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A new species of *Minagenia* Banks, 1934 (Hymenoptera, Pompilidae) from China, with the key to species

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Abstract

Minagenia fulvifemoralis Ji et Ma, **sp. nov.** (Yunnan) is described and figured. Key to five species of the genus *Minagenia* Banks is given.

Key words: spider wasps, *Minagenia*, new species, China

Introduction

The genus *Minagenia* (as subgenus of *Pseudagenia* Kohl, 1884) has been proposed for two Oriental species (type species *Pseudagenia (Minagenia) brevicornis* Banks, 1934, by original designation) (Banks 1934). The genus *Nannochilus* has been proposed by Banks (1944) for three Nearctic species. Later (Dreisbach 1953, Townes 1957) regarded *Minagenia* as distinct genus in tribe Minageniini and synonymized *Nannochilus* under this genus. Dreisbach (1953, 1955) described and keyed some species from the Nearctic and Neotropical Regions. Towns (1957) described and revised some species from the Nearctic Region, and provided key to the species. Tsuneki (1989) studied and keyed some new species from Taiwan, China. Currently the genus *Minagenia* includes 22 species, six of them occur in Oriental, eleven in Nearctic, five in Neotropical Regions (Provancher 1887, Banks 1934, 1944, 1946, Dreisbach 1953, 1955, Townes 1957, Tsuneki 1989). Four species of *Minagenia* was known from China (Tsuneki 1989).

The diagnosis for *Minagenia* Banks is as follows: second and third radiomedial veins convex and parallel, *Cu* of fore wing reaching apical margin; tarsal segment 5 smooth beneath; claws bifid; subgenital plate (hypopygium) laterally strongly compressed. The larva of *Minagenia* lives as an external parasite on the abdomen of an active spider, and the cocoon apparently is spun under bark or in similar places, probably wherever the spider succumbs (Towns 1957).

During our study of *Minagenia* from China, one new species was discovered. The new species is described and illustrated and the key to five Chinese species is given below.

Material and methods

The examined specimens are deposited in Yunnan Agricultural University, Kunming (YNAU). Olympus stereomicroscope (SZ Series, Japan) with an ocular micrometer has been used for the study. The abbreviations are as follows: A1, A2..., antennal segment 1, 2...; HL, head length; HW, head width; OCD, ocello-occipital distance; Od, anterior ocellar diameter; OOD, ocellocular distance; POD, postocellar distance.

Material examined: *Holotype*: ♀, CHINA: Yunnan: Puer City, Simao County; 20. ix. 2007, coll. Xueyan Shi. Paratypes: 1 ♀, CHINA: Yunnan: Puer City, Simao County, 14. ix. 2007, coll. Xueyan Shi; 1 ♀, Puer City, Simao County; 30. ix. 2007, coll. Xueyan Shi; 1 ♂, Xishuangbanna Prefecture, Mengla County, Yao Town, 8. v. 2005, coll. Peng Wang; 1 ♂, Dehong Prefecture, Yingjiang County, Tongbiguan Town, Sanhe Village, 2. v. 2013, coll. Xiaoling Ji.

Distribution. China (Yunnan).

Etymology. The specific name *fulvifemoralis* is derived from Latin *fulvus*, reddish-brown, and *femoralis*, femur, with reference to reddish-brown mid and hind femorae.

Key to species of *Minagenia* Banks from China

Females (unknown for *M. granulosa* Tsuneki and *M. alticola* Tsuneki)

1. Second and third radio-medial veins of fore wing parallel. Mandible apically reddish-brown, fore coxae apically pale yellowish-brown, scape ventrally with yellowish stripe, trochanters black, fore tibia brown, mid and hind femorae reddish-brown. Ratio POD: OOD: Od: OCD = 10: 5: 4: 6, POD longest obviously *M. fulvifemoralis* Ji et Ma, **sp. nov.**
- Second and third radio-medial veins of fore wing not parallel. Mandible apically and mid and hind femorae not reddish-brown, all trochanters and inner side of fore tibia lemon-yellow, or apical ring of fore trochanter and claws of ivory-white. Ratio of POD: OOD: Od: OCD different, OCD longest obviously 2
2. Upper frons flat, with very large ocelli; frons medially below strongly carinate. Propodeum without median furrow. Apex of fore coxa, mid and hind coxae, all trochanters lemon-yellow *M. taiwana* Tsuneki
- Upper frons gently, roundly elevated. Propodeum with median furrow. Coxae more or less brownish, apical ring of fore trochanter and claws ivory-white *M. pempuchiensis* Tsuneki

Males (unknown for *M. pempuchiensis* Tsuneki)

1. Fore claws asymmetrical, mid and hind claws symmetrical, mid claws bifid, hind claws simple. Lower frons medially carinate. A1 carinate beneath. 2
- All claws symmetrical. Lower frons medially not carinate, if carinate, carina very short and A1 not carinate beneath 3
2. Second and third radio-medial veins of fore wing parallel. Ratio POD: OOD: Od: OCD = 8: 5: 3: 4. Head without yellowish mark; tegula brown, fore coxa except apex black; mid femora and hind femora except apex reddish-brown. *M. fulvifemoralis* Ji et Ma, **sp. nov.**
- Second and third radio-medial veins of fore wing not parallel. Ratio POD: OOD: Od: OCD = 5: 6: 3: 8. Clypeus except medio-apical mark, lower inner orbits, basal half of mandible yellow; tegula, most part of fore coxae and mid coxae anterad beneath yellow; apical half or more of mid and hind femorae beneath rather yellowish. *M. taiwana* Tsuneki
3. Pronotum distinctly angulate posterad. Second and third radio-medial veins of fore wing not parallel. Basal half of mandible yellow, apical ring of fore coxa, apex of fore femur and fore tibia pale brown, other legs apically somewhat brownish *M. granulosa* Tsuneki
- Pronotum arcuate posterad. Second and third radio-medial veins of fore wing parallel. Head with yellowish mark, lower inner orbits, clypeus except medioapical brownish spot, most of mandible, parts of maxillary palpi pale yellow, fore coxa mostly pale yellow, coxae, femora and tibiae each anterad yellow *M. alticola* Tsuneki

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