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A NEW SPECIES OF THE GENUS *POECILIMON*
FISCHER, 1854 FROM KIKLADHES IN THE ISLAND
OF ANDROS (GREECE, AEGEAN ISLANDS)
(Orthoptera Phaneropteridae)

ABSTRACT - FONTANA P., 2004 - A new species of the genus *Poecilimon* Fischer, 1854 from Kikladhes in the island of Andros (Greece, Aegean Islands) (Orthoptera Phaneropteridae).

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Poecilimon klausgerbardi n. sp. from the Greek Island of Andros, in the Kikladhes Islands is described. The new species is clearly related to *Poecilimon hamatus* Brunner von Wattenwyl, 1878 and *Poecilimon paros* Heller & Reinhold, 1992 but can easily be identified by male cerci and subgenital plate shape; its bioacoustics is unfortunately unknown.

KEY WORDS - *Poecilimon klausgerbardi* n. sp., *Poecilimon hamatus* group, Greece, Kikladhes Islands, morphology.

RIASSUNTO - Fontana P., 2004 - Una nuova specie del genere *Poecilimon* Fischer, 1854 dall'Isola di Andros nelle Cicladi (Grecia, Isole Egee) (Orthoptera Phaneropteridae).

È descritto *Poecilimon klausgerbardi* n. sp. proveniente dall'isola di Andros, nell'arcipelago delle Cicladi in Grecia. La nuova specie è affine a *Poecilimon hamatus* Brunner von Wattenwyl, 1878 e *Poecilimon paros* Heller & Reinhold, 1992 ma può essere facilmente distinta per la peculiare forma dei cerci e della lamina sottogenitale del maschio; la sua bioacustica resta finora sconosciuta.

PAROLE CHIAVE - *Poecilimon klausgerbardi* n. sp., gruppo del *Poecilimon hamatus*, Grecia, Isole Cicladi, morfologia.

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INTRODUCTION

Among a lot of Orthoptera obtained during an entomological fair, I found a couple of *Poecilimon* Fischer, 1854 from the Greek Island of Andros, in the Kikladhes Islands (Fig. 1). No *Poecilimon* species was known up to date from this island (WILLEMSE, 1984) except *P. aegaeus* (LEHMANN, 1998). The specimens from Andros are clearly related to *Poecilimon hamatus* Brunner von Wattenwyl, 1878 as well to *Poecilimon paros* Heller & Reinhold, 1992 that has been recently described from the Greek Island of Paros, in the Kikladhes Islands too. The morphological features of Andros island specimens are so peculiar that they cannot be assigned to the previous species and must be described as a new one. Unfortunately no information on the bioacoustics of the new species is available.

DISCUSSION

Poecilimon hamatus, *P. paros* and the new species from the island of Andros must be grouped according to their general features and in particular for the male cerci strongly bifurcate (Figs 5-8). The only other species with strongly bifurcate cerci in the genus *Poecilimon* Fischer, 1854 are *Poecilimon cervus* Karabag, 1950 and the related *P. demirsoyi* Sevgili 2001; both species cannot be included in the *P. hamatus* group for the presence of a row of teeth on the upper margin of the apical branches of male cerci, as illustrated by SEVGILI (2001). *P. cervus* and *demirsoyi* are distributed in North-east Turkey (BEY-BIENKO, 1954, SEVGILI 2001). I examined one specimen of *P. cervus* from the village of Bolu, Dorukhan region, Turkey (06.07.1968, leg. Brignoli, 1 male, coll. P. Fontana).

Poecilimon hamatus Brunner von Wattenwyl, 1878

Type locality: Greece, Rhodes.

Distribution: known from Western Anatolia (Turkey, Izmir and Aydin district) and some adjacent Greek Aegean islands (WILLEMSE, 1984; HELLER & REINHOLD, 1992, CIPLAK et al., 1993).

