**Tapinella phuketensis** n. sp. – a new species from Thailand  
(Insecta: Psocoptera)

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**Abstract:** A new species of *Tapinella* Enderlein, 1908 from Phuket Island, Thailand named *Tapinella phuketensis* n. sp. was described. It was found in a rain forest east of Karon Village at the west coast of the island. The species is unique in having blackish-brown wings with a white stripe in their middle part.

**Keywords:** biodiversity, equatorial, insects, rain forest, South-East Asia

**Introduction**

Faunistic and taxonomic works on the psocid fauna of Thailand are very scarce, especially compared to neighbouring regions like China and Indonesia (Thornton, 1984; Fasheng, 2002). Only 27 psocid species were known from this country (Lienhard, 2016). In this paper I describe a new species of *Tapinella* Enderlein, 1908 from the rain forests of the west coast of Phuket Island.

**Material and methods**

Psocoptera were collected from Phuket Island, Thailand by beating the vegetation on 26–27.02.2023. The specimens were stored in 96% ethanol. The photos (specimens in glycerin) were taken by a camera Canon PowerShot SX500IS through the eyepiece of a light microscope Optika. The type material was deposited at the National Museum of Natural History, Sofia, Bulgaria (NMNH). The species discussed in the paper were considered according to original descriptions. Measurements followed Lienhard (1998).

Measurements abbreviations (all in mm in the text): LC = body length; A = antenna length, P4: fourth segment of maxillary palp, F+tr = hind femur and trochanter length; T = hind tibia length; t1, t2, t3 = tarsomeres of hindtarsus (lengths measured from condyle to condyle), FW = forewing, HW = hindwing, D = anteroposterior diameter of the compound eye, IO = shortest distance between compound eyes.

**Results and discussion**

Family Pachytroctidae Enderlein, 1904

*Tapinella phuketensis* n. sp.

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Material examined: Holotype ♀, 27.02.2023, Thailand, Phuket Island, East of Karon Village, near the road to Yuan Phueng Monastery, rain forest, from bushes, N07 50 51.1 E98 18 10.4, 80 m a.s.l., NMNH – Sofia, Bulgaria; Additional material: 1 ♀, 26.02.2023, East of Karon Village, rain forest, from dry leaves on a bush near a pond, N07 51 26.7 E98 17 49.0, 32 m a.s.l., coll. D. Georgiev.
Type locality: Thailand, Phuket Island, West coast, East of Karon Village, near the road to Yuan Phueng Monastery, rain forest, from bushes, N07 50 51.1 E98 18 10.4, 80 m a.s.l.

Description (after 25 days in 96% ethanol):
Female: Colouration: Head creamy with some brown patches of pigment at its middle line and between the compound eyes. It has a thick dark brown lateral stripe at each side from the postclypeus to the antennal socket, continuing to the eye, the thorax and the abdomen. Viewed from above, the abdomen is also yellowish-creamy, with the lateral stripes on each side forming a spotted colouration on the lateral side of each tergite (Fig. 1: B, C, E). Apex of the abdomen darker. Viewed from above, the abdomen is also yellowish-creamy, with the lateral stripes on each side forming a spotted colouration on the lateral side of each tergite (Fig. 1: B, C, E). Apex of the abdomen darker. Ventrally it is pale yellowish. Antennae, palpi and legs yellowish-brown, darker at their distal parts. Compound eyes reddish-brown. Ocelli pale, surrounded by red-brown pigment at their inner side. Forewings and hind wings blackish-grey with a white transverse band at their middle area. Veins dark with an exception at the pale wing zones, where they are white (Fig. 1: A).

Morphology: Macropterous. Three ocelli present. Lacinia similar with this one of *T. curvata* Badonnel 1949 (see Lienhard, 2008), with smaller internal cusp and much longer lateral one, having a small cusp itself at its internal side (Fig. 1: D). Fore and hind wings slender with venation typical for the genus. Subgenital plate with T-sclerite as typical for the genus, having a short stem and arms. Epiproct rounded, paraprocts elongated. Both with long setae. The setae of the epiproct are more numerous and denser but a little shorter than these of the paraprocts.

Measurements (in mm): Holotype (female): LC = 1.2; F+tr = 0.35; T = 0.40; t1 = 0.21, t2 = 0.04, t3 = 0.04, FW = 0.88, HW = 0.70, A = 0.92, D = 0.10, IO = 0.23, IO/D = 2.30.

Male: Unknown.

Diagnosis: *Tapinella phuketensis* n. sp. is unique in the genus with its transverse white stripe on the both wings. Having patterned wings, the new species is similar with *T. baliensis* Thornton, 1984 known from Indonesia but in this species (described on the base of a specimen without genital parts) the white areas of the wings are two in the forewing (at the base and the apex) and one in the hind wing (at the base) (Thornton, 1984). *T. fusca* Badonnel 1977 described from Angola also has white areas at the base of its forewing located mainly along R and A1 (Badonnel, 1977). The lacinia of this species is similar with this one of *T. phuketensis* n. sp. but the whole animal is darker: blackish-brown to reddish-brown. In *T. nebulosa* Vaughan, Thornton & New, 1991 from Indonesia the white areas are located along the wing.
veins (Vaughan et al., 1991). The forewing colouration of *T. pictipenna* Thornton, Lee & Chui, 1972 (Indonesia) is opposite to this one of the new species: the wing is whitish with a dark stripe in its middle (Thornton at al., 1972).

Etymology: Named after the Phuket Island, Thailand, where the species was found.

Habitat: The species was collected from bushes in a rain forest.

Acknowledgements

I am grateful to Ramesh Gurusamy (Zoological Survey of India) for sending me the scanned descriptions of the Chinese *Tapinella* species.

References


