

Poecilimon soulion sp. nov., a new bush-cricket from Greece (Orthoptera: Phaneropterinae)

LUC WILLEMSE

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Abstract: *Poecilimon soulion* sp. nov. from Ipiros, Greece is described and illustrated.

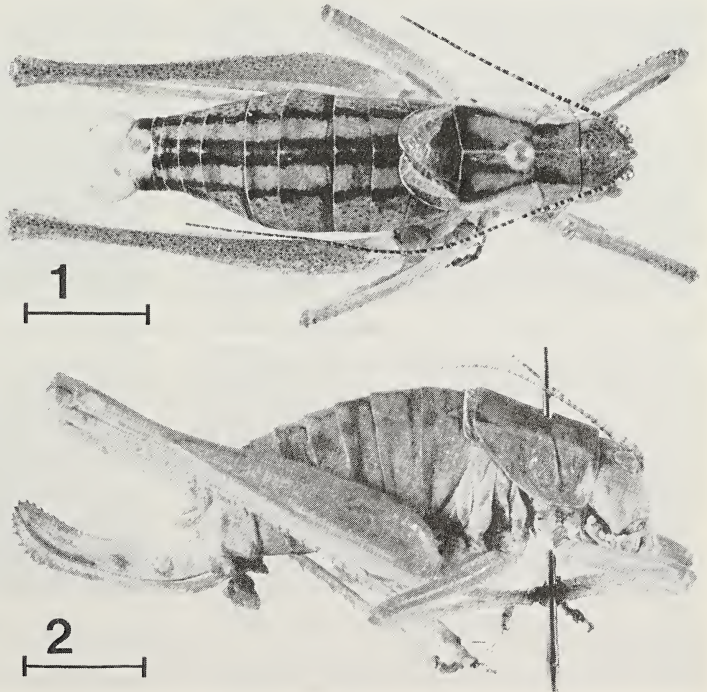
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Introduction

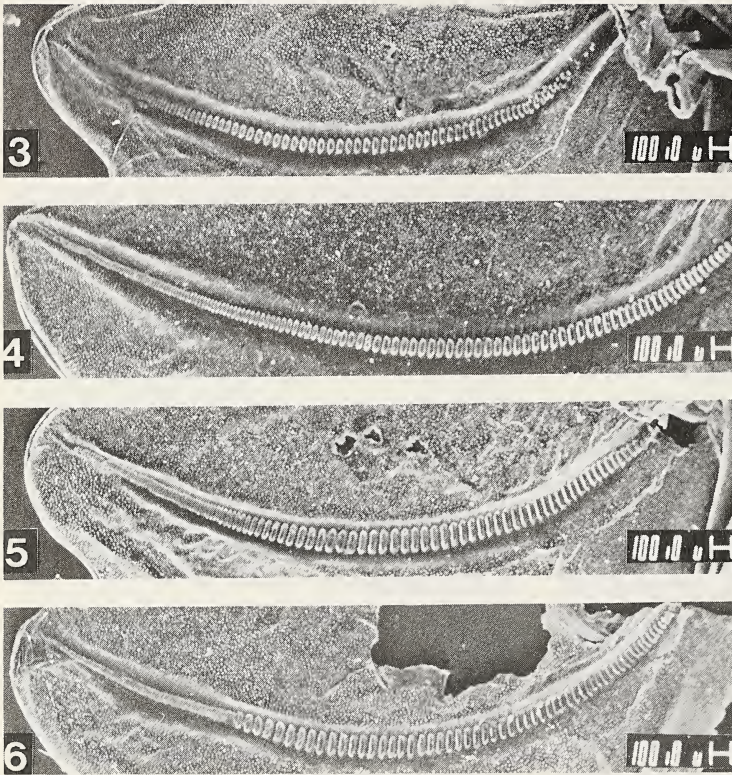
The genus *Poecilimon* Fischer has been revised by Ramme (1933) and Bei-Bienko (1954). Since the last revision, in which 72 species were placed under *Poecilimon*, many new species have been described, especially from south-eastern Europe and Turkey. Among the approximately 100 species up to now described in *Poecilimon*, some 35 are known to occur in Greece (Heller, 1984; In-

grisch & Pavicevic, 1985; Willemse, 1982, 1984, 1985a).

Many species of *Poecilimon* have only a relatively small distribution and therefore the finding of new species of *Poecilimon* can even in the thoroughly explored Greek mainland still be expected. New species of *Poecilimon* have been discovered recently in central Greece (Heller in prep.), on Mt.



Figs. 1-2. *Poecilimon soulion* sp. nov. 1, holotype, dorsal view; 2, allotype, lateral view. (Scale = 5.0 mm)



Figs. 3-6. Stridulatory file of the male left fore wing in *Poecilimon* spp., ventral view, distal end to the left; 3, *P. nobilis* Brunner von Wattenwyl, Mt. Mainalon (Arkadhia, Peloponnisos); 4, *P. pindos* Willemse, Mt. Timfi (Ioannina, Ipiros); 5, *P. gracilis* (Fieber), Mt. Pelister (Jugoslav Makedonija); 6, *P. soulion* sp. nov., Mt. Soulion (Thesprotia, Ipiros). (Scale = 0.1 mm)

Athos (Tilmans & Willemse in prep.) and finally on Mt. Soulion in north-western Greece. The description of the latter is dealt with in this article.

