

*impurum* in the Gran Sasso, which are the only hosts available at the elevation inhabited. Similarly, *S. testaceus* has always been found together with one of these two host species (except for *T. brevicorne* in Sardinia) and thus apparently becomes a species of higher altitudes in the south. However, it remains an open question whether it can also survive in mixed colonies together with *T. semilaeve*. Records of *S. huberi* are very scarce at present and do not justify any general conclusions. The hosts recorded by us and other authors for Italy, however, consistently belong to the *T. caespitum* group (sensu Radchenko, 1992a).

Owing to lack of information the usual pattern of host use of *A. atratulus* in southern Italy cannot be elucidated. It seems likely that this inquiline most frequently depends upon *T. caespitum* and *T. impurum* due to its preference for higher elevations as known from other regions, especially the Alps (pers. obs.). Furthermore, its probable dependence on orphaned host colonies should favour exploitation of monogynous host species which are prone to provide such kind of target colonies. In Calabria we found *A. atratulus* together with *T. impurum* at 1600m on M. Pollino. The single colony discovered in Sicily at 300m contained *T. diomedaeum*, as new host species. The composition of the infested colony with developing sexual brood of the host species raises many questions. As colonies being parasitized by *Anergates* usually contain no *Tetramorium* brood at all, this population may have developed different life habits. However, the possibility cannot be ruled out that *Anergates* had accidentally been adopted into this colony, despite the presence of one or more host queens. In the lowlands, *A. atratulus* might be more adaptable to monogynous *T. semilaeve*, though no such records are presently available.

The findings of *A. atratulus* in southern Italy presented in this study are the only two records from this region thus far (see Fig. 29). Yet, there are reasons to believe that the species occurs throughout Italy without considerable gaps. As a workerless inquiline *A. atratulus* can be easily detected only within a limited period from June to August when winged females are present in the nests. Since most of the social parasites like *Anergates* are usually both local and rare, new records have always been difficult to obtain. As a consequence, many of the existing populations still await to be discovered. Further collecting activities and detailed field studies will be necessary to improve our understanding of distribution, habitat requirements and biology of these fascinating ants.

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