

A NEW SPECIES OF LEPTOPODIDAE FROM THAILAND (Hemiptera-Heteroptera)

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Patapius thaiensis Cobben, new species Fig. 1 A-E.

Description of the unique ♀ (all measurements in mm). Moderately sized, length 3.3, width 1.2; spinous; pale testaceous with brown markings.

Head: (fig. 1 A-C) Testaceous, compound eyes and lateral parts of vertex dark brown; greatest width 0.85, narrowest width between eyes 0.2; occipital area annularly constricted to fit in pronotal collar; clothed dorsally with short, decumbent silver hairs, 1 erect hair near notched inner margin of eye, gula with long pubescence. Eyes with a few short hairs, notch along dorsal inner side flavotestaceous. Ocellar tubercle not prominent, not stalked; ocelli placed obliquely, separated from each other as far as diameter of an ocellus; ocellar tubercle provided with 2 anterior spinulae; an elevated plate behind tubercle bears 2 stout spines. Fronto-clypeal region with 2 pairs of spines: 1 pair anteromedial to indentations of dorsal apodemes, the anterior pair is close to base of labrum. Gular region with 3 pairs of transparent spines extending to sides. Rostrum with 3 visible segments; 1st and 2nd segment of equal length, pale, each with 2 pairs of long spines; last segment $3.5 \times$ shorter, extending to the distal margin of the prosternum, dark fuscous. Antennae slender, with few very short hairs on segment 1 and 2; pale brown, last segment dark brown and with some pubescence; length of segments 1-4: 0.13, 0.16, 1.5, 0.28 mm.

Thorax: Pronotum rugulose, coarsely punctate, pale with brown design along lateral and subdistal margins; beset with scattered, small, whitish hairs and numerous spines; number and location of spines which have a wide base and a constricted apex follows from fig. 1B; length of pronotum 0.75, width of collar 0.4, width of front lobe 0.55, width of hind lobe (exclusive of spines) 0.62 mm; hind lobe higher and more convex than front lobe which bears a central pit; the transverse fissure between both lobes is bridged over by 5 longitudinal ribs. Scutellum $2 \times$ wider than long; dark brownish, distal part and 2 stout spines pale. Underside of thorax black, except for pronotal collar and acetabula; with semi-long, suberect white hairs; 1st acetabulum with 1 pale spine.

Wings: Shape, color-markings and distribution of spines on hemielytra follow from fig. 1C. Clavus and corium pitted with evenly spaced areolae (diameter of areola about 0.025 mm); clavus with about 20 of these pits, strip of corium bordering clavus with about 70, closed cell on middle of corium with about 50 and rest of exocorium with about 200 pits. Membrane with 4 cells, the 1st cell along median border extending half way length of 2nd cell. Hind wings fully developed, slightly fuscous.

Legs: Yellowish, last tarsal segment brown. Femur and tibia of raptorial fore leg subequal (0.8), each armed with 3 or 4 pairs of long, translucent, divergent spines, 1 row on the fore and

