Description of the unknown male of *Ozyptila tenerifensis* (Araneae: Thomisidae)

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Abstract. The unknown male of *Ozyptila tenerifensis* Wunderlich, 1992, an endemic species to Tenerife is described. This species is rarely collected and seems restricted to litter of understory broadleaf bushes in the Canary pine forest zone.

Keywords: Canary Islands, spider, taxonomy, Tenerife

Zusammenfassung. Erstbeschreibung des Männchens von *Ozyptila tenerifensis* (Araneae: Thomisidae). Das unbekannte Männchen von *Ozyptila tenerifensis* Wunderlich, 1992, ein Endemit von Tenerifa, wird beschrieben. Die Art wurde selten gefangen und scheint auf die Laubstreu von Büschen im Unterwuchs der Kanarienkiefer-Zone beschränkt zu sein.

Ozyptila tenerifensis Wunderlich, 1992 is the only *Ozyptila* species known from Tenerife. Just one other species, *O. atlantica* Denis, 1963, has been recorded in the Canary Islands and so far only from the island of Lanzarote (Schmidt 1980, Wunderlich 1992). This species was originally described from the Savage Islands (Denis 1963) situated 165 km to the north of the Canary Islands and is still only known from the female. In this study the hitherto unknown male of *O. tenerifensis* is described and data on its habitat and phenology is presented.

Material and methods

The spiders were collected by sifting leaf litter in a tray. Illustrations were created from photos of selected features using a Leica M205 A stereomicroscope fitted with Leica DFC450 digital camera connected to a computer with Leica Application Suite software, Zerene Stacker software and the vector graphics editor Inkscape.

Abbreviations

TL = total length
PL = prosoma length
PW = prosoma width
OL = opisthosoma length
CJL = Collection Jørgen Lissner
DZUL = Department of Animal Biology, Edaphology and Geology, University of La Laguna, Tenerife, Spain
NHMD = Natural History Museum of Denmark

Results

Taxonomy

***Ozyptila tenerifensis* Wunderlich 1992**: 494, f. 790-792 (Figs 1-4)

New material examined. SPAIN, Canary Islands, Tenerife, Las Raices (El Rosario) (N28°25'31", W16°22'38"), pine forest (1075 m), 3.IX.2015, 3♀♀ 2♂♂ 1 juvenile (two males and one female were collected as subadults and matured in captivity mid-late October 2015), leg. Lissner (CJL: 10931). The male used for illustrations of the male palpal organs is deposited at NHMD; Pinar de Taucho (Adeje) (N28° 9'28" W 16°41'51"), pine forest (1300 m), 14.IV.2007, 1♀, leg. Nuria Macías-Hernández (Coll. DZUL-34306).

Fig. 1: *Ozyptila tenerifensis* Wunderlich, 1992, male

Fig. 2: *Ozyptila tenerifensis* Wunderlich, 1992, female

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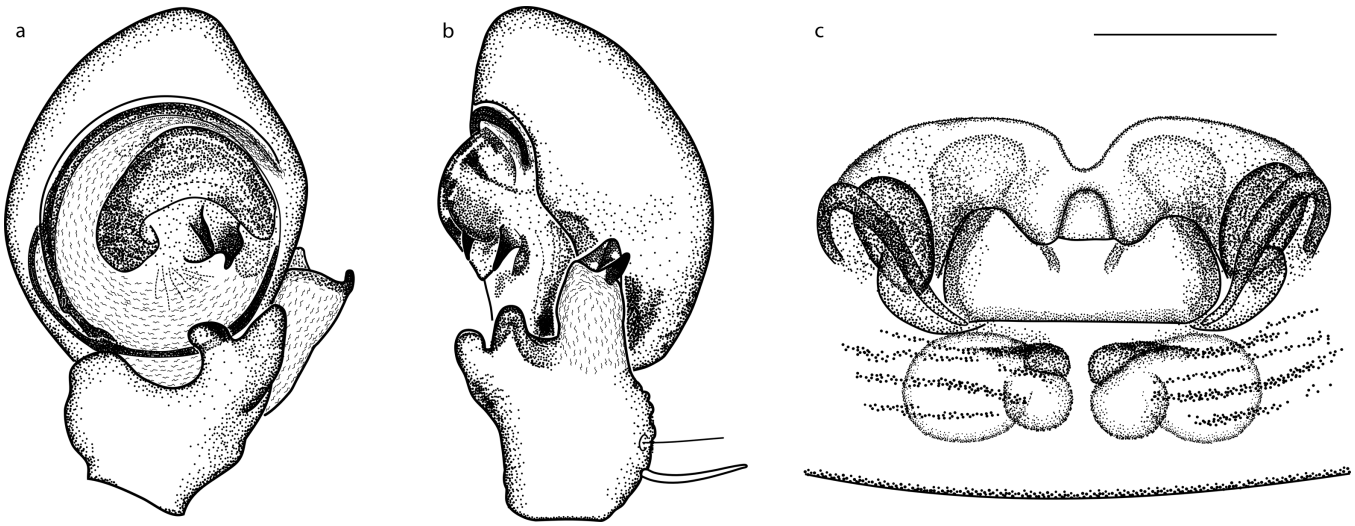

