

## Description of *Hedychridium mosadunense* n. sp. from The Netherlands (Hymenoptera: Chrysididae)

by

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ABSTRACT. — The new species is described from river dunes along the river Meuse in the provinces of Noord-Brabant and Limburg. The species closely resembles *H. coriaceum* (Dahlbom) and *H. femoratum* (Dahlbom).

In 1971 I collected two females of a new species of *Hedychridium* in the nature reserve "De Drunense Duinen", south of Drunen, west of Udenhout, in the Province of Noord-Brabant, The Netherlands. The specimens superficially resembled *H. coriaceum* (Dahlbom), but differed from it in having brown-orange tibiae and a strongly darkened metasoma. Males which were captured in the same locality in 1977, strongly resembled the females, also with regard to the colour of tibiae and metasoma.

The specimens were compared with material of one of the southern species with light-coloured tibiae, *H. femoratum* (Dahlbom) from Spain, France and Hungary in the collections of the Rijksmuseum van Natuurlijke Historie at Leiden (RMNH) and in the collection of W. Linsenmaier (Ebikon, Switzerland). *H. femoratum* is clearly smaller (3.5-4 mm) and more brilliantly coloured. The genitalia of the male are small like those of *H. femoratum*, and nearly half as large as those of *H. coriaceum*.

Compared to the Eastern European species *H. krayniki* Baltasar, the genitalia of *H. mosadunense* are very small, the large valvae are narrower and end in hooks with rounded apices. *H. krayniki* has dark tibiae.

The new species differs from the Eastern European species *H. tauranicum* Semenow in having a broader pronotum and thicker antennae; *tauranicum*, on the other hand, has a more shiny mesosoma, about as in *H. ardens* (Coquebert).

### *Hedychridium mosadunense* n. sp.

figs 1-3

Types. — "Nederland, Br. [Noord-Brabant], Drunen, 15.VII.1977, B. V. Lefebber", "*Hedychridium mosadunense*, ♂, Type, V. Lefebber, 1985", Holotype ♂ RMNH; Paratypes: Nederland, Br., Drunen, 15 and 16.VII. 1977, B. V. Lefebber, 3 ♂ coll. Lefebber, 1 ♀ RMNH, 1 ♀ and 3 ♂ coll. W. Linsenmaier, 1 ♂ coll. J. Petit; Nederland, Br., Udenhout, 23. VII. 1971, B. V. Lefebber, 1 ♀ coll. Lefebber, 1 ♀ coll. W. Linsenmaier; Nederland, L. [Limburg], Aayen, Bergen, J. Petit, 8. VIII. 1976, 1 ♀ coll. J. Petit, same data but: 13. VIII. 1984, V. Lefebber, 1 ♀, coll. Lefebber.

Description. — Length of body: ♂ 4-4.5 mm, ♀ 4.5-5 mm. Ground colour of head, pronotum, mesonotum and scutellum green; metanotum dark-blue; golden colour of head, pronotum, mesonotum and scutellum dorsally strikingly duller than in *H. femoratum*, more intense than in *H. coriaceum*. (In one of the ♀ paratypes the golden colour is reduced to light-bronze).

Metasoma dorsally for the greater part covered with a dark round spot (fig. 3) which is mainly black changing to greenish-blue at the margin; rest of metasoma totally gold coloured in five of the six females; one female and all males show a more or less green ground colour. Ventrally the metasoma is wholly deep black, without the metal lustre of species such as *coriaceum* and *krayniki*.

Antennae and mandibles like those of the other four species in our country.

Clypeus longer, more shiny than in *H. femoratum*, punctation finer and wider apart than in

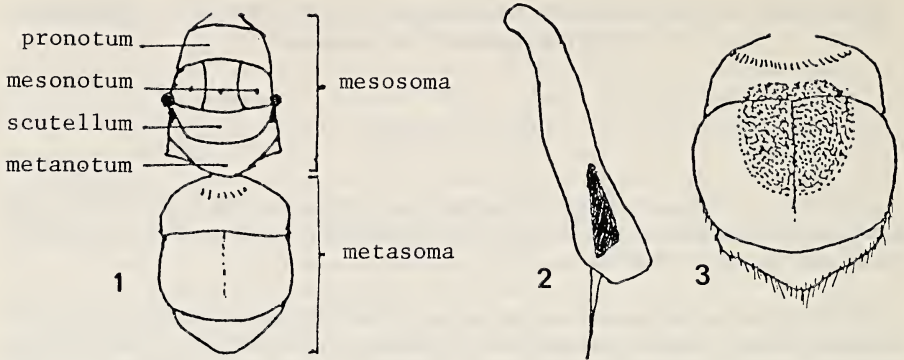


Fig. 1. Dorsal side body *Hedychridium*. Figs 2-3. *Hedychridium mosadunense* n. sp. 2, inner-side of hind tibia; 3, dorsal side of metasoma.

that species. The cavitas is more intensely green than in *femoratum*. Pronotum and mesonotum very finely, regularly and densely stippled, dull; pronotum broader than in *H. femoratum* and with less strongly converging margins. Scutellum anteriorly equally finely stippled as in *H. coriaceum*, but more posteriorly punctations become coarser. Punctuation of metanotum very coarse, like in the other species of the genus. Punctuation of metasoma not different from that of *H. ardens* or *H. coriaceum*.

Tibiae and tarsi semi-translucid, orange-brown; last tarsi lightly darkened; apices of femora of ♀ also light coloured; rest of femora blue-black. Outer side of tibiae with a dark strike, which is most clear in the fore tibiae, especially in the ♂. Inner side of all tibiae pale, but hind tibiae of ♂ and ♀ with a clearly demarcated dark brown triangle (fig. 2).

Pilosity of metasoma nearly white, longer than in *H. ardens* and *H. coriaceum*, but clearly shorter than in *H. integrum*, especially on the sides of the metasoma.

Genitalia very small, as in *H. femoratum*, hardly half as large as in *coriaceum*. The differences in the structure of the genitalia are very subtle and in practice inworkable as in most genera of Chrysididae.

Biology. — Host unknown, probably *Astata (Dryudella) stigma* Panzer, which is the only sphecid that is very common at the locality of the new species. The two ♀ from Aayen were collected on *Chamerion angustifolium* (L.) Holub and *Achillea millefolium* L.

Distribution. — The two known localities, south of Drunen and east of Aayen, are on dunes along the river Meuse, respectively in the provinces of Noord-Brabant and Limburg.

#### ACKNOWLEDGEMENTS

W. Linsenmaier kindly compared *Hedychridium mosadunense* with other specimens of the genus in his collection; J. Petit permitted me to study a ♀ of *mosadunense* in his collection.

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