

Agelena tungchis (Araneae, Agelenidae), a new funnel-weaver from Taiwan

Jeng-Di Lee

Department of Geography,
King's College London,
Strand, London WC2R 2LS

Summary

A new species of *Agelena* was collected from the central mountain area of Taiwan and is described as *Agelena tungchis*. The spider weaves a funnel-web in the trees of evergreen forest. This is the third species of *Agelena* known from Taiwan.

Introduction

Some earlier studies of the spider fauna of the mountains on Taiwan were made by Brignoli (1974) and Yoshida (1977). Although Chang (1996), Okuma (1994), Ono (1992, 1993), and Tanikawa (1995) added some new discoveries, much more work is still needed in this habitat. Two *Agelena* species, *A. limbata* Thorell, 1897 and *A. opulenta* L. Koch, 1878, have been recorded in Taiwan (Li, 1964). The latter is common in lowland areas, but no specimens of the former were available for examination in this study. The only specimen of *A. limbata* in Taiwan recorded by Li (1964) has been lost, and the occurrence of the species in Taiwan has been doubted (Yaginuma, 1986). In this paper, the third species of *Agelena* from Taiwan is described, obtained from funnel-webs on the branches of an evergreen tree.

Both specimens are deposited in the National Museum of Natural Science (NMNS), Taiwan. All measurements are in mm.

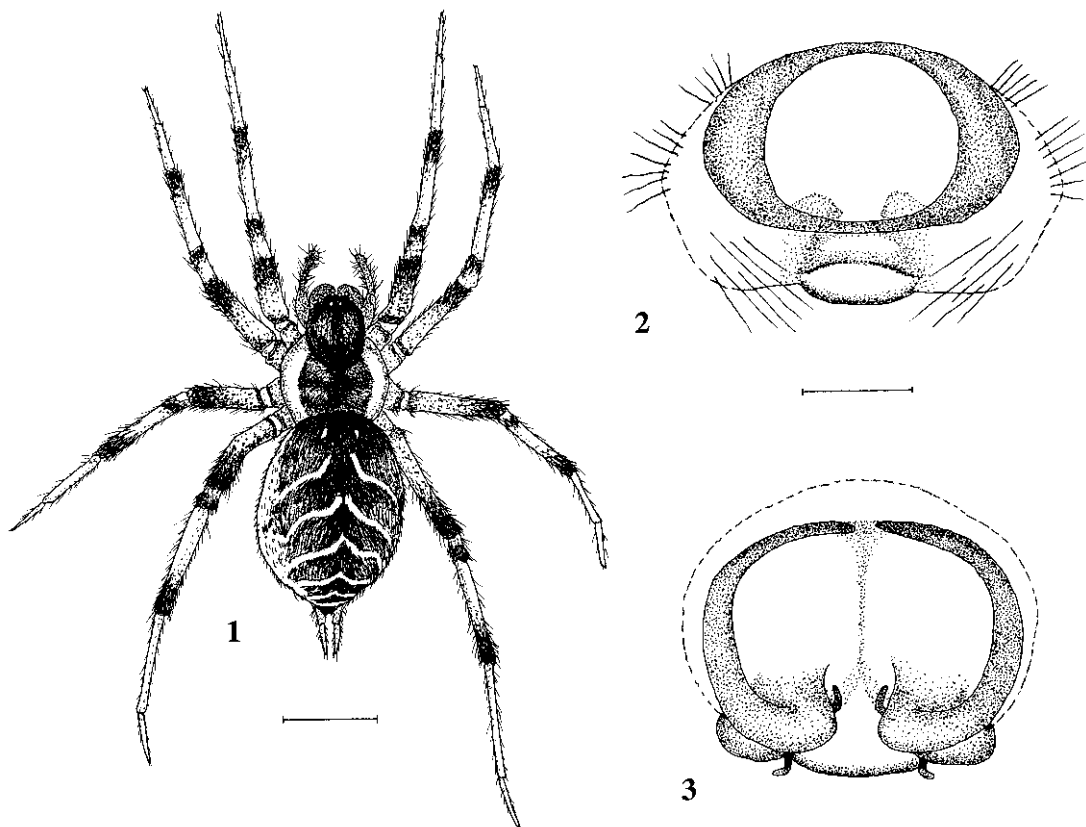
Agelena tungchis sp. n. (Figs. 1–3)

Types: Female holotype (NMNS-OTTO-00192) and one female paratype (NMNS-OTTO-00193) from Lanhuachih, Nantou County, central Taiwan, 600 m, leg. J. D. Lee, 20 August 1995.

Etymology: Derived from the Chinese for an arthropod living in evergreen forest.

Diagnosis: The female epigynum (Fig. 2) has a large, elliptical atrium, wider than long, that differs from that of the related species, *A. difficilis* Fox, 1936, *A. limbata*, *A. opulenta*, and *A. scopulata* Wang, 1991 (Chen & Zheng, 1989; Wang, 1991; Wang, 1997; Yaginuma, 1986). The posterior edge of the epigynal plate is broad. The copulatory bursae are relatively broad with narrow marginal ridges and narrow diverticula (Fig. 3). *A. tungchis*, with body length of 17 mm, is larger than the other species, c. 10–16 mm. The wide dark area in the cephalic region of *A. tungchis* (Fig. 1) is also distinctly different from that of *A. difficilis* and *A. scopulata*.

Female holotype: Total length 17.1. Cephalothorax length 6.5, width 4.8. Abdomen length 10.6, width 6.4. Length of legs I–IV: 19.2, 18.5, 18.1, 22.7. *Coloration* (Fig. 1): Cephalothorax yellow brownish with wide dark brownish stripe from front of cephalic region to posterior margin of thorax. Sternum brownish. Abdomen dark brownish with seven yellow “^” stripes, the first



Figs. 1–3: *Agelena tungchis* sp. n., female. 1 Dorsal view; 2 Epigynum, ventral view; 3 Ditto, dorsal view. Scale lines=5 mm (1), 0.5 mm (2, 3).

and second with a central gap; ventrally light yellowish with central dark brown area between epigastric furrow and spinnerets. Legs brownish, apical ends of tibiae blackish. Female palpus brownish. Spinnerets dark brownish, except posterior spinnerets light brownish. *Cephalothorax*: Longer than wide, cephalic region distinctly elevated. Both eye rows recurved, especially posterior row; all eyes equal in size except posterior medians smaller; median ocular rectangle slightly longer than wide. Thoracic region flat, with distinct fovea, 2 pairs of cervical grooves. Chelicerae moderately strong, with yellowish boss. Sternum almost circular, pointed behind, with white pubescence and hairs. Labium longer than wide, with distinct scopulae. *Abdomen*: Oval, longer than wide, narrow in front; clothed with pubescence. Posterior spinnerets twice as long as anteriors. *Epigynum* (Fig. 2): With large, elliptical atrium, without median septum at anterior margin of atrium; posterior edge of epigynal plate broad; in dorsal view (Fig. 3), rather broad copulatory bursae with narrow marginal ridges and narrow diverticula, connected to pair of spermathecae, to outside through atrium.

Male: Unknown.

Distribution: Known only from central Taiwan.

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