

# Three new *Hydrodessus* from Surinam (Coleoptera: Dytiscidae)

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*Abstract:* Three new species from the tribe Bidessini (Coleoptera: Dytiscidae) are described from Surinam: *Hydrodessus soekhnandanae*, *H. rattanae* and *H. jethoeae*. The three species were collected on the 7th of August 1984 in the same ditch near Brownsweg (district Brokopondo).

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## Introduction

The bidessine genus *Hydrodessus* forms a small genus with 14 species described from the neotropics (Biström, 1988). Balfour-Browne (1953) originally described the genus on basis of a single Brazilian species: *Hydrodessus siolii*. Guignot (1957) described four more Brazilian species originally in the genus *Brinckius*, which was synonymized with the genus *Hydrodessus* by Young (1967, 1969). Further species were described from Peru by Spangler (1966), from Surinam by Young (1970) and from Guyana by Spangler (1985). A key to all known species of *Hydrodessus* is published by Spangler (1985).

Within the tribe Bidessini *Hydrodessus* can be separated from all other genera by the presence of not reduced eyes, parameres consisting of only one segment and a pronotum without striae. An extended diagnosis of the genus is published by Biström (1988).

During a recent collecting trip in Surinam three new species of *Hydrodessus* were collected on 7.viii.1984 in a ditch near Brownsweg in the Brokopondo district. This semi-permanent ditch, with a width of 3 m and a depth of 50 cm, and a sandy soil, had a dense vegetation of emergent plants only. The stagnant water was brown coloured by humic acids. The three *Hydrodessus* species were collected with a dip net under bushes, all on the same locality.

## *Hydrodessus soekhnandanae* spec. nov. (figs. 1-4)

### *Type material*

Holotype ♂: Surinam, District Brokopondo, Brownsweg, 7.viii.1984, leg. D. Makhan (Nationaal Natuurhistorisch Museum, Leiden). Paratypes: 15 specimens, same data as holotype (Zoölogisch Museum, Amsterdam (one specimen) and coll. Makhan).

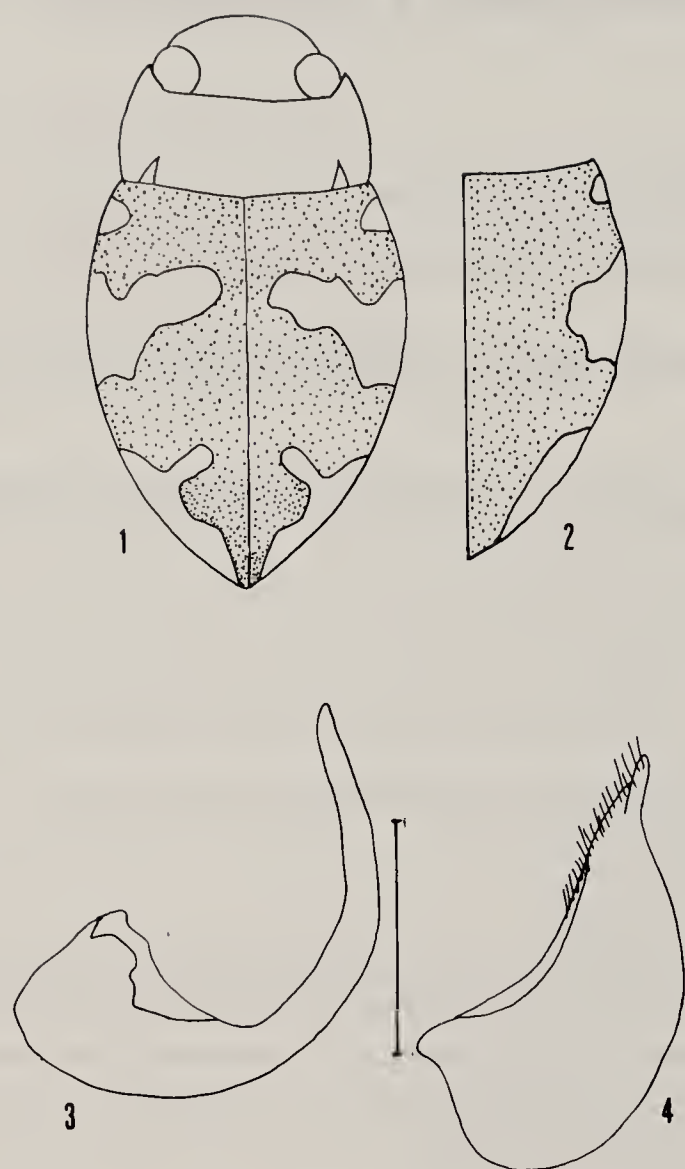
## Description

Length: 3.3 mm. Elongately oval. Greatest width at basal third of elytra: 1.5 mm (♂), 1.7 mm (♀). Colour testaceous with dark brown pattern (stippled) (figs. 1-2); colour pattern of elytra variable in some specimens. Dorsal side shiny.

