

# Theridiosomatid spiders of the granitic islands of Seychelles (Araneae, Theridiosomatidae)

Michael I. Saaristo  
Zoological Museum,  
University of Turku, FIN-20014 Turku,  
FINLAND

**Key words:** Arachnida, *Andasta*, Silhouette

**Abstract:** Three theridiosomatid spiders are recorded from the granitic islands of Seychelles. The genus *Andasta* Simon, 1895 is revalidated. *Andasta benoiti* (Roberts, 1978) n. comb. is transferred from *Theridiosoma* O. Pickard-Cambridge, 1879 to that genus and a new species *Andasta siltte* n. sp. is described. A new genus *Zoma* n. gen. is created for *Zoma zoma* n. sp.

## Introduction

Theridiosomatids are small araneoid spiders; total length 0.5-3 mm. They can be distinguished from all other spiders by having a small pit on both sides of the base of the labium. They have eight subequal eyes in two rows. Height of clypeus variable, usually more than twice the diameter of the anterior median eyes. Cephalic region frequently elevated. The sizes of cheliceral teeth are highly variable. Abdomen spherical, usually higher than long or wide and more or less overhanging the cephalothorax. Colulus relatively large. Female palpus without claw. Male palpus almost equal in size to prosoma, its cymbium with a minute lateral hook at the base. Epigyne usually a flat or domed plate. Characteristic of the vulva are a pair of spermathecae with a shared median wall.

Theridiosomatids live almost exclusively in wet or humid, shaded forest habitats. They make orb-like webs; the radii of the webs do not meet in the center. Papery egg sacs are suspended on a long stalk. Twelve genera and 64 species have been described.

All measurements cited below are in millimetres.

## Genus *Andasta* Simon, 1895, revalidated genus

*Andasta* Simon, 1895: 918. - Type species by monotypy *Andasta semiargentea* Simon, 1895 from Sri Lanka.

**Diagnosis:** *Andasta* is clearly close to *Theridiosoma* O. Pickard-Cambridge, 1879 but may be distinguished from it by having a flat epigynal area while in *Theridiosoma* it is protuberant and hood-shaped.

**Discussion:** Coddington (1986) placed *Andasta* Simon, 1895 as a junior synonym of *Theridiosoma* O. Pickard-Cambridge, 1879 stating that its type species *Andasta semiargentea* Simon, 1895 does not differ substantially from his generic diagnosis for *Theridiosoma*. However, compared with the diagnosis of the other considered genera (Coddington 1986) that of *Theridiosoma* was left considerably broader and included the statement: "Without doubt some species groups of

*Theridiosoma* will merit generic status" (Coddington 1986: 61). At the same time he concluded that the cladistic relationships within *Theridiosoma* should be better understood before its splitting. The uncertainty over the cladistic relationships within *Theridiosoma* sensu lato is not accepted here as a valid justification for suppression of the names of its accepted component genera. In this particular case the very differently shaped epigynal areas have been considered to be sufficient to separate *Andasta* from *Theridiosoma*.

*Andasta benoitii* (Roberts, 1978), new combination  
*Theridiosoma benoitii* Roberts, 1978: 935 (male & female).

**Diagnosis:** The males of *A. benoitii* may be distinguished from the other species of the genus by the long, pointed bulbal apophysis and the females by having broadly rounded posterior margin of the epigyne and long ovoid spermatecae laying rather close to it (Roberts 1978: Figs. 75-77 and 79-81).

**Description:** The species has been well described by Roberts (1978).

**Distribution:** Known only from Mahé and Praslin; Seychelles.

*Andasta siltte*, new species (Figs. 1-4)

**Type:** Female holotype from Seychelles; Silhouette, outside *Pisonia* forest, 1990, Justin Gerlach legend. Deposited in the Zoological Museum, University of Turku (MZT AA 0.271).