***Poecilimon soulion* sp. nov.**

(figs. 1-2, 6-8, 10, 14, 17)

Types: ♂ Holotype, ♀ allotype, 9 ♂, 1 ♀ paratypes, labelled: „HELLAS (Thesprotia) 1150-1500 m Mt. Soulion ab. Souli L. Willemse 13.vii.1986”. The type-material is deposited in the collection Willemse, except 1 ♂ paratype in the British Museum of Natural History, London and 1 ♂ paratype in the Instituut voor Taxonomische Zoölogie, Amsterdam.

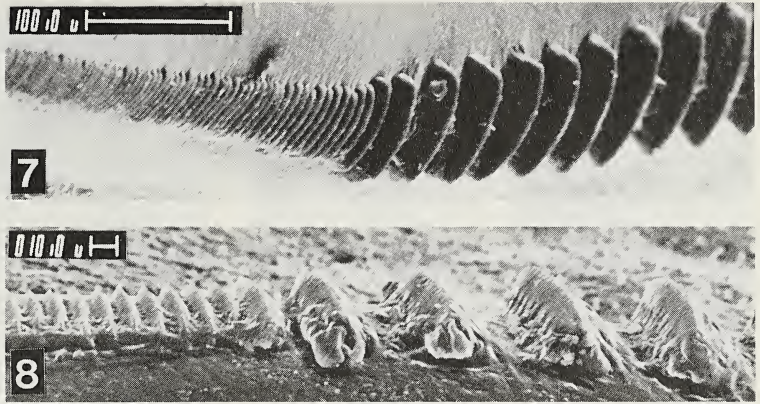
Description

Male (fig. 1) medium-sized, integument moderately shiny.

Head: fastigium of vertex sloping, margins

subparallel, almost as wide as greatest width of the scapus.

Thorax: pronotum with transverse sulcus cutting median line at middle of pronotal length; metazona widening posteriorly, moderately dome-shaped, slightly raised above the tegmina; hind margin slightly concave, ventral margin (fig. 10) straight or slightly convex in pro- and metazona. Elytra with basal third covered by pronotum, apical margin reaching middle of second tergite; stridulatory file of left elytron (figs. 6-8): in ventral view arcuate especially in proximal part; in profile straight in proximal and distal part, slightly concave in the middle, reaching hind margin of elytron; shortest distance between most proximal and most distal tooth 3.0-3.2 mm; greatest width of the file in the middle of the length, 0.15 mm; proximal three-fourth with 58-62 well developed large teeth, spacing increasing from 36 pro mm proximally to 18 pro mm distally, distal fourth with numerous much smaller and nar-



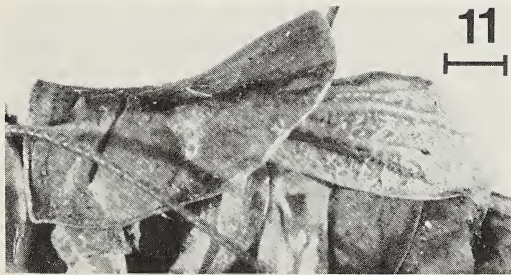
Figs. 7-8. Stridulatory file of *P. soulion* sp. nov., further enlargements of the transition in spacing and width of the teeth. (Scale fig. 7 = 0.1 mm; scale fig. 8 = 0.01 mm)

rower spaced teeth (ca 100 pro mm), transition in spacing and size of teeth rather abrupt (figs. 7-8). Hind femur with 2-9 spinules on inner and 1-5 on outer ventral carinae.

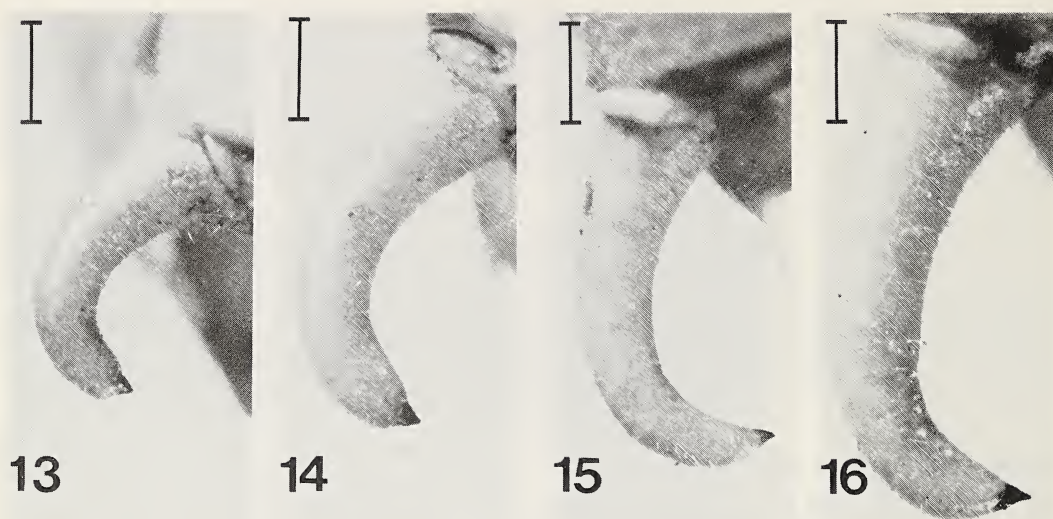
Abdomen: hind margins of tergites straight. Cercus (fig. 14) of moderate length, cylindrical, gradually tapering towards apex, curved inwardly, especially in apical third; apex blunt with a defined tooth. Subgenital plate reaching tip of cerci; hind margin slightly concave, postero-lateral edges protruding; ventral side without median keel.

