



## CHECKLIST OF BRAZILIAN SCUTACARID MITES

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The family Scutacaridae (Heterostigmatina) is divided into about 20 genera, contains some 750 species and occurs all over the world. Scutacarid mites are characterized by extremely small body sizes of around 200 $\mu$ m, and they inhabit different types of soil, where they feed on fungi. Several scutacarids display interesting features like female dimorphism in terms of phoretomorphism, thanatosis, transfer of fungal spores by sporothecae, ovoviviparity or jumping behaviour. Almost half of all known species have been reported from associations with other animals, either as inquilines or as phoronts. Since Brazil is a huge country with different climatic and vegetation zones, including several biodiversity hot spots, the diversity of scutacarid mites in Brazil should be enormous. The following number might serve as a reference value: in the small European country of Austria, which doesn't even cover 1% of Brazil's total area, 90 scutacarid species are known to science. The objective of the present study was to review the literature in order to provide a current checklist of Scutacaridae in Brazil. The results of the literature research were surprising and disappointing from a "scutacaridophilous" point of view. Although the first Brazilian species had been described as early as 1924, few following studies included Scutacaridae. There was a remarkable upturn in descriptions and reports of scutacarids between 1970 and 1990, but until today the number of known species from Brazil did not rise above 50. About half of the species reported from Brazil were new to science, and a quarter of them were found in association with different insect taxa. Obviously, the number of known Brazilian scutacarid species does not reflect the actual relations. Because of Brazil's size and environmental features mentioned above, the diversity of scutacarid taxa in this country can be expected to be significantly higher than the current data suggest. So what may be the reasons for the scarceness of knowledge about Scutacaridae in Brazil? First of all, they might not be well studied because they have no evident relevance on human welfare, but moreover, the fact that they usually are not very abundant in (soil) samples and maybe also their small size might also have caused their neglect.

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