

## *Hydraena* (s.str.) *frenzeli* sp.n. (Coleoptera: Hydraenidae) from Lebanon

A. Skale\* & M.A. Jäch\*\*

### Abstract

*Hydraena* (s.str.) *frenzeli* sp.n. is described from central Lebanon. It is the tenth species of *Hydraena* KUGELANN to be recorded from Lebanon. It is a member of the *Hydraena rufipes* species group.

**Key words:** Coleoptera, Hydraenidae, *Hydraena* s.str., taxonomy, Lebanon.

### Zusammenfassung

*Hydraena* (s.str.) *frenzeli* sp.n. (Coleoptera: Hydraenidae) wird beschrieben. Es ist die zehnte im Libanon nachgewiesene Art der Gattung *Hydraena* KUGELANN. Sie gehört zur *Hydraena rufipes* Artengruppe.

### Introduction

The Lebanese species of the genus *Hydraena* KUGELANN were revised recently (see JÄCH et. al. 2006). Nine species, belonging to five species groups, were recorded from Lebanon in this revision. Surprisingly, a tenth species was discovered in this country just before the revision was published. Eventually, this species turned out to be new to science. It is described below.

#### Acronyms

CFS	Coll. Frenzel, Sonneberg, Germany	NME	Naturkundemuseum Erfurt, Germany
CSH	Coll. Skale, Hof, Germany	NMW	Naturhistorisches Museum Wien, Austria

## *Hydraena* (s.str.) *frenzeli* sp.n.

**TYPE LOCALITY:** Large carstic spring (source of Nahr el Ibrahim), ca. 4–5 m wide, emerging from large cave, 1160 m a.s.l., near Afqa, central Lebanon (Fig. 1).

**TYPE MATERIAL:** **Holotype** ♂ (NMW): "LIBANON, Prov. Mount Libanon, Afqa, Nahr el Ibrahim, 1160 m NN", "N 35°04'00", E 35°53'46" im Bachlauf unter Steinen [in stream course under rocks] 01.VI.2006, leg. D.Frenzel"; right maxillary palp detached and glued separately, claws of right hind leg missing. **Paratypes** (CFS, CSH, NME): 2 ♂♂, 2 ♀♀, same locality data as holotype.

\* Andre Skale, Blücherstraße 46, D–95030 Hof/Saale, Germany. – andre.skale@online.de

\*\* Dr. Manfred A. Jäch, Naturhistorisches Museum, Burgring 7, A–1010 Wien, Austria. – manfred.jaech@nhm-wien.ac.at

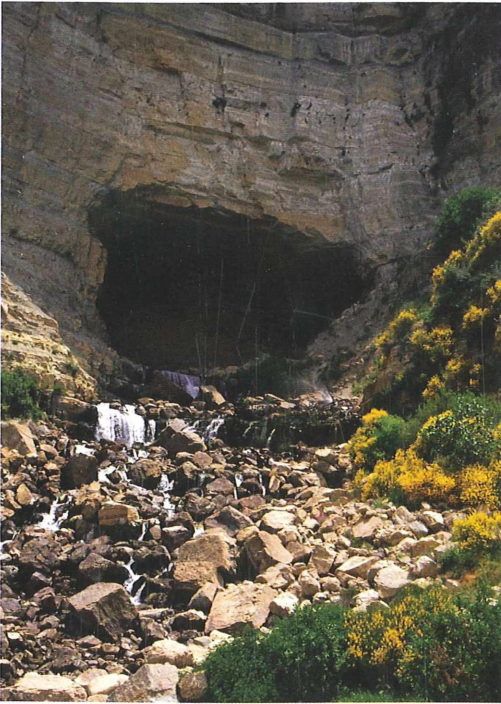


Fig. 1: Type locality of *Hydraena frenzeli*; carstic spring near Afqa, central Lebanon.

DESCRIPTION: Habitus as in Fig. 2. Body length: 1.80–2.05 mm. Brown, head darker brown, clypeus almost black. Clypeus sparsely punctate, medially glabrous or superficially microreticulate between punctures, laterally densely microreticulate. Frons moderately densely punctate, medially glabrous, laterally densely microreticulate.

Pronotum transverse, lateral rim denticulate, moderately convergent to anterior angle, sinuately convergent to posterior angle; anterior margin slightly concave; disc convex, discal foveae hardly perceptible; middle of disc sparsely punctate, interstices glabrous or very superficially reticulate; pronotal margins more densely punctate, rather distinctly reticulate.

Elytra elongate, ovoid, widest behind middle; disc somewhat flattened, with rather distinct impression behind shoulder and with blunt humeral ridge; discal striae rather irregular, punctures large, shallowly to moderately deeply impressed, interstices more or less smooth; explanate margin moderately wide, anteriorly denticulate; apex separately rounded.