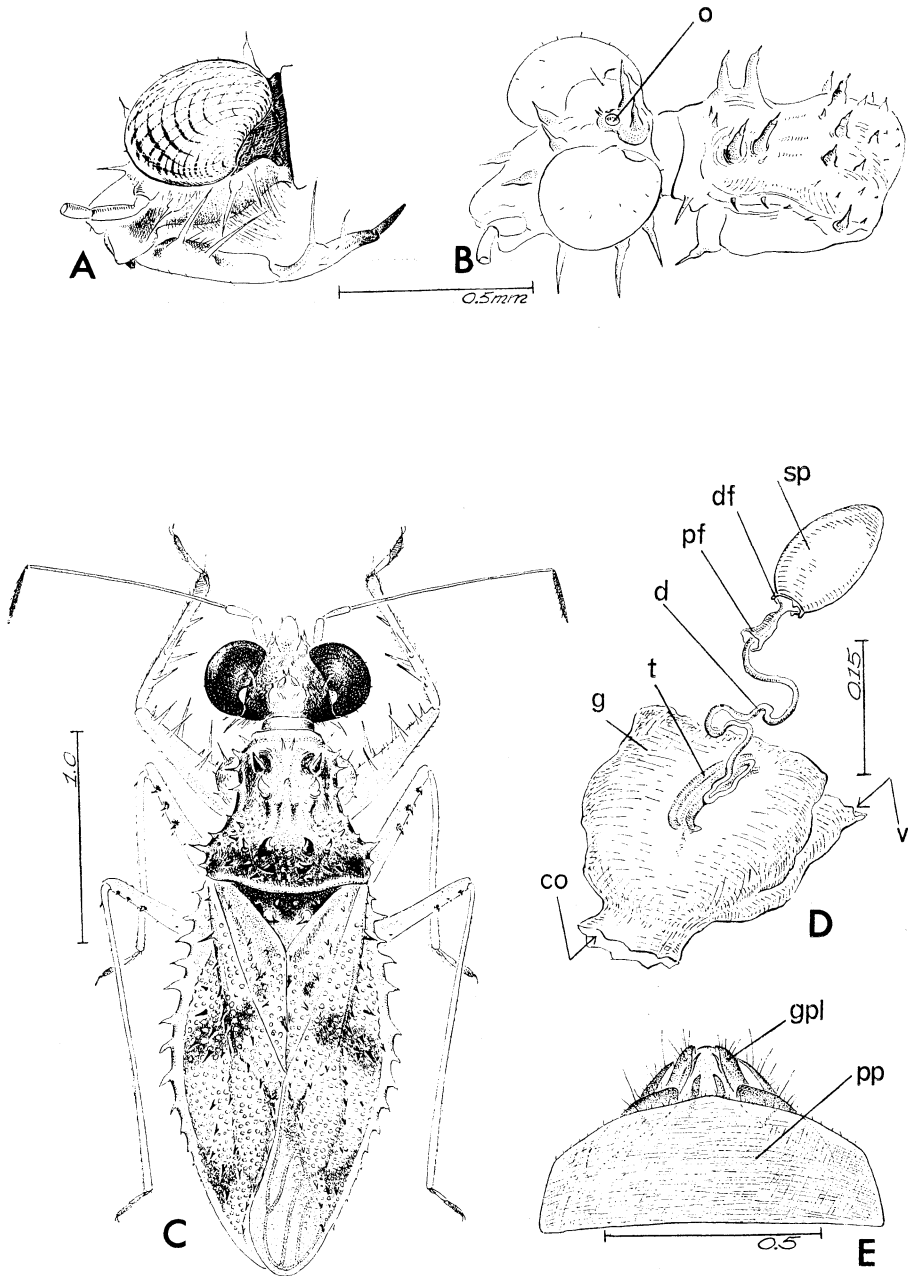


Fig. 1A-E. *Patapius thaiensis* n. sp., holotype ♀ : A, head, side view; B, head and prothorax, laterodorsal view; C, entire insect, dorsal; D, ectodermal genital tract (gynatrium has been lifted somewhat to show its ventral side); E, apex of abdomen, ventral. Abbreviations: co, common oviduct; d, duct of spermatheca; df, distal flange; g, gynatrium; gpl, gonoplac; o, ocellus; pf, proximal flange; pp, praegenital plate; sp, spermatheca; t, thickened strip; v, vagina.

aft side; underside of femur moreover with 3 small spines arising from dark spots and with scattered, erect, pale hairs; tibia apically with a comb; 3rd tarsal segment nearly as long as 2nd. Middle and hind legs tender, sparsely short haired, 3 pairs of small teeth with dark bases ventrodistally on femur.

Abdomen: 8 pairs of spiracles present situated somewhat below the center of each external laterotergite. 1st tergite pale with a sclerotized area on each side; 7th sternite, praegenital plate (fig. 1E), with convex hind margin; ovipositor very short, provided with gonoplags. Ovoid spermathecal bulb directed to dextral side of abdominal cavity, with 2 flanges and a simple duct; duct arises from a thickened strip on ventral wall of gynatrium (fig. 1D).

Holotype ♀ (BISHOP 7765), Thailand, Banna, Chawang near Nabon, 70 m, 4.IX.1958, J. L. Gressitt.