Head finely punctate, punctures on disc separated by 2-4 times their diameter; surface between punctures smooth and shiny. Clypeus arcuately emarginate, not thickened anteriorly. Labrum deeply and moderately widely emarginate.

Pronotum strongly curved laterally; widest in anterior third and recurved to base forming an obtuse angle with elytral base; disc with coarse punctures; base with two strongly incurvate plicae.

Elytra with lateral margins regularly curved; coarsely punctate laterally, surface between punctures smooth and shiny; each puncture with one minute seta. Elytra with distinct medium brown pattern (stippled) (figs. 1-2). Mesosternum channeled medially but hidden



Figs. 1-4. *Hydrodessus soekhnandanae* spec. nov. 1, male; 2, female (right elytron); 3, aedeagus; 4, left paramere (scale line for figs. 3-4: 0.25 mm).

beneath prosternal process. Fore, mid and hind legs testaceous; femora swollen; pro- and mesofemora with long setae.

Male genitalia as illustrated in figs. 3-4.

Etymology: the species is named after my mother Soekhnandan.

Differential diagnosis: *Hydrodessus soekhnandanae* is closely related to *H. surinamensis* Young. It can be easily distinguished from the latter by the presence of pronotal plicae, colour pattern, size and male genitalia.

### *Hydrodessus rattanae* spec. nov. (figs. 5-8)

#### Type material

Holotype ♂: Surinam, District Brokopondo, Brownsweeg, 7.viii.1984, leg. D. Makhan (Nationaal Natuurhistorisch Museum, Leiden). Paratypes: 16 specimens, same data as holotype (Zoölogisch Museum, Amsterdam (one specimen) and coll. Makhan).

### Description

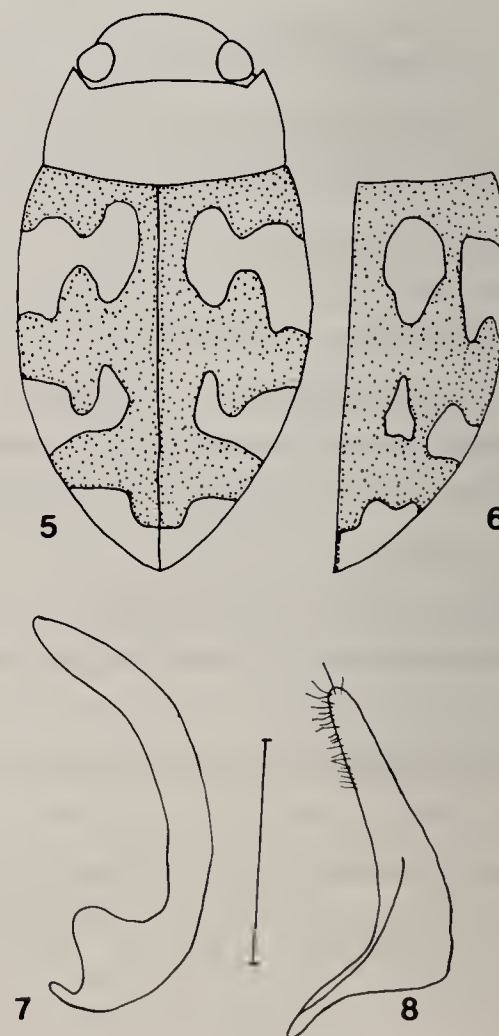
Length: 3.1-3.3 mm. Elongately oval. Greatest width at basal third of elytra: 1.5 mm. Colour testaceous with dark brown pattern (stippled) (figs. 5-6); colour pattern of elytra variable in some specimens. Dorsal side shiny.

Head finely punctate, punctures on disc separated by 1-1.5 times their diameter; surface between punctures smooth and shiny.

Clypeus arcuately emarginate, not thickened anteriorly. Labrum deeply and moderately widely emarginate.

Pronotum strongly curved laterally, widest in anterior third and recurved to base forming an obtuse angle with elytral base; disc with fine punctures.

Elytra with margins regularly curved, coarsely punctate, surface with spaces between punctures smooth and shiny; each puncture with one minute seta; density of punctures as on pronotum. Elytra with distinct medium brown pattern (stippled) (figs. 5-6). Mesosternum channeled medially but hidden beneath prosternal process. Fore, mid and hind legs



Figs. 5-8. *Hydrodessus rattanae* spec. nov. 5, male; 6, female (right elytron); 7, aedeagus; 8, left paramere (scale line for figs. 7-8: 0.25 mm).



testaceous; femora swollen; pro- and mesofemora with long setae.

Male genitalia as illustrated in figs. 7-8.

Etymology: the species is named after my wife Rattan.

Differential diagnosis: This species is closely related to *Hydrodessus robinae* Spangler from Guyana. It can be distinguished from the latter by the elytral pattern and male genitalia.