Metaventral plaques large and wide, slightly converging anteriorly. Legs sexually dimorphic.

Gonocoxite (Fig. 6): Subpentagonal, transverse, inner plate exposed in ventral view.

Secondary sexual characters: Male mesotibia slightly curved and very slightly enlarged mesally in posterior half; male metatibia slightly curved, with distinct, evenly rounded, mesal enlargement around apical 0.3 (Fig. 3).

Aedeagus (Fig. 4–5): Main piece remarkably angulate, strongly attenuate at angle, with five short distinct setae (two subapical and three dorsal); dorsal margin with conspicuous tooth-like projection near insertion of distal lobe; apex of main piece slightly curved ventrad; phallobase asymmetrical. Distal lobe elongate and slender, rather distinctly sclerotized, apical part tube-like, basally with conspicuous, strongly sclerotized, finger-like dorsal projection. Right paramere almost reaching apex of main piece, apically not distinctly enlarged, with a group of apical setae and a group of subapical ventral setae; left paramere longer than main piece, more strongly enlarged apically, apex fringed with long setae.

Female tergite X (Fig. 7): Semicircular; disc without squamose setae; setae of subapical fringe trichoid, sparsely arranged.

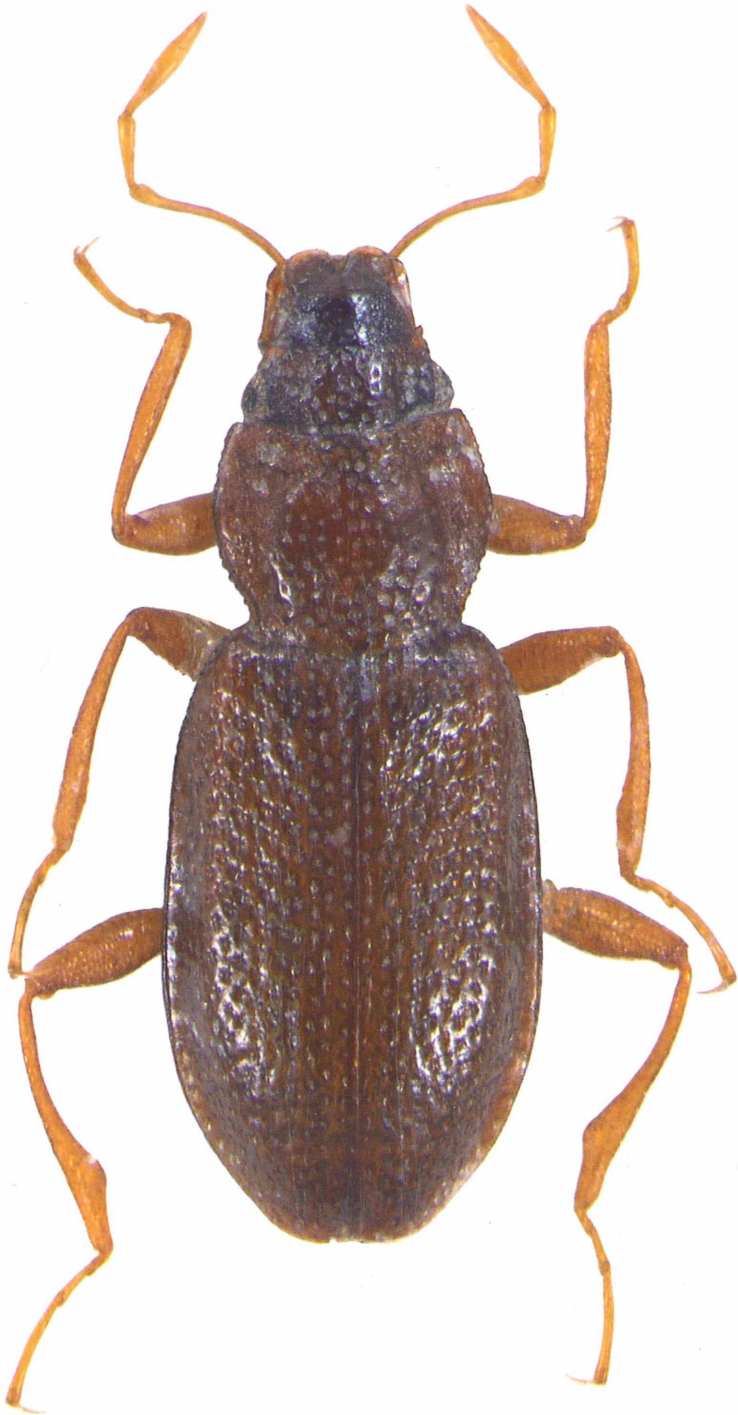
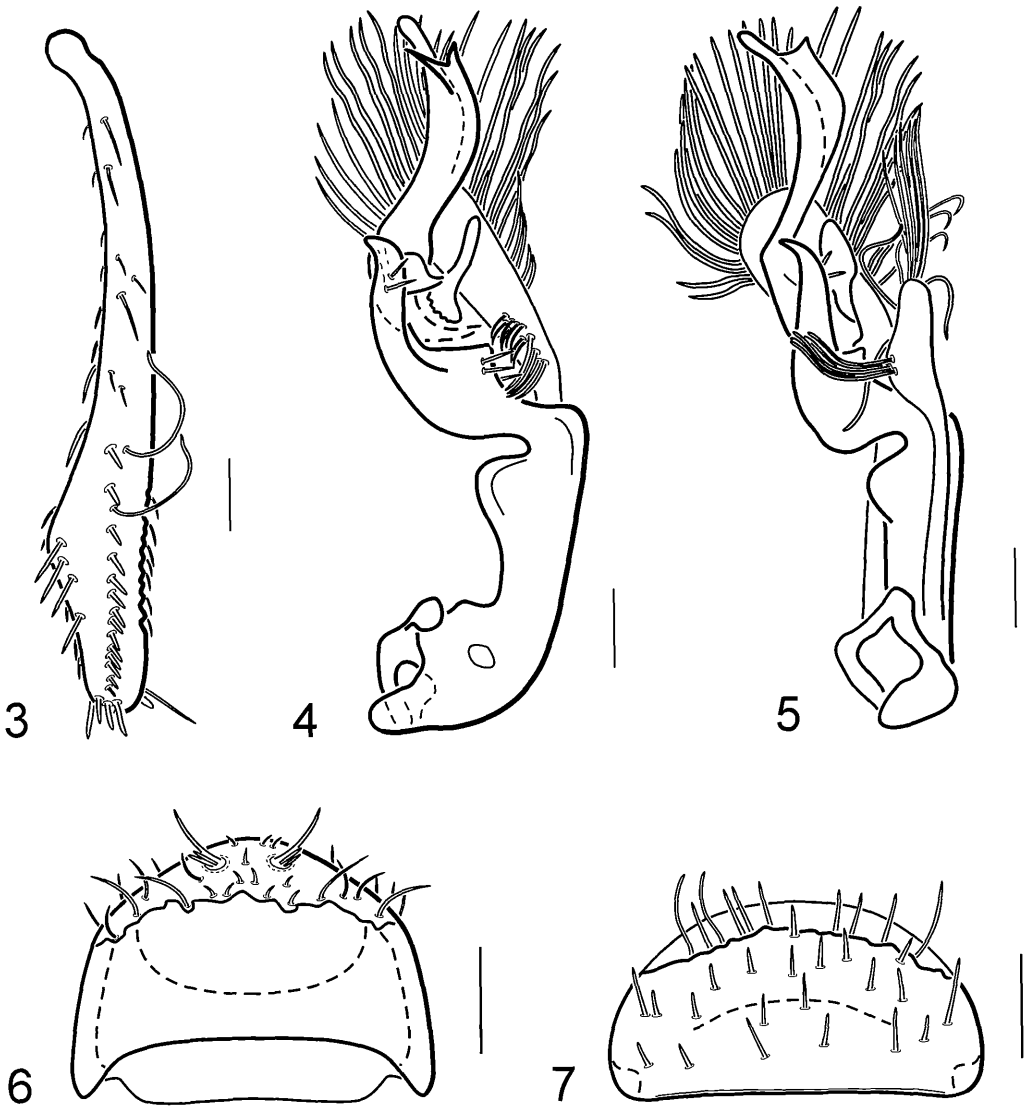


