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**Anacaena lohsei, a new species
from Italy and Switzerland
(Coleoptera: Hydrophilidae)**

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Summary

Anacaena lohsei sp. nov. from northern Italy and southern Switzerland is described, keyed and illustrated.

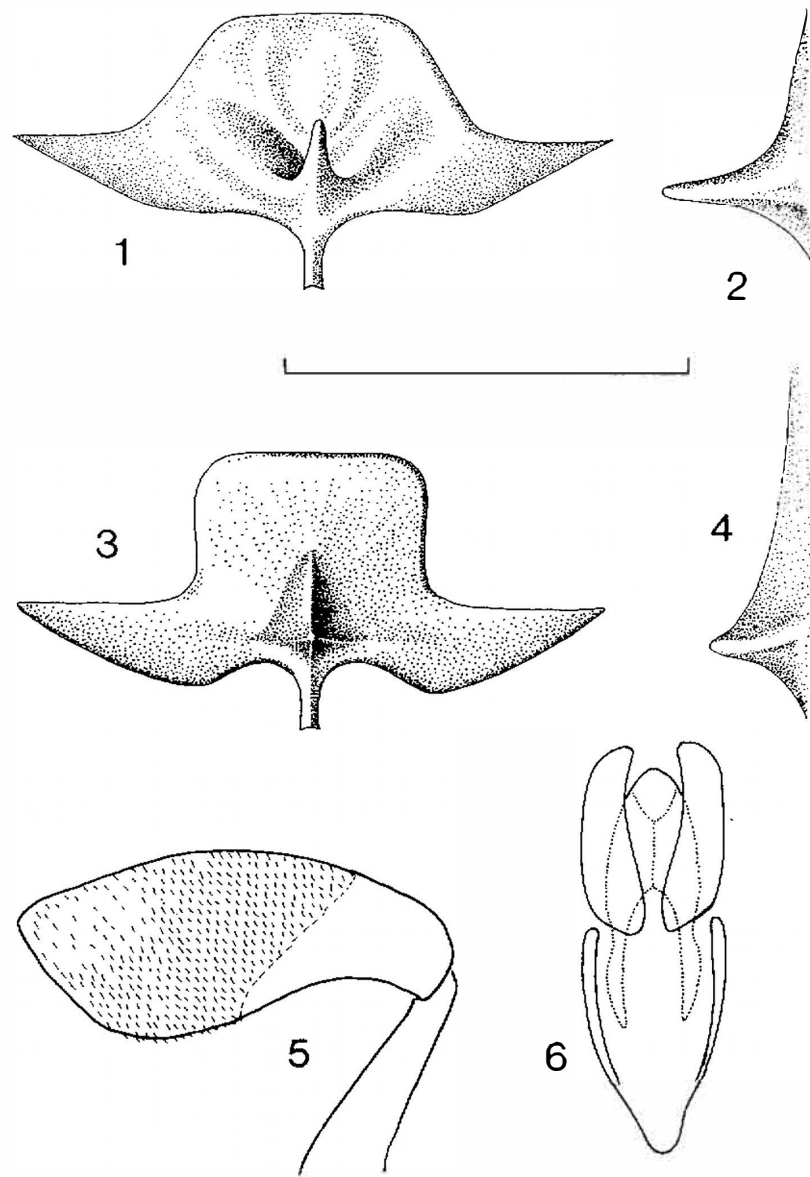
Introduction

Recently the West Palaearctic species of *Anacaena* THOMSON have been revised (VAN BERGE HENEGOUWEN, 1986). In that paper it was shown that the outline of the hairiness on the underside of the hind femur together with characters on the mesosternum and the colour of the dorsal side, especially the head, proved to be of good value in distinguishing the species. Most variation was found in the colour of the dorsal side, this variation being the least on the head. To the known species in western Europe can be added a sixth species, the darkest known yet, which is described below. The species is named after its first collector, Dr. G. A. LOHSE, Hamburg.