The type species of the genus *Patapius* is *spinosus* (Rossi 1790) which has a holo-mediterranean distribution, occurring eastward, as far as the southwestern part of Asia. It is recorded from the following countries and islands: Portugal, Spain, Southern France, Italy, Yugoslavia, Greece, Bulgaria, Turkey, Southern Russia, Armenia, Turkmen, Turkestan, Syria, Israel, Egypt, Libya, Tunisia, Algeria, Morocco; The Canaries, Majorca, Sardinia, Corsica, Sicily, Cyprus (Horváth 1911; Lindberg 1936, 1948; Hoberlandt Linnavuori 1960; Stichel 1960; Tamanini 1961; Josifov 1964; Ribes 1965). Furthermore, the species is the only representative of the Leptopodidae known to occur in the western hemisphere; this certainly points to a recent introduction. The first record is from California (Usinger 1941), and the species is rapidly increasing its new territory (Drake 1954).

The genus *Patapius* consists now of 5 species. Besides *P. thaiensis* and *P. spinosus* there are:

P. sentus Drake & Hoberlandt (1950), 1♂, 1♀ from Helwân, Egypt; 1 specimen, Ein Gedi, Israel (Linnavuori 1964).

P. africanus Dr. & Hob. (1951), 3♂, Dundo, Angola.

P. angolensis Dr. & Hob. (1951), 1♂, Dundo, Angola.

Drake & Hoberlandt (1951) created the subgenus *Pseudopatapius* to contain the 2 species from Angola. The eyes should represent the only subgeneric difference. In *Pseudopatapius* the eyes are large (distinctly longer than wide), bearing seta-like hairs. In the subgenus *Patapius* the eyes are smaller (only slightly longer than broad), and armed with stout, sharp spines. Based on these characters the new species from Thailand falls within *Pseudopatapius*. This eye character, however, varies in other taxa. It seems dubious, therefore, that the 2 subgenera can be maintained if other features do not support such a division. The pygophore of the ♂ *Patapius spinosus* has a differentiation which sets it apart from all other Leptopodidae studied so far by me. There is an auriculate projection in front of the cavity in the capsule through which the paramere operates. The projections on both upper sides of the capsule meet each other beneath the phallosome to form a subphallic bridge. This and other genital structures must be considered when ♂♂ of the other *Patapius* species become available for dissection.

Horváth (1911) discriminated between *Cryptoglana* (replaced in 1912 by *Patapius* because *Cryptoglana* is a nomen praeoccupatum in Polyzoa) and *Leptopus* on the basis of a combination of 3 characters. The first one; eyes spined or not, must now be canceled. Stichel (1960) stated in his key on the European Leptopodidae that *Leptopus* has very short, fine spines in contrast to the long-spined condition in *Patapius*. In fact, *Leptopus*

bears extremely short hairs instead of spines. The other 2 characteristics given by Horváth, namely: different length of 2 antennal segment and of the internal cell of the membrane, still hold good for separating both genera. Drake & Hoberlandt (1951) made an error when they stated that the 2nd visible segment of the rostrum of *Leptopus* is unarmed in contrast to *Patapius*. The species of both genera have 2 spines on each side of the segment in question.

The present known *Patapius* species can be identified by the following:

1. Eyes with spines..... 2
Eyes without spines 3
2. Length about 2 mm. Spines on eyes short. Outer margin of corium not distinctly serrate..... **P. sentus** Dr. & Hob.
Length 3-3.5 mm. Spines on eyes conspicuous. Outer margin of corium distinctly serrate **P. spinosus** (R.)
3. Length about 2 mm. 3rd antennal segment less than 3× as long as 4th segment **P. angolensis** Dr. & Hob.
Length about 3 mm. 3rd antennal segment more than 3× as long as 4th segment 4
4. 3rd antennal segment 3-4× longer than 4th segment. Outer margin of corium without spines..... **P. africanus** Dr. & Hob.
3rd antennal segment more than 5× longer than the 4th segment. Outer margin of corium with spines **P. thaiensis** Cb.

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