which are treated in the discussion chapter.

In view of strongly differing habitats, *S. alpinus* and *S. destefanii* are surprisingly difficult to distinguish morphologically. Females are usually distinctly larger in *S. alpinus*, though extreme individuals of either species may be comparable in size. As for *S. huberi*, the most reliable characters for species identification are found in the surface sculpture of the petiolar nodes. In *S. alpinus* females, there are always conspicuous transverse rugae on the postpetiole (Fig. 19), while those of *S. destefanii* usually completely lack these and show only punctate reticulation (not unlike *S. huberi* but much weaker, the surface appearing shiny: Fig. 17). Differences regarding the sculpturing of the petiolus are similar but less obvious. Generally, the value of the structure of the petiolar nodes for species distinction is less reliable in workers than in females. At least some regular, continuous longitudinal rugosity is present in *S. alpinus* workers on the often very shiny surface. In contrast, this is weakly, irregularly and discontinuously developed to almost absent in *S. destefanii* with the microsculpture usually more pronounced. Other differences concerning colour, size and structure are present but of limited importance. Note that the development of the propodeal spines shows specifically pronounced variation, rendering it less useful for distinction than implied in available keys (Baroni Urbani, 1969; Poldi, 1994).

S. alpinus is essentially a high altitude species, reported in Italy between 1500 and 2000m and in the Alps from 1700 to 2000m. According to all we know *T. impurum* is the sole host species in the Alps; previous records of *T. caespitum* must be considered erroneous. However, the hosts of Sicilian and Calabrian *S. alpinus* are indeed assignable to *T. caespitum* which replaces *T. impurum* in the southern mountains, the latter cold-adapted species being recorded only as far south as M. Pollino.

Locality 1 - Sicily, Monti Nebrodi

The record is very interesting in that it shows a hitherto unknown existence of a further *Strongylognathus* species on Sicily which inhabits distinctly higher altitudes than the long known *S. destefanii*. On a southwest-facing slope of the Nebrodi mountains the species was fairly common and three nests could be found within a few hours. The host species at that site is *T. caespitum*. In addition, an aggressive conflict between two *Tetramorium* colonies, one of which was infested by *Strongylognathus*, was observed in the field, but characteristic slave-raiding behaviour could not be seen.

Locality 2 - Calabria, Montalto

On the very summit of the Montalto two *Strongylognathus* colonies were discovered on a clearing in a montane beech forest also containing scattered specimens of Silver Fir (*Abies alba*). Both samples were collected relatively close to each other but were ascertained as belonging to different colonies. *T. caespitum* was identified as the host species, by electrophoresis.

Localities 3a, b, c - Abruzzi, Gran Sasso

The presence of *S. alpinus* in the Gran Sasso massif was first discovered during an excursion by Buschinger, Douwes & Schumann. On this mountain plateau the species occurred in rather high population densities, and four nests were found on one day