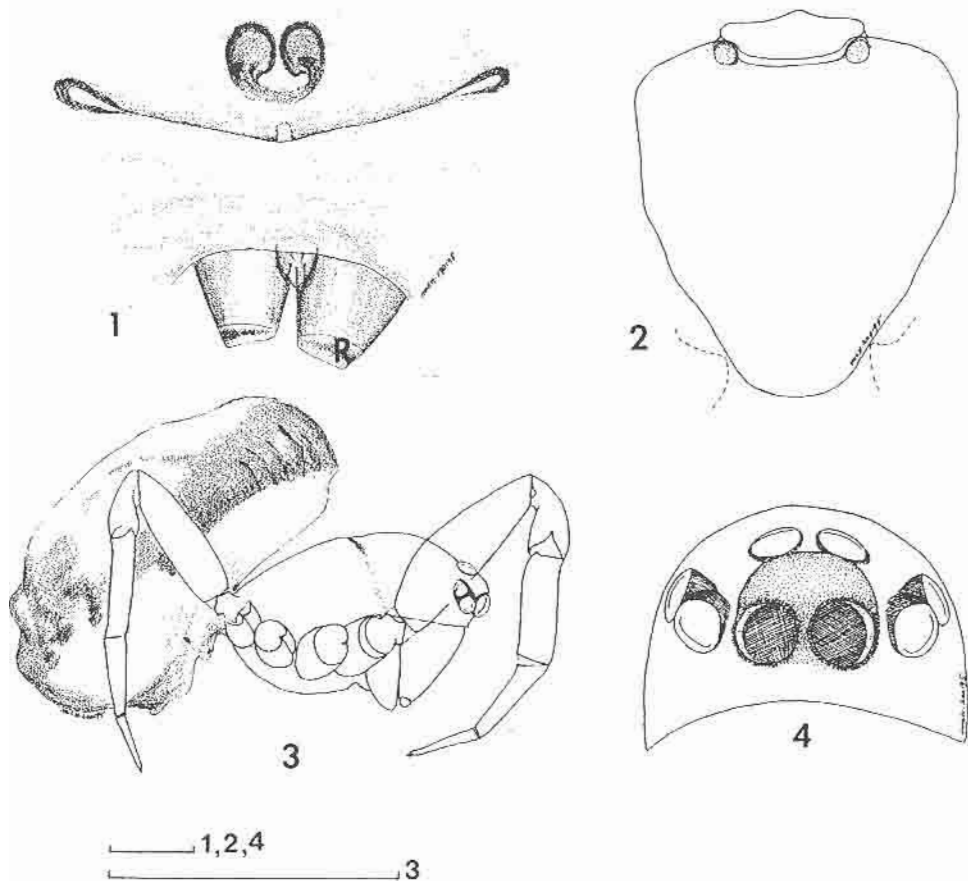
**Diagnosis:** The females (male unknown) of this species may be distinguished by the slightly convex, blunt tipped posterior margin of the epigynal area and long ovoid receptaculæ lying about their length from it.

**Male:** Unknown.

**Female:** Total length, not including chelicerae, 1.70. Carapace 0.77 long, 0.63 wide. Carapace, sternum, labium, and maxillae dirty white; cephalic area lightly suffused with black. Chelicerae pale yellowish. All coxae and femora dirty white; patella, tibiae, metarsus, and tarsus of leg I and II yellow brown but those of leg III and IV blackish brown. Anterior median eyes (AMEs) clearly larger than anterior lateral eyes (ALEs); posterior median eyes (PMEs) slightly smaller than AMEs, about one third of their diameter apart from each other. Clypeus relatively low, its height about 2/3 AME diameter. Labium wide and narrow. Sternal pits somewhat rectangular; ca. 3 times their diameter apart. Abdomen 0.63 long, 0.88 wide, 1.19 high. Abdomen flat, disk-like, overhanging cephalothorax. It is dirty white and surrounded by a relative wide blackish band; venter also dirty white. Colulus fairly

large, black. Posterior margin of epigyne slightly convex, bluntly triangular with small median transparent square. Receptaculæ elongately ovoid, about their length from the posterior margin of the epigyne.

*Distribution:* Known only from Silhouette, Seychelles.



Figs. 1-4. *Andasta siltte* n. sp. (female). Original figure. Scale bar 0.1 mm.

1). Epigyne, colulus and spinnerets ventrally. - 2). Sternum and labium ventrally. - 3). Female dextrolaterally. - 4). Eyes frontally.

**Genus *Zoma*, new genus**

*Type species: Zoma zoma n. sp.*

*Diagnosis:* At the present *Zoma* contains only its type species *Zoma zoma* and is diagnosed by the same characters as that species.

*Erymology:* The generic name *Zoma* refers to the belt of silvery corpuscles on the abdomen of the type species.

***Zoma zoma*, new species (Figs. 5-8)**

*Type:* Female holotype from Seychelles; Silhouette, outside *Pisonia* forest, 1990, Justin Gerlach legend. Deposited in the Zoological Museum, University of Turku (MZT AA 0.291).

