



The genus *Anahita* from Wuyi Mountains, Fujian, China, with description of one new species (Araneae: Ctenidae)

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The family Ctenidae is represented by 40 genera and 490 species in the world, distributed mainly in America, Africa and Asia. Sixty-three species have been recorded from Asia (Jäger 2012), however, only nine species in four genera (*Anahita* Karsch, 1879; *Ctenus* Walckenaer, 1805; *Leptoctenus* L. Koch, 1878 and *Sinoctenus* Marusik, Zhang & Omelko, 2012) have been reported from China (Platnick 2014). The genus *Anahita* was established by Karsch in 1879 for the type species *A. fauna* Karsch, 1879. Silva (2003) found that all species in the genus can be recognised by the absence of the retrolateral tibial apophysis and the presence of a hyaline area in the female epigynum. Jäger (2012) reviewed Asian *Anahita*, illustrated the type species according to the new materials, transferred four species from the genus *Ctenus* to *Anahita* and described one new species. Presently, this genus contains 27 species, among them five species are recorded from China (Platnick 2014): *A. fauna* Karsch, 1879; *A. maolan* Zhu, Chen & Song, 1999; *A. samplexa* Yin, Tang & Gong, 2000; *A. jianfengensis* Zhang, Hu & Han, 2011 and *A. jinsi* Jäger, 2012 (Jäger 2012; Yin et al. 2000; Zhang et al. 2011; Zhu et al. 1999).

When examining the specimens of the family Ctenidae collected from Wuyi Mountains, Fujian Province, we found two *Anahita* species, *A. jinsi* Jäger, 2012 and *A. wuyiensis* sp. nov. We present a detailed description and illustration for the new species.

Palps and epigynes were examined and drawn using a Leica M165C stereomicroscope equipped with a drawing tube. Photographs were taken using a Leica M205A stereomicroscope equipped with a DFC450 CCD camera. Carapace length was measured from the anterior margin to the rear margin of the carapace medially. Eye sizes were measured as the maximum diameter of the lens in dorsal or frontal view. The measurements of legs are shown as total length (femur, patella, tibia, metatarsus, tarsus). The epigyne was cleared in a warm solution of potassium hydroxide (KOH), transferred to 75% ethanol. All specimens are deposited in the Museum of Hebei University (MHBU), Baoding, China. Spination formula follows Jäger (2012).

The following abbreviations are used: ALE, anterior lateral eyes; AME, anterior median eyes; AME–ALE, distance between AME and ALE; AME–AME, distance between AMEs; C, conductor; CD, copulatory ducts; d, dorsal; DS, distal retrolateral spine; E, embolus; ET, epigynal teeth; FD, fertilisation duct; GA, glandular appendage; IS, intersegmental sclerite; MOA, median ocular area; p, prolateral; PLE, posterior lateral eyes; PME, posterior median eyes; PME–PLE, distance between PME and PLE; PME–PME, distance between PMEs; r, retrolateral; RTA, retrolateral tibial apophysis; SP, spermathecae; TA, tegular apophysis; v, ventral.

Anahita wuyiensis sp. nov.

(Figs 1–11)

Type material. Holotype ♂, CHINA, Fujian Province: Wuyi Mountains, Moshikeng (27°53'N, 117°57'E), 4 June 2013, C. Jin leg. Paratypes: 3♀, same data as holotype.

Etymology. The specific name is derived from the type locality; adjective.

Diagnosis. The species *A. wuyiensis* sp. nov. is similar to *A. jinsi*; both with a longitudinal band on the carapace and abdomen (Figs 1–2, 12–13), epigyne with curving glandular appendage and epigynal teeth (Figs 3–4, 14–15), and palp with long striped tegular apophysis (Figs 6, 17). *Anahita wuyiensis* sp. nov. can be distinguished from *A. jinsi* by the embolus arising at the five o'clock position, and the distally round tegular apophysis in the ventral view (Fig. 6) (embolus arising at three o'clock and distally little slant tegular apophysis from the ventral view in *A. jinsi*, Fig. 17); by distally

