

SPIDERS OF SOCOTRA ARCHIPELAGO

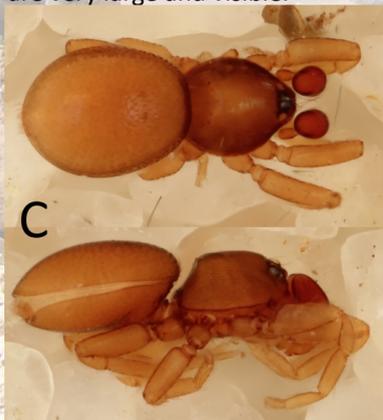
Spiders and similar groups of so called Arachnids are usually very unpopular or hated group of animals. But they are very important group of bioregulators and they are very important for function of all ecosystems. There are known almost 44 000 species of spiders, 1600 scorpions, 100 uropygids, 100 amblypygids (whip spiders) and 6500 harvestmen in the world. At this moment, is from Socotra Island officially recorded 59 species of spiders, 3 amblypygids and 1 harvestmen. These numbers are horribly underestimated and we are expecting numbers severally times bigger.

The biggest spiders (Teraphosidae and Nephilidae)

The most widespread and visible are these two families of spiders. Spiders are presented on the island by giant and dwarf forms together. The largest species known from Socotra is endemic baboon spider *Monocentropus balfouri* (Teraphosidae) (A). This big spider, also called by local people, fitama, is burrowing species living solitary under stones or dead tree trunks. It is possible to see this species outside of its burrows just during the rains and in time of mating, when males are looking for females. The other big species is orb-weaver *Nephila sumptuosa* (Nephilidae) (B). This species is also known from Horn of Africa and south part of Arabian Peninsula, but there are just a few records in museums. The species is local, but the webs of this species are very large and visible.



A



C

The smallest spiders - Oonopidae (C)

In opposite the smallest spiders of Socotra are goblin spiders (Oonopidae). These small creatures live in the leaf litter usually and it is difficult to find them but it seems that this family is one of the most numerous around the World but not studied well. There are 6 species known from Socotra, but it seems that there are more. All of species known from Socotra are according to our knowledges endemic.



B

The most widespread spiders - Wolf spiders (Lycosidae)

Large family represented by ground dwelling spiders which are often very abundant. The most widespread wolf spider of the Socotra island is *Wadicosa fidelis* (D, E). This spider is very common close to the water (streams and ponds where hunt different invertebrates. These spiders are mainly diurnal and you can see them even walking on the surface of water. Other wolf spiders are mainly night active and taxonomic revision is really needed. The most common one is *Hogna ferox* (F). This species is known from Arabian Peninsula as common and you can find it mainly due to reflecting of light by their eyes.



D



E



F



G

Danger spiders species (Theridiidae – Letrodectus, Sicariidae)

There are several danger species from human safety perspective. The most widespread are black widows spiders of genus *Latrodectus*. These small creatures inhabit different habitats – some species live close to human settlement, some species live only in natural habitats. The venom of all *Latrodectus* (I) species contains some components which attack neural system of hot-blooded organisms humans including. They are able to kill small geckos (G), scorpions (H), but the main prey are insects. From Socotra are published 6 species all together, all of them are danger for human. The interesting thing is, that local people don't know that these spiders are danger.

The other danger spiders known from Socotra are Sicariids. The only known species from the island is *Loxosceles rufescens* (J). This is typical Mediterranean species, which is spreading by different goods around the World, but it is highly probable that there are other species too (in caves for example). These species could be danger for children, old and sick people only and there are no evidence of loxoscelism from the island. But we can expect some in future because the expansion is quite recent.



H



I



J

Jumpers – jumping spiders (Salticidae)

The most diverse and species rich family of the island and one from the most species rich families of the World. Actually is known 18 species of jumping spiders from the island. The most widespread is very common *Rafalus insignipapis* (K), orange-red spider with perfect mimicry to red ground. Other common species is relatively big species *Afrobeatia firma* (L). This species can be found on the trees and rocks. Females laid their eggs into different hollows, like empty trunks of *Adenium* or empty land-snail shells. The smallest known species is *Heliophanus parvulus* (M), nice shiny species living close to ant colonies on different trees. The most species rich genus of jumping spiders is genus *Habrocestum* (N), and generally is possible say, that even this genus is distributed from Mediterranean to South Africa, the highest species diversity is known from Socotra island. Pantropical or generally widespread species on Socotra island are *Hasarius adansoni*, *Plexippus paykulli* (O) and *Thyene imperialis*. First two are common in Hadiboh and other settlements, the third one lives in the natural habitats.



L



N



M



K



O



Q

Others

There live, of course, other families of spiders too. Common is for example still unknown species of genus *Ariadne* (Segestriidae) with typical burrow entrance on trees (R), or big and fast spiders of genus *Olios* (Sparassidae), which is probably endemic to Socotra (Q). A little bit different from the other are spiders of Pholcidae family, long-legged spiders living always in shadow. There is surely one known species, but we expect much more (S). Very characteristic are spiders from Hersiliidae family with very long spinarets. The only member of this family on the island is *Hersilia wraniki* (T).



R



S



T