Fig. 3: *Ozyptila tenerifensis* Wunderlich, 1992: **a.** male palp in ventral view; **b.** in retrolateral view; **c.** epigyne in ventral view. Scale bars a, b: 0.2 mm, c: 0.13 mm

Diagnosis. The male is separated from male congeners by the mitten-shaped ventral apophysis and the broad whitish retrolateral apohysis of the palpal tibia. It differs from the morphologically similar *Ozyptila pauxilla* (Simon, 1870) distributed in the Western Mediterranean (World Spider Catalog 2017) by the straight and tooth-like process close to tip of the retrolateral apophysis, this process is relatively long and curved in *O. pauxilla*. Also the shape of the tegular apohysis is characteristic, terminating in two blackish tooth-like processes of which the medial one points towards the retrolateral apophysis. In *O. pauxilla* both these teeth point posteriad. Patella and tibia of legs I and II are blackish in males of *O. tenerifensis* while pale in *O. pauxilla*. The female differs from female congeners by the shape of the epigyne and its colouration. *O. tenerifensis* has a short, truncated hood, this structure is longer and rounded apically in *O. pauxilla*. The legs of females are clearly annulated with dark brown in *O. tenerifensis* in contrast to the uniformly light brown legs of *O. pauxilla*. The epigyne of the second Canarian *Ozyptila* species, *O. atlantica*, is with a forked hood according to illustration by Denis (1963), thus very different from the very short, truncated hood of *O. tenerifensis*. The two species are also separable by the shape of the clavate hairs at the centre of the opisthosoma. These hairs are relatively thicker distally in *O. atlantica* (length-to-width ratio (L/W) ≈ 2.1) than in *O. tenerifensis* (L/W ≈ 5.8), compare Figs 788 and 790 in Wunderlich (1992).

Description

Male

Measurements (n=2). TL: 2.64, 2.92; PL: 1.22, 1.31; PW: 1.23, 1.29.

Habitus. Habitus of live specimen as in Fig. 1. Prosoma black except for a yellow-brown spot at fovea, yellow-brown eye tubercles and a narrow, whitish rim along the lateral edges of the carapace. Coxae yellow-brown, femora black, patellae and tibia of legs I and II nearly black, those of legs III and IV less black or annulated. Metatarsi and tarsi yellow-brown. Abdomen brown with irregular black pattern enclosing a lanceolate