PME–PME 0.12, PME–PLE 0.05. MOA 0.42 long, front 0.34 wide, back 0.50 wide. Clypeal height 0.08. Labium yellowish, 0.27 long, 0.37 wide. Sternum yellowish, with sparse black setae in the edge; 1.42 long, 1.21 wide. Chelicerae yellowish, with indistinct longitudinal bands especially in proximity half; three promarginal teeth, middle tooth biggest; six retromarginal teeth, proximal three teeth large and distal three teeth very small. Measurements of legs: I 16.09 (4.12, 1.47, 4.30, 4.44, 1.76), II 13.24 (3.78, 1.12, 3.75, 3.25, 1.34), III 10.75 (3.04, 0.70, 2.46, 3.10, 1.45), IV 15.48 (4.20, 0.90, 3.71, 5.07, 1.60). Leg formula: 1423. Spination of palp and legs: palp 101, 2221, 101; femora I p021, d111, r111, II p001, d212, r1111, III p111, d111, r1111, IV p111, d111, r111; patellae I lost, II 101 III–IV lost; tibiae I lost, II p010, d111, r100, v22222, III–IV lost; metatarsi I lost, II p111, r111, v222, III–IV lost. Opisthosoma oval, dorsum with a pale brown longitudinal median band, sides dark brown, venter spotted. Palp (Figs 5–9) without RTA; embolus long, filiform, arising at five o'clock position, running around tegulum; tegular apophysis arising from central area of tegulum, gradually widened from base to tip in ventral view, distally with pointed dorsal rim in prolateral view; conductor partly hidden by tegular apophysis in ventral view; intersegmental membrane at tibia-tarsus joint with sclerite.

Female (paratypes). Total body length 7.00–7.58; one specimen measured, total length 7.38; prosoma 3.17 long, 2.47 wide; opisthosoma 4.23 long, 2.91 wide. Carapace pattern as in male (Fig. 1), but with the darker color. Diameters of eyes: AME 0.15, ALE 0.10, PME 0.22, PLE 0.23. Interdistances of eyes: AME–AME 0.12, AME–ALE 0.20, PME–PME 0.11, PME–PLE 0.15. MOA 0.52 long, front 0.35 wide, back 0.59 wide. Clypeal height 0.10. Chelicerae brown with three promarginal teeth, middle tooth biggest; eight retromarginal teeth, proximal three teeth large and distal five teeth very small. Labium 0.33 long, 0.41 wide. Sternum 1.36 long, 1.34 wide. Measurements of legs: I 9.38 (2.59, 1.89, 2.62, 1.63, 0.65), II 7.81 (2.36, 1.08, 2.13, 1.71, 0.53), III 7.74 (2.09, 1.06, 1.74, 2.06, 0.79), IV 11.02 (2.91, 1.11, 2.69, 3.23, 1.08). Leg formula: 4123. Spination of palp and legs: palp 11221, 1211, 111; femora I p021, d111, r011, II p012, d111, r111, III p112, d111, r112, IV p112, d111, r002; patellae I–II 000, III–IV 101; tibiae I v22222, II p010, v22222, III–IV p11, d111, r11, v222; metatarsi I–II v222, III p112, d010, r112, v222, IV p112, d010, r112, v21112. Copulatory openings situated in the front of the epigyne (Figs 3–4, 10–11). Copulatory ducts running a loop medially, following lateral lobes and leading to the posteriorly situated spermathecae from medio-ventral side. Glandular appendages with two bends. Epigynal teeth arising from the bottom of epigynum in ventral view.

Distribution. China (Fujian)

Anahita jinsi Jäger, 2012

(Figs 12–18)

Anahita jinsi Jäger, 2012: 11, f. 28–38.

Material examined. 3 males and 3 females, *Fujian Province*: Wuyi Mountains, Moshikeng (27°53'N, 117°57'E), 4 June 2013, C. Jin leg.

Diagnosis and description. See Jäger (2012).

Distribution. China (Sichuan, Fujian)

Remark. The specimens of *A. jinsi* Jäger, 2012 collected from Fujian (Wuyi Mountains) have the following characteristics: embolus arising at three o'clock; glandular appendages having at least three bends, and distally oval; copulatory ducts running a loop medially. These main characteristics are the same as the description of specimens of *A. jinsi* collected from Sichuan (Jäger 2012). However, the forepart of the glandular appendages appears at a level slightly different from the illustrations of *A. jinsi* offered by Jäger. We believe the specimens described by Jäger have these glandular appendages slanting dorsally, but we maintain the difference is due to intraspecific variability. So we identify these specimens from Fujian to be conspecific with *A. jinsi* Jäger, 2012.

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