating the larvae of Anacaena, Crenitulus and Paracymus is provided below.***

An additional caveat - do not confuse *Crenitulus* with *Crenitis* Bedel, a genus that does not occur in Florida.

Archangelsky, M. 1997. Studies on the biology, ecology and systematics of the immature stages of New World Hydrophiloidea (Coleoptera: Staphyliniformia). Ohio Biological Survey Bulletin New Series Vol. 12 No. 1. ix + 207 pp.

Archangelsky, M. & M. Fikáček. 2004. Descriptions of the egg case and larva of *Anacaena* and a review of the knowledge and relationships between larvae of Anacaenini (Coleoptera: Hydrophilidae: Hydrophilinae). European Journal of Entomology 101: 629-636.

Epler, J.H. 2010. The Water Beetles of Florida - an identification manual for the families Chrysomelidae, Curculionidae, Dryopidae, Dytiscidae, Elmidae, Gyrinidae, Haliplidae, Helophoridae, Hydraenidae, Hydrochidae, Hydrophilidae, Noteridae, Psephenidae, Ptilodactylidae and Scirtidae. Florida Department of Environmental Protection, Tallahassee, FL. 399 + iv pp.

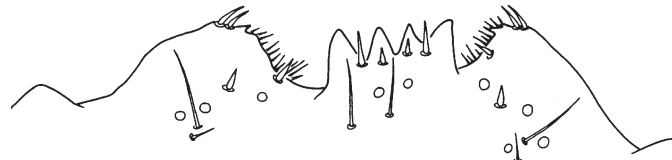
Fikáček, M. & D. Vondráček. 2014. A review of *Pseudorygmodus* (Coleoptera: Hydrophilidae), with notes on the classification of the Anacaenini and on distribution of genera endemic to southern South America. Acta Entomologica Musei Nationalis Pragae 54: 479-514.

Komarek, A. 2005. Taxonomic revision of *Anacaena* Thomson, 1859. II. Neotropical species (Coleoptera: Hydrophilidae). Koleopterologische Rundschau 75: 253-301.

Thanks to Miguel Archangelsky and Martin Fikáček

Replace couplet 18 on page 12.8 with the following:

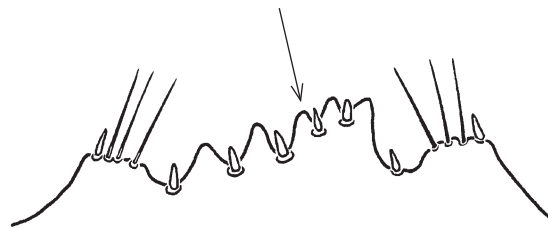
18(17) Anterior margin of clypeolabrum with 3-4 teeth ***Paracymus***



(adapted from Archangelsky 1997)

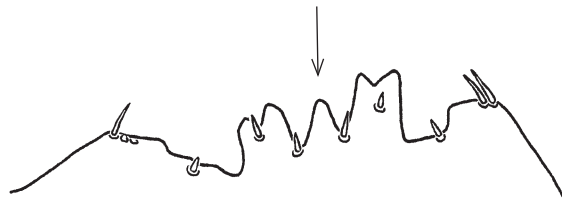
18' Anterior margin of clypeolabrum with 5 teeth (see figures below) 18A

18A(18') Clypeolabral tooth row with median tooth appressed to the 2 teeth to its right ***Crenitulus***



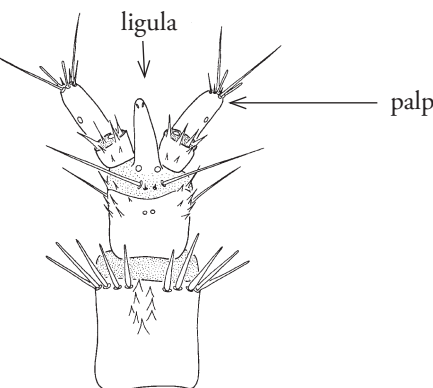
(adapted from Fikáček & Vondráček 2014)

18B Clypeolabral tooth row with median tooth separate from each group of lateral teeth * ***Anacaena***

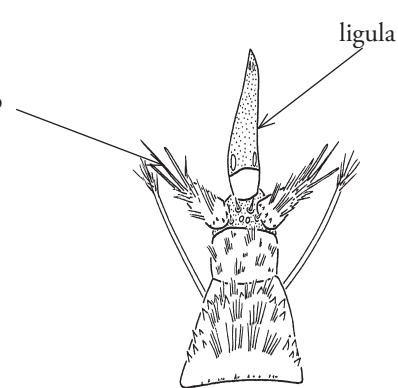


(adapted from Fikáček & Vondráček 2014)

Note also that the ligula on the labium may be longer OR shorter than the labial palpi in *Crenitulus* AND some *Paracymus* (e.g. *P. rufocinctus* Bruch, a South American species)



(adapted from Archangelsky 1997)



Crenitulus suturalis

(adapted from Archangelsky & Fikáček 2004)