Scytodes longipes (Spitting Spider)

Order: Araneae (Spiders)
Class: Arachnida (Spiders, Scorpions and Mites)
Phylum: Arthropoda (Arthropods)

Fig. 1. Spitting spider, *Scytodes longipes.*

[http://cookislands.bishopmuseum.org/MM/MX5/5AP068_Scyt-long_RR1_GM1_005-03_MX.jpg, downloaded 24 February 2016]

TRAITS. Spitting spiders (family Scytodidae) are named due to their ability to release from their fangs a special combination which contains silk, venom, and glue (Monterosso, 1927). Additionally, these spiders are able to manufacture silk through their posterior spinnerets, this is similar to other spiders, as most species are able to use webs to attain food (Cole and Rayor, 1985; Nentwig, 1985). Spitting spiders possess a total of six eyes, which are organized in a triad of three pairs. The length of the body of *Scytodes longipes* ranges from 4-6mm for adult females and 3-5mm for adult males. These lengths exclude the legs, which are very long in *S. longipes* (Fig. 1).

DISTRIBUTION. *Scytodes longipes* is found in the neotropics from the southern USA to northern and central South America (Fig. 2). This species has also been introduced to other tropical and subtropical areas, and is probably synanthropic (living close to humans).

HABITAT AND ACTIVITY. They can be found commonly in homes, although they can also be seen in fields, on the bark of trees, or under overhanging stones or slopes (Nentwig, 1985). They are mainly nocturnal, and are frequently found in cellars, cupboards and other dark corners.

FOOD AND FEEDING. Due to being mostly nocturnal, the food and feeding patterns of *Scytodes longipes* occurs mostly in darker conditions. It involves the spider hiding when it is daytime in a cryptic posture to avoid detection (Fig. 3). After dark the spider moves and takes up its hunting posture (Fig. 3), motionlessly awaiting prey, which include other spiders as well as small insects (Li et al., 1999). It is able to recognize prey by tactile input and substrate vibration, due to having sensory setae (hairs) on its long widely-spread legs (Fig. 4). The spider spits onto prey once it is recognised as of suitable size and shape. The insects that are caught by this method are drained of their body fluids and the hard remains left. *S. longipes* produces a net of silk threads around the area in which it is hunting. These spiders may stay in one area for a period of time, so the network of threads usually gives the appearance of a sheet web (Fig. 5). However, these threads serve no function to catch prey as a web. The exoskeleton remains of the victims are left (Nentwig, 1985).

REPRODUCTION. The female *Scytodes longipes* is able to develop a silk sac, containing her eggs, which held by her chelicerae until the hatching process. Then upon hatching of the eggs, there is an extended mother–offspring association. This is shown by the young spiders tending to remain in their mother's web until they are developed. The mother takes food to their young ones and either feeds with or leaves its young to feed on the prey (Li et al., 1999). Spitting spiders have a tendency to stay alone, however they must interact to mate. As both sexes are able to produce pheromones, the female spider makes its choice of mate based on the male pheromone production. As these spiders are aggressive hunters, the potential mates must be able to interact carefully with the female or be assumed to be prey (Koh et al., 2009).

BEHAVIOUR. Scytodidae are able to capture their prey by spitting a fluid-like silk, which thickens when coming in contact, and it forms a sticky but venomous mass. Its venom-infused "spit", not only is able to immobilize prey, for example silverfish, by preventing movement but is also paralyzes its prey. Due to having drastically poor eyesight, they developed a means of using their sensory setae by walking around with mostly their front legs. This helps to sense their surroundings (Suter and Stratton, 2005). For interactions with larger prey, they attack by continuously spitting several time on the prey to subdue it. It then fully wraps its prey with its silk then it begins to feed.

REFERENCES

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Fig. 2. *Scytodes longipes* geographic distribution.