Examined material: GREECE, Rhodes, Lindos, 20.IV.1984, 1 male

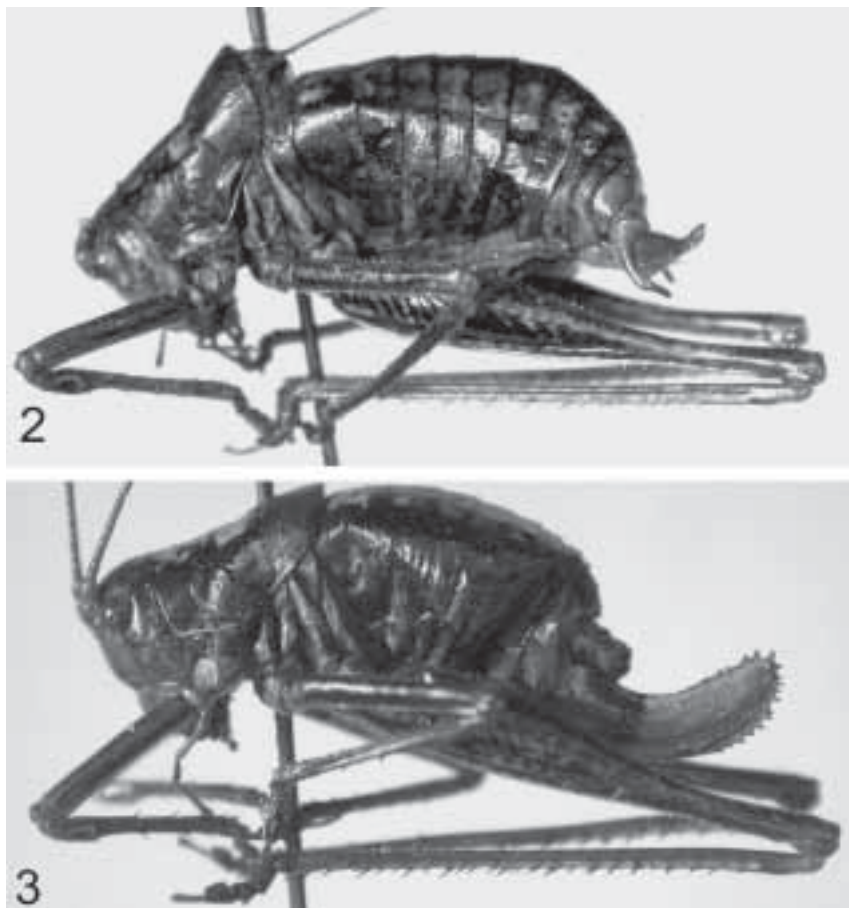


Fig. 1. Map of the main Aegean Islands, with the localities referring to the listed material. The type locality of *P. klausgerbardi* n. sp. is coloured in grey.

and 1 female, leg. A. Stumpner, coll. K-G- Heller; TURKEY, Efes-Martyemana, vill. Aydin, 700 m, VII.1973, 2 males and 2 females, leg. M. & G. Osella, coll. P. Fontana.

Bioacoustics: the calling song consists of extremely short echemes with usually one or very few syllables (HELLER & REINHOLD, 1992).

Poecilimon hamatus is distributed in Greek Aegean Islands along western Turkish coast and in western Turkey. On the basis of the examined material some little morphological differences can be observed in male cerci shape of different localities (Figs. 5, 6, 9, 10); on the other hand bioacoustics data confirm the identity of Rhodes and Turkey population as stated by Heller (pers. comm., 2003): *For differences within P. hamatus I see no indication from the sounds. I have records from differ-*



Figg. 2-3. *P. klausgerbardi* n. sp. Male *holotype* and female *allotype*, Greece, Kikladhes, island of Andros, Apikia, 800 m, 30.5.1973. Photos P. Fontana.

ent Turkish localities without such obvious differences as seen in P. paros and similar to records from Rhodes.

Poecilimon paros Heller & Reinhold, 1992

Type locality: Greece, island of Paros.

Distribution: only known from the islands of Paros and Naxos, in the Kikladhes (HELLER & REINHOLD, 1992).

Examined material: GREECE, Kikladhes, island of Paros, Ag. Ilies-Pantes, 500-600 m, above the village of Lefkes, 17.V. 1991, 1 male paratype and 1 female paratype, leg. K. Reinhold, coll. K.-G. Heller.

Bioacoustics: The calling song is the most peculiar character of *P. paros* in comparison to *P. hamatus*; it consists of short echemes repeated at intervals of 3-5 s and composed by 9-14 syllables, with increasing intensity (HELLER & REINHOLD, 1992). The main morphological character is given by male cerci shape (Fig. 7, 11)

Poecilimon klausgerhardi n. sp.

Type locality: Greece, Kikladhes, island of Andros, Apikia, 800 m.

Distribution: Greece, Kikladhes, island of Andros, Apikia.

Examined material: GREECE, Kikladhes, island of Andros, Apikia, 800 m, 30.5.1973, 1 male (*holotype*) and 1 female (*allotype*), coll. P. Fontana.

Description: Male (Fig. 2) medium sized (Tab. 1), with a peculiar dorsal pattern, as in many specimens of *P. hamatus* and *P. paros*: abdominal tergites with two yellowish subrectangular spots, forming two dorso-lateral light stripes along abdomen dorsum; yellowish spots are also present on pronotum discus and on tegminawhich strongly shortened (Fig. 13). Head: vertex blackish, face, metazona, cerci and subgenital plate brown-reddish. Legs reddish with black pattern, particularly evident on outer side of hind femora (Fig. 2); fastigium produced anteriorly, a little narrower than second antennal segment, from above with a longitudinal rugose impression.

Thorax: pronotum with V-shaped transversal sulcus just behind the middle; metazona scarcely raised (Fig. 13). Tagmina mostly covered by pronotum.

Abdomen: hind margin of tergites straight; supraanal plate semicircular. Cerci strongly bifurcate (Figs. 4, 8, 15). Apical inner branch (fig. 4) with flattened, lightly serrated blackish apex; apical branch very short, consisting of a stout, blackish tooth; inner branch forming with the apical one, in a dorsal view, about a 60° angle (Fig. 8). Apical branch strongly upcurved (Fig. 12). Subgenital plate upcurved and markedly incised (Fig. 16).

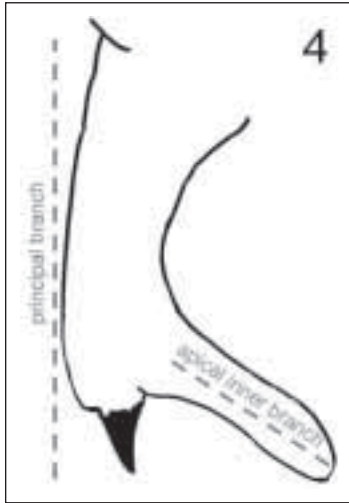