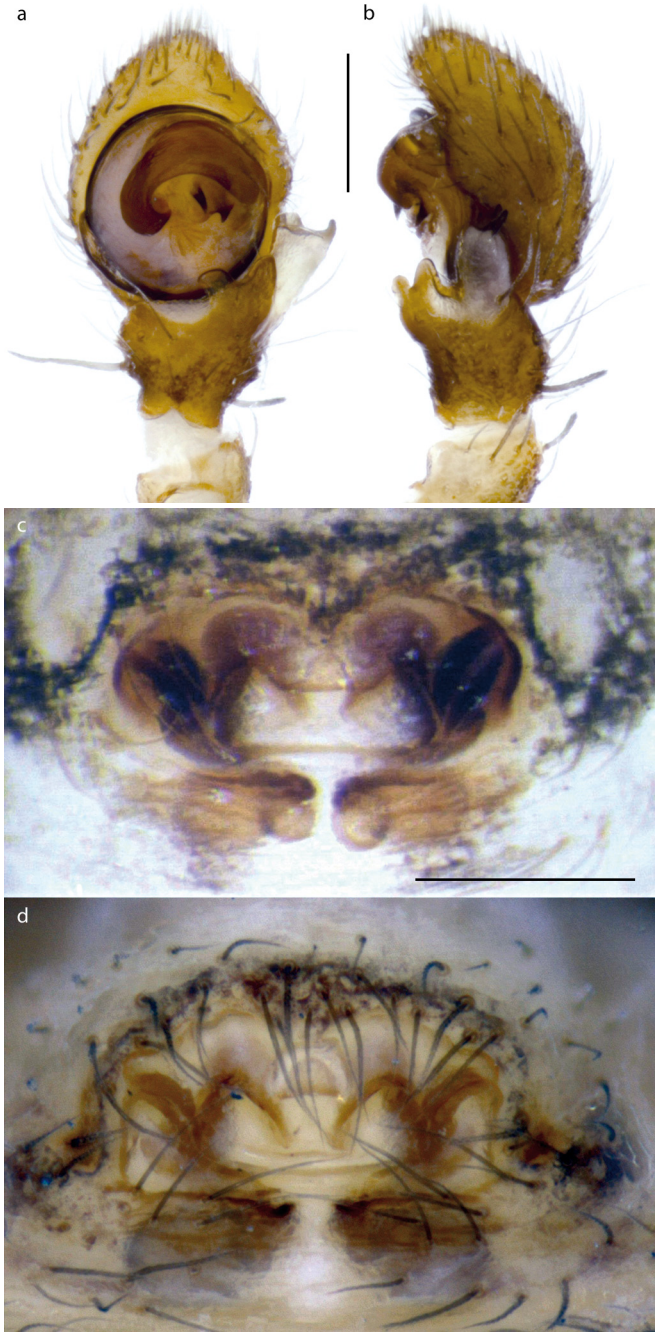

Fig. 4: *Ozyptila tenerifensis* Wunderlich, 1992, photographs: **a.** male palp in ventral view; **b.** same in retrolateral view; **c.** epigyne in ventral view, older female; **d.** same, freshly moulted female. Scale bars a-d: 0.2 mm

Fig. 5: Habitat of *Ozyptila tenerifensis* Wunderlich, 1992. Specimens were found in leaf litter of the fire tree in Canary pine forest at Las Raices, Tenerife.

cardiac mark. With small white dots along edges and at sides. Shape of prosoma and configuration of eyes are typical of *Ozyptila*. Legs short, stout. Leg spination as described for the female in Wunderlich (1992). Abdomen truncated anteriorly, broad posteriorly with wrinkled sides and rear. Carapace and dorsum of abdomen with dense cover of blunt or narrowly clavate setae, in older specimens most setae have fallen off. Male palp. Femur, patella and tibia with clavate hairs. Tibia with ventral and retrolateral tibial apophyses (Figs 3a, b; 4a, b). Ventral apophysis mitten-shaped, arising retrolaterad on segment and is broad with two rounded processes. Retrolateral apophysis broad, whitish, except for two small processes apically, one of which is tooth-like (black in one specimen, grey-brown in a second), the second process is a lightly sclerotized triangular plate. Basal tegular ridge smoothly rounded and without teeth. Tegulum with an acute tooth near the middle. A second hooked tooth with a broad base is situated more retrolaterally (Figs 3a, 4a). The points of the two teeth are oriented approximately 45° to each other when seen in ventral view. Cymbium egg-shaped in dorsal view, densely clothed with fine hairs, a few small spines of varying sizes are present along prolateral edge. Embolus filiform and curved along the rim of the cymbium. Apex of embolus comes to a very fine, nearly straight tip and is protected by a membranous structure.

Female

The description here is supplemental to the one provided by Wunderlich (1992).

Measurements (n=3) TL: 3.21-3.85, PL: 1.32-1.45, PW: 1.41-1.47.

Habitus. Habitus of live specimen as in Fig. 2. As male but paler with the black markings replaced by dark brown markings of a lesser extent. Legs more uniformly annulated than in male. Epigyne. The epigyne is illustrated in Fig. 3c and photos are presented in Figs 4c-d. The illustration is based on an older female collected at Pinar de Taucho (Fig. 4c). Rather indistinct transverse wrinkles are seen in posterior half. Hood short, broadly truncated. Epigynes varies in transparency and the structures of the vulva in the posterior part are difficult to discern in some specimens. An illustration of the vulva is available in Wunderlich (1992).

Habitat and phenology

Specimens of *Ozyptila tenerifensis* were found at the type locality of Las Raices, in leaf litter of the fire tree (*Myrica faya*) growing scattered in the understory of Canary pine (*Pinus canariensis*) forest (Fig. 5). The fire tree grows rather commonly on nitrogen-poor sites such as young lava flows and open-canopy forest ecosystems in the mesic fayal-brezal zone (500-1500 m) and the xeric pine forest zone (1000-2000 m). No *Ozyptila* specimens could be found in areas of the forest floor with litter consisting of pine needles only. Two subadult males collected in September both matured in October in captivity. Adult females have been found in September and one subadult collected in September matured in October in captivity. Wunderlich (1992) collected a female in a Barber trap operated between April and June. The maturity period probably extends from September to October with females persisting at least until April. However, more material needs to be collected before more detailed conclusions can be made on phenology.

Distribution

Endemic to Tenerife. Known only from two localities: Taucho (Adeje) 1300 m in the south and Las Raices (El Rosario) 1075 m in the north. The two localities are separated by approximately 45 km. Pine forests cover large expanses of land in the mountains of Tenerife and the species may not be as uncommon as present data suggests.

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