Key to the Genera of Hydrophilidae of Central America and the Caribbean

Andrew Edward Z. Short---Cornell University---as384@cornell.edu

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This document provides a key to the 36 described genera of Hydrophilidae known to occur in Central America and the Caribbean, 1 new genus that is currently in press, and 1 potentially new genus. For species lists, habitat notes, and habitat photos, see the web address listed above. This key may not be published without my permission.

1. Labrum well scleratized and exposed, not concealed by clypeus. (subfamily Hydrophilinae) 2

1' Labrum not well scleratized, usually retracted under clypeus. If labrum is exposed, then clypeus always excised below eyes exposing base of antennae (subfamily Sphaeridiinae) 20

2. Middle and hind tibia with fringe of long swimming hairs on dorsal face (Tribe Berosini) 3

2' Middle and hind tibia without fringe of long swimming hairs on dorsal face 5

3. Dorsum entirely black. Form subglobular, laterally compressed.....***Derallus***

3' Dorsum at least partially (usually mostly) yellow or brown with scattered black markings 4

4. Pubescence on hind femur short, dense. Size always very small..... ***Hemiosus***

4' Pubescence on hind femur long, less dense. Size variable..... ***Berosus***

5. First ventrite with large cavity, covered by a fringe of very long setae. Form very round size always very small..... ***Chaetarthria***.

5' First ventrite not as above. Form and size variable 6

6. Meta and Mesosternal keels fused to form a single structure, often ending posteriorly in a pronounced spine. Usually large to very large 7

6' Sternal structure not as above, never ending in large spine. Size variable, but never exceeding 15mm 9

7. Prosternum with large emargination, sometimes completely divided to receive anterior portion sternal keel.....8

7' Prosternum carinate centrally, never divided or emarginate..... ***Hydrobiomorpha***

8. Size small, less than 20mm .....***Tropisternus***

8'. Size large, over 20 mm..... ***Hydrophilus***

9. Head, pronotum and elytra without distinct systematic punctures, fifth ventrite always without apical emargination (Anacaenini) 10

9' Head, pronotum and elytra with systematic punctures, although they may not be visible on all three parts. Fifth ventrite emarginated or not.....13

10. Elytra with sutural stria in posterior half.....11

10' Elytra without sutural stria .....***Notionotus***

11. Prosternum carinate medially..... ***Paracymus***

11' Prosterum not carinate medially.....12.

12. Mesosternum distinctly raised to form a acutely pointed or lateral ridge. .....***Anacaena***

12' Mesosternum without any ridge or raised process .....***Crenitis***

13. Abdomen with 6 ventrites (as far south as Mexico, and the Caribbean) .....***Laccobius***

13’ Abdomen with 5 ventrites ..... 14.

14. Elytra with sutural stria in posterior half ..... 16.

14’. Elytra without sutural stria ..... 15.

15. Form round, black, with short palpi. Hygropetric ..... ***Oocyclus***

15’ Form more elongate, usually brown, long palpi ..... ***Helochares***

16. Eyes divided by lateral canthus of frons ..... ***Quadriops***

16’ Eyes not divided by frons 17

17. Second segment of maxillary palpi distinctly bowed outward ..... ***Enochrus***

17’ Second segment of maxillary palpi normal, bowed inward 18

18. Tarsi 5-4-4 (As far south as Guatamala) ..... ***Cymbiodyta***

18’ Tarsi 5-5-5 19

19. Labrum concealed by clypeus, elytral margins explanate ..... ***Helobata***

19’ Labrum not concealed by clypeus, elytral margins not explanate ..... ***Chasmogenus***

20. Head in front of eye notched or indented, exposing antennal base 21

20’ Head in front of eye not notched, base of antennae concealed (Coelostomatini) 34

21. Clypeus strongly deflexed downward in profile, labrum often visible (Omicrini) 22

21’ Clypeus not deflexed downward, labrum concealed by clypeus (Megasternini) 24

22. First ventrite carinate medially 23

22’ First ventrite not carinate medially ..... ***Heteryon***

23. Mesocoxae widely separated, mesosternal process sloping downward laterally, not flat ..... ***Omicrus***

23’ Mesocoxae narrowly separated; mesosternal process a flat, pentagonal tablet ..... ***Aculomicrus***

24. Pronotum with large longitudinal costae ..... ***(Oosternum?)***[1]

24’ Pronotum without longitudinal costae 25

25. Antennal groves reaching prothoracic margin 26

25’ Antennal groves not reaching prothoracic margin 27

26. Pronotum with dense microsculpture in from on longitudinal lines; mesosternal tablet c. as wide as long ..... ***Cycrillum***

26’ Pronotum without dense microsculpture, mesosternal tablet wider than long ..... ***Cryptopleurum***

27. Anterolateral corners of metasternum demarcated from rest of metasternum by a small ridge 28

27’ Metasternum not as above 29

28. Eyes very large. Prosternum laterally shelf like ..... ***Sacosternum***

28’ Eyes small. Prosternum not self-like as above ..... ***Oosternum***

29. Anterior margin of prosternum with a median, subrectangular incision. Meso and Metasternal elevations concave centrally ..... ***Motonerus***

29’ Sternum without above characters 30

30. Mesosternal tablet elongate-oval to almost linear, narrowed anteriorly and posteriorly; not abutted to raised portion of metasternum ..... ***Cercyon***

[1] This unusual species, closely related to *Oosternum*, may represent a new genus.

30’ Mesosternal tablet pentagonal or parallel sided, truncated posteriorly and closely abutted or fused with metasternum 31

31. Mesosternal tablet as long as wide 32

31’ Mesosternal tablet much longer than wide 33

32. Middle of prosternum tectiform, strongly carinate. Antennal groves hardly defined. ***Agna*** (Mexico)

32’ Middle of prosternum rather flat, only finely carinate. Antennal groves well defined by lateral ridge ..... ***Deltostethus***

33. Mentum with deep notch, reaching back to midlength of mentum ..... ***Nitidulodes***

33’ Mentum weakly emarginated, not as above ..... ***Pelosoma***

34. First segment of hind tarsi shorter than second; size large, brown in color ..... ***gen. n.***[2]

34’ First segment of hind tarsi longer than second; size smaller 35

35. Elytra with 10 rows of serial punctures 36

35’ Elytra without 10 rows of serial punctures; sutural stria may be present 37

36. First ventrite carinate; ..... ***Dactylosternum***

36’ First ventrite not carinate ..... ***Cyclotypus***

37. Elytra with sutural stria in posterior half ..... ***Phaenostoma***

37’ Elytra without sutural stria ..... ***Phaenonotum***

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[2] This new genus of Coelastomatini is currently in press. The name will be replaced after publication.