

COLLECTING DATA:

Calabria - Prov. Cosenza, Monte Pollino, 4 km NW Morano Calabro, 1000-1100m, 21.V.1994;
Apulia - Prov. Foggia, Gargano Peninsula. a: road N. 528, ca. 2 km NE intersection to Carpino, ca. 700m, 7.X.1990, A. Buschinger, P. Douwes & R. Schumann leg. and 23.V.1994, R. Güsten & M. Sanetra leg. b: road Monte S. Angelo-Carpino 1,5 km NW intersection to Vico, ca. 700m, 7.X.1990, A. Buschinger, P. Douwes & R. Schumann leg.

OTHER INVESTIGATED MATERIAL: Switzerland, Valais, Fully, A. Forel leg. 3♀♀, 3♀♀, 3♂♂ (MHNG), syntypes; same data 3♀♀, 1♀ (NMB), syntypes; Veneto, Settimo near Verona, 25.X.1957 & 28.V.1959, C. Baroni Urbani leg. 51♀♀ (MCV); Spain, Sierra de l'Aguila, Puerto de Monrepós, V.1967, G. Osella leg. 11♀♀ (MCV), determined as *S. caeciliae* Forel by Baroni Urbani.

Since the discovery of *S. huberi* in Switzerland, very few accounts have further contributed to the knowledge of its biology and distribution. According to literature data the species appears to occur in local pockets scattered through the southern alpine region, the northern Mediterranean and the Iberian Peninsula (e.g., Consani, 1947; Baroni Urbani, 1962; Acosta & Martinez, 1982). Here we highlight three new records from the Gargano Peninsula and one from M. Pollino, which are clearly referable to this species as revealed by comparison with the types. A map (Fig. 24) shows the presently known distribution of this rare parasite in Italy and areas close by.

S. huberi is one of the more characteristic species of the genus and comparatively easy to separate from its congeners. Both females and workers exhibit a strong punctate-reticulate microsculpture on the petiolar nodes which makes these look entirely matt (Fig. 18). The rather shiny appearance of the nodes in *S. alpinus* and *S. destefanii* females is caused by a weaker development of that microsculpture (Figs. 17, 19). Rugosity on the nodes is nonetheless more distinct in *S. alpinus* than in *S. huberi* while entirely absent in *S. destefanii*. On the head and mesosoma *S. huberi* females again appear completely dull owing to conspicuous microsculptural elements. A small frontal area of the mesonotum remains the only shiny surface (Fig. 22). In the two other species, head and mesosoma have the microsculpture reduced in extent, being almost absent on the dorsal mesonotum where only longitudinal rugosity is obvious (e.g. Fig. 23). Surface sculpture in workers of *S. alpinus* and *S. destefanii* is very variable, but as in females the petiolar nodes are more shiny than in *S. huberi*. Additionally, the latter show a smaller unsculptured, shiny portion of the head and mesosoma surface, which, however, is subject to considerable variation.

In the field, workers of *S. huberi* may be recognized by their characteristic slender appearance, due to narrower petiolar nodes, a narrow mesosoma and a different head shape compared with other *Strongylognathus*. The head tends to be parallel-sided with the occipital margin being almost straight (Fig. 20), while in the other two species discussed here, head sides are distinctly convex and the occiput appears appreciably concave (e.g. Fig. 21). In *S. huberi*, heads of females narrow behind the eyes towards the occipital margin which is not the case in the other two species (compare Figs. 6, 7 in Baroni Urbani (1969) for *S. huberi* and *S. alpinus*).

In southern Italy *S. huberi* has not been found at elevations below 700m, but some of the more northerly records originated from the lowlands (Po valley; Marseille). The