Fig. 2: Habitus of *Hydraena frenzeli*, holotype, missing body parts replaced digitally.



Figs. 3–7: *Hydraena frenzeli*; 3) metatibia, lateral view; 4) aedeagus, lateral view, right paramere not illustrated; 5) same, ventral view; 6) gonocoxite; 7) female tergite X. Scale bars: 0.1 mm.

Differential Diagnosis: Externally, *Hydraena frenzeli* differs from all other Lebanese species in the combination of the following characters: palpi unicoloured, elytral striae somewhat irregular.

DISCUSSION: *Hydraena frenzeli* is a member of the *Hydraena rufipes* species group. It is probably related with some species from Turkey (e.g. *H. colchica* JANSSENS, *H. fritzi* JÄCH, *H. janckyki* JÄCH, and *H. tauricola* JÄCH). These species share some similarities

in the aedeagal shape (distinctly angulate in *H. fritzi*), and the shape of the (tube-like) distal lobe. However, non of these species appears to be very closely related with *H. frenzeli*.

**DISTRIBUTION:** So far known only from the type locality.

**ETYMOLOGY:** The species is named after Dirk Frenzel (Sonneberg), who collected the type material.

#### **Acknowledgements**

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#### **References**

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Autor(en)/Author(s): Skale Andre, Jäch Manfred A.

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