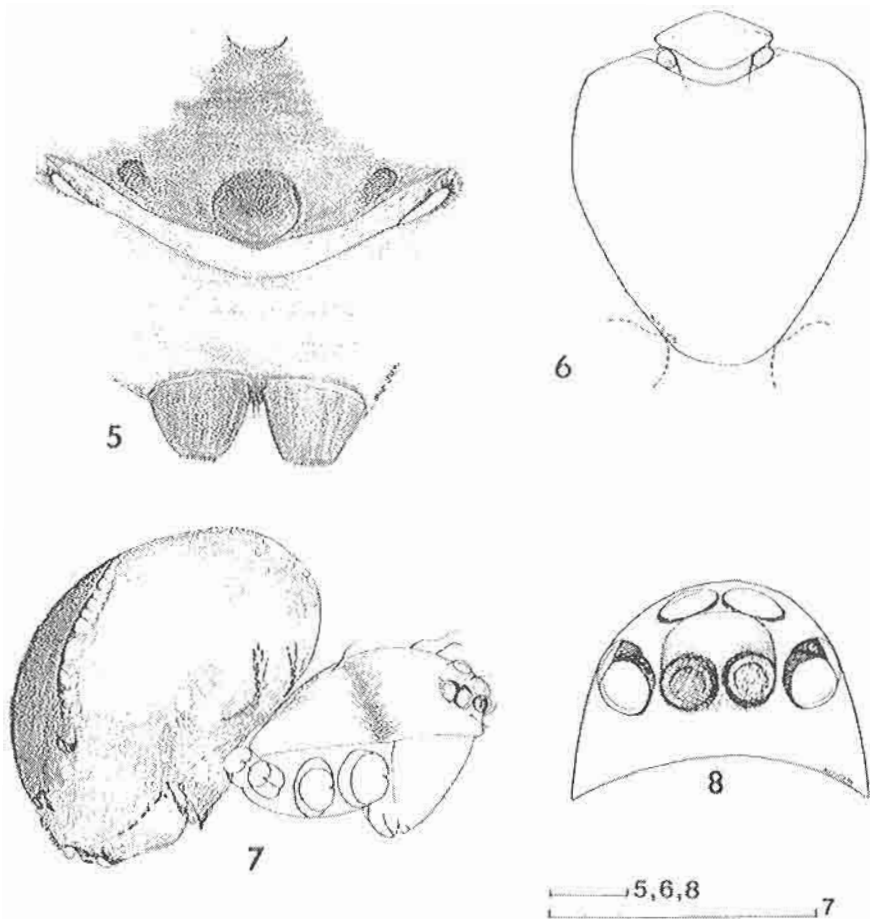
*Diagnosis:* Female (male unknown) of *Z. zoma* is distinguished from all other theridiosomatids by the flat, sharply pointed bluntly triangular epigynal plate with a wide, shallow median pit and smaller lateral ones.

*Male:* Unknown.

*Female :* Total length, not including chelicerae, 1.79. Carapace 0.74 long, 0.60 wide. Carapace yellow brown with broad lateral bands merging together in the ocular area. Chelicerae, sternum, labium, and maxillae yellow; sternum also with blackish edges. Labium about twice as wide as long. Sternal pits elliptical, a little more than twice their diameter apart. Coxae, femora, and patella pale yellowish; tibiae, metatarsi, and tarsi yellow brown, apex of tibiae and metarsi blackish; legs III and IV somewhat paler than legs I and II. Clypeus high, slightly more than AME diameter. Abdomen 0.77 long, 0.95 wide, 1.15 high; smoothly ovoid, overhanging carapace, dorsum with deep brown folium with black edges surrounded by a silvery glittering band of guanine corpuscles; otherwise dirty white variably suffused with black; areas of silvery corpuscles also frontally and lateroventally. Colulus small, black. Anterior spinnerets yellow brown, others more or less dirty white. Epigynal plate flat, sharply pointed bluntly triangular with wide, shallow median pit and smaller lateral ones.

*Distribution:* Known only from Silhouette, Seychelles.

*Erymology:* The specific name *zoma* denotes that this is the type species of the genus *Zoma*.



Figs. 5-8. *Zoma zoma* n. sp. (female). Original figure. Scale bar 0.1 mm.

5). Epigyne, colulus and spinnerets ventrally. - 6). Sternum and labium ventrally. - 7). Female dextrolaterally. - 8). Eyes frontally.

#### References

- Coddington J.A. 1986 - The genera of the spider family Theridiosomatidae. *Smithsonian Contr. Zool.* 422; 1-96
- Roberts M. 1978 - Contributions à l'étude de la faune terrestre des îles granitiques de l'archipel des Séchelles (Mission PLG Benoit & JJ van Mol 1972) Theridiidae, Mysmenidae et gen. *Theridiosoma*. *Rev. Zool. afr.* 92(4); 902-939
- Simon E. 1895 - *Histoire naturelle des Araignées*. Vol. 1, part 4, pp. 761-1084. Paris