***Anacaena lohsei* sp. n.**

Type material: Holotype male labelled «Italia bor./ Macugnaga/ 28.5.1970 Lohse» deposited in the Museon, The Hague. Paratypes: same data as holotype, 2 male, 3 female; Italy: east shore of Lake Como, brooklet near Premana, Dervio, 4.IX.1986, HEBAUER leg., 2 female (coll. VAN BERGE HENEGOUWEN, coll. HEBAUER); Italy: Piemonte, Biella Val Chiobbia Alp Fimestre, 1700 m, VIII.1927, Capra leg., 1 male (Museum Genua); Italy: Piemonte, Rima, WINKLER leg., 5 specimens (coll. VAN BERGE HENEGOUWEN and Museum Wien); Switzerland: Graubünden, V. Cama, 1230 m, VI.1965, TOUMAYEFF leg., 1 male (Museum Genève).

Description (holotype, male): length 2.9 mm, width 1.5 mm, length of elytron 1.9 mm. Body form oval, moderately convex. Dorsal parts black. Pronotum and elytron with lateral



Morphological characters of *Anacaena* species. Fig. 1-2, 5-6: *A. lohsei*, fig. 3-4: *A. lutescens*. Fig. 1-4, mesosternum, 1, 3, ventral view, 2, 4, left-lateral view, fig. 6, genitalia, fig. 5, inferior side of right hind-femur. Scale-line = 0.5 mm to fig. 1, 3, 5-6, 0.25 mm to fig. 2, 4. Fig. 1-4 by Rob VAN ASSEN, Museon.

margins narrowly infuscated. Ventral side black. Maxillary palpus except ultimate segment, antenna except club segments and legs reddish brown. Dorsal side shiny. Head with dense punctuation, the punctures of varying diameter. Pronotum with fine and sparse punctuation. Scutellum with punctuation as on pronotum. Elytron with regular dense punctuation, along the side margin with closer, more irregular punctuation. Mesosternum (fig. 1-2) with distinct, acutely pointed, transverse carina. Mesosternum not swollen before carina. Lateral sides of mesosternum before carina convergent. Hairline on underside of hind femur oblique (fig. 5). Ultimate fore-tarsal segment not inflated distally. Genitalia (fig. 6).

Female: not different from male.

Identification: *Anacaena lohsei* runs to *A. lutescens* (STEPHENS) in the key to the European species in VAN BERGE HENEGOUWEN, 1986 from which it is distinguished as follows:

Elytron brightly yellowish or reddish brown. Pronotum black with the lateral sides widely yellow or reddish brown. Mesosternum (fig. 3-4): mesosternal surface swollen before carina; lateral sides of mesosternum before carina parallel. Male fore-tarsus with distinct inflated ultimate tarsal segment *lutescens*
 Dorsal side black. Pronotum with the lateral sides narrowly reddish brown, especially near the front angle. Mesosternum (fig. 1-2): mesosternum not swollen before carina; lateral sides of mesosternum before carina convergent. Secondary sexual characters in male fore-tarsus absent *lohsei*

Ecology

Compared with other genera the spatial distribution of the species of the genus *Anacaena* seems more dependant from the substrate, rather than from abiotic factors. All species are feeding upon algae and are commonly found in habitats where detritus is abundant. Considering this *Anacaena lohsei* is a rheophilous species that should be placed between *A. globulus* PAYKULL and *A. lutescens* (STEPHENS) opposed to the more thermophilous species *A. bipustulata* MARSHAM, *A. limbata* (FABRICIUS) and *A. rufipes* (GUILLEBEAU). *A. globulus* prefers spring pools and cold, slow running water, where it lives on decaying wood. *A. lohsei* lives in mountainous brooks. It is probably associated with rotting branches and roots where it feeds on the algal layers. Further records will have to establish this assumption.

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