Colouration: general colour yellowish green,

vertex, pronotal disc, abdominal tergites and dorsal part of femora finely rusty brown spotted. Antennae annulated with black and yellow. Vertex and pronotal disc with a yellow, clearly defined median line. Pronotal disc on either side and hind margin with more or less extensive blackish markings. Elytra yellowish, stridulatory area darker. Abdomen dorsally with two dark yellow bands bordered on either side with more or less distinctive black bands; cercus yellow, tip black.



Figs. 9-12. Male pronotum in lateral view in *Poecilimon* spp. 9, *P. nobilis* Brunner von Wattenwyl, Mt. Mainalon (Arkadhia, Peloponnisos); 10, *P. soulion* sp. nov., Mt. Soulion (Thesprotia, Ipiros); 11, *P. pindos* Willemse, Mt. Timfi (Ioannina, Ipiros); 12, *P. gracilis* (Fieber), Mt. Pelister (Yugoslav Makedonija). (Scale = 1.0 mm)



Figs. 13-16. Left male cercus in dorsal view in *Poecilimon* spp. 13, *P. nobilis* Brunner von Wattenwyl, Mt. Mainalon (Arkadhia, Peloponnisos); 14, *P. soulion* sp. nov., Mt. Soulion (Thesprotia, Ipiros); 15, *P. pindos* Willemse, Mt. Timfi (Ioannina, Ipiros); 16, *P. gracilis* (Fieber), Mt. Vernon (Florina, Makedhonia). (Scale = 0.5 mm)

Female: (fig. 2) as male. Pronotum more rounded, subcylindrical; metazona scarcely widened and not raised posteriorly. Elytra overlapping dorsally, visible, reaching fore

margin of first tergite. Basal fold of dorsal margin of lower ovipositor valve (fig. 17) lamelliform, bent downwards and forming with the gonangulum a shallow but narrow groove directed vertically.

Colouration: unicolorous green. Antennae annulated black and yellow. Pronotum at postero-lateral edges with a small dark brown streak.

Measurements (length in mm): body ♂ 21.6-24.0, ♀ 20.0-21.5; pronotum ♂ 4.9-5.4, ♀ 4.8-5.1; elytron ♂ 4.0-4.5, ♀ 1.3-1.6; hind femur ♂ 17.5-19.2, ♀ 17.0-18.4; ovipositor 9.9-10.1.

Distribution. Only known from the type locality, Mt. Soulion which together with Mt. Paramithias forms an isolated mountain range west of the Pindos. Mt. Soulion is situated more or less in the centre of the triangle formed by Igoumenitsa, Ioannina and Arta. The species was found on low herbaceous plants on rocky slopes between 1150 and 1500 m.

Differential diagnosis

P. soulion is well defined by the pronotum,



Fig. 17. Lateral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon soulion* sp. nov., Mt. Soulion (Thesprotia, Ipiros). (Scale = 0.5 mm)

fore wing and cercus in the male, the basal fold of the dorsal margin of the lower ovipositor valve and the spined hind femur, size, and colouration in both sexes. The most obvious character, however, is found in the stridulatory file.

The new species is readily distinguishable from other members of the genus and comes near *P. nobilis* Brunner von Wattenwyl, *P. pindos* Willemse and *P. gracilis* (Fieber). The stridulatory file of the latter three species doesn't show that sudden change from large and widely spaced teeth to small and very narrowly spaced teeth which is quite characteristic in *P. soulion* (compare figs. 3-6). Also the male pronotum and cercus of *P. nobilis*, *P. pindos* and *P. gracilis* are different from those in *P. soulion* (compare figs. 9-16). Other distinct features are found in the hind margin of the last male abdominal tergite which is straight in the new species and convex in *P. nobilis*, the colouration of the antennae which are annulated in *P. soulion* and unicolorous in *P. nobilis* and *P. pindos*. Noteworthy are also slight differences in colour pattern of the male abdomen and shape of the basal fold of the dorsal margin of the lower ovipositor valve.

Acknowledgements

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