### *Hydrodessus jethoeae* spec. nov.

(figs. 9-11)

#### Type material

Holotype ♂: Surinam, District Brokopondo, Brownsweeg, 7.viii.1984, leg. D. Makhan (Nationaal Natuurhistorisch Museum, Leiden). Paratypes: 2 ♀♀ same data as holotype (Zoölogisch Museum, Amsterdam (one ♀) and coll. Makhan).

### Description

Length: 3.0 mm. Elongately oval. Greatest width at about basal third of elytra: 1.5mm. Colour testaceous with vague brown pattern (stippled) (fig. 9); colour pattern of elytra of females slightly different. Dorsal side shiny.

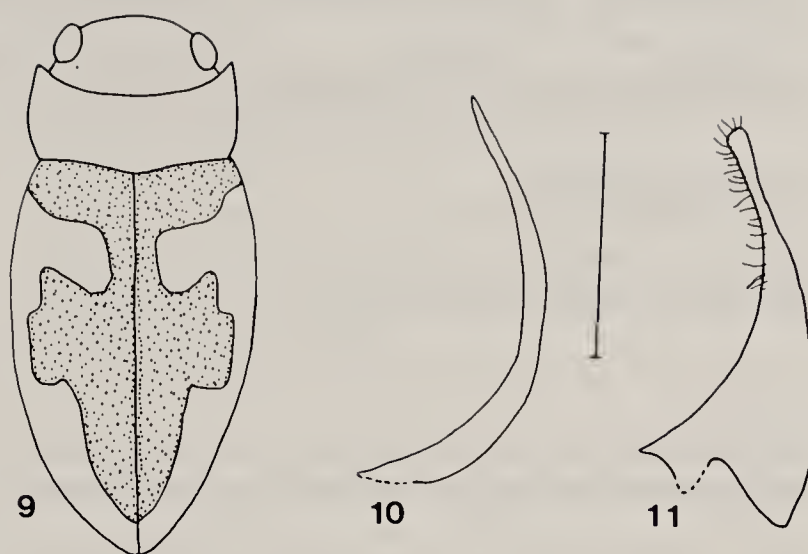
Head finely punctate, punctures on disc separated 1-4 times their diameter; surface between punctures smooth and shiny. Clypeus arcuately emarginate, not thickened anteriorly. Labrum deeply and moderately widely emarginate.

Pronotum strongly curved; widest in anterior third and recurved to base forming an obtuse angle with elytral bases; disc with fine punctures.

Elytra with lateral margins regularly curved, punctures fine, surface with spaces between punctures smooth and shiny; each puncture with one minute seta; density of punctures as on pronotum. Elytra with vague brown pattern (stippled) (fig. 9). Mesosternum channelled medially but hidden beneath prosternal process. Fore, mid and hind legs testaceous; femora swollen; pro- and mesofemora with long setae.

Male genitalia as illustrated in figs. 10-11.

Etymology: the species is named after my mother-in-law Ramragia Jethoe.



Figs. 9-11. *Hydrodessus jethoeae* spec. nov. 9, male; 10, aedeagus; 11, left paramere (scale line for figs. 10-11: 0.25 mm).

Differential diagnosis: *Hydrodessus jethoeae* is closely related to *H. angularis* Young from Surinam. It can be easily distinguished from the latter by the presence of its vague elytral colour pattern.

### References

- BALFOUR-BROWNE, J., 1953. *Hydrodessus* gen. n. Hydroporinarum (Coleoptera, Dytiscidae). – *Proc. R. ent. Soc. Lond.* 22: 55-56.
- BISTRÖM, O., 1988. Generic review of the Bidessini (Coleoptera, Dytiscidae). – *Acta zool. fenn.* 184: 1-41.
- GUIGNOT, F., 1957. Contribution à la connaissance des dytiscides Sud-Américains (Coleoptera). – *Revue fr. Ent.* 24: 33-45.
- SPANGLER, P.J., 1966. The Catherwood Foundation Peruvian-Amazon expedition XIII. Aquatic Coleoptera (Dytiscidae; Noteridae; Gyrinidae; Hydrophilidae; Dascillidae; Helodidae; Psephenidae; Elmidae). – *Monogr. Acad. nat. Sci. Philad.* 14: 377-433.
- SPANGLER, P.J., 1985. Five new species of the predacious water beetle genus *Hydrodessus* from Guyana and a key to the species (Coleoptera: Dytiscidae). – *Monogr. Acad. nat. Sci. Philad.* 137: 80-89.
- YOUNG, F.N., 1967. A key to the genera of American bidessine water beetles, with descriptions of three new genera (Coleoptera: Dytiscidae, Hydroporinae). – *Coleopt. Bull.* 21: 75-84.
- YOUNG, F.N., 1969. A checklist of the American Bidessini (Coleoptera: Dytiscidae-Hydroporinae). – *Smithson. Contr. Zool.* 33: 1-5.
- YOUNG, F.N., 1970. Two new species of *Hydrodessus* from Suriname, with a key to the known species (Coleoptera: Dytiscidae). – *Stud. Fauna Suriname* 12: 152-158.

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