[http://eol.org/data_objects/21437294, downloaded 30 April 2016]

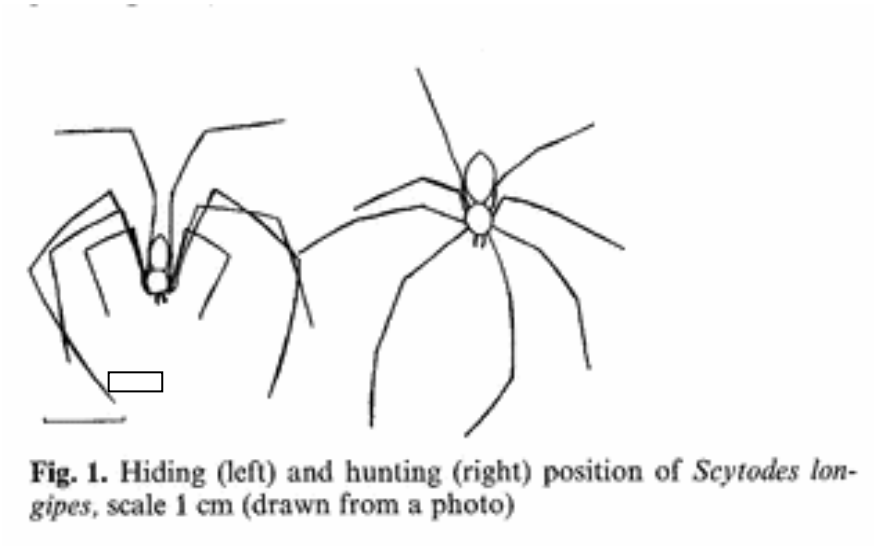

Fig. 1. Hiding (left) and hunting (right) position of *Scytodes longipes*, scale 1 cm (drawn from a photo)

Fig. 3. Postures of *Scytodes longipes*.

[https://static-content.springer.com/lookinside/art%3A10.1007%2FBF00379231/000.png, downloaded 3 March 2016]

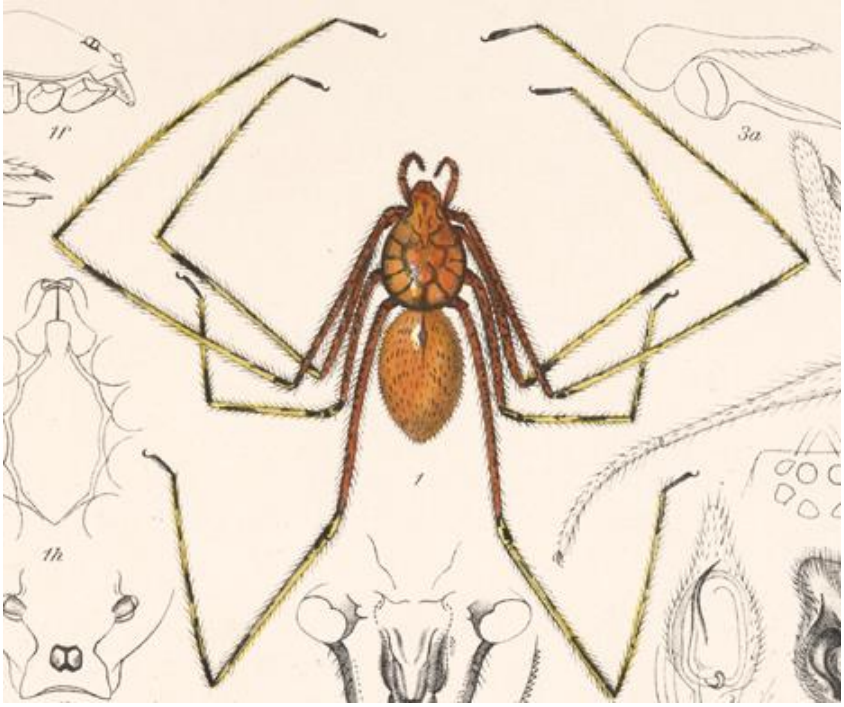

Fig. 4. Detailed drawing of *Scytodes longipes*.

[http://www.sil.si.edu/digitalcollections/bca/navigation/bca_08_00_00/bca_08_00_00platesTN.cfm, downloaded 3 March 2016]

Fig. 5. *Scytodes longipes* in hunting position, near silk threads.

[http://eol.org/pages/1182718/overview, downloaded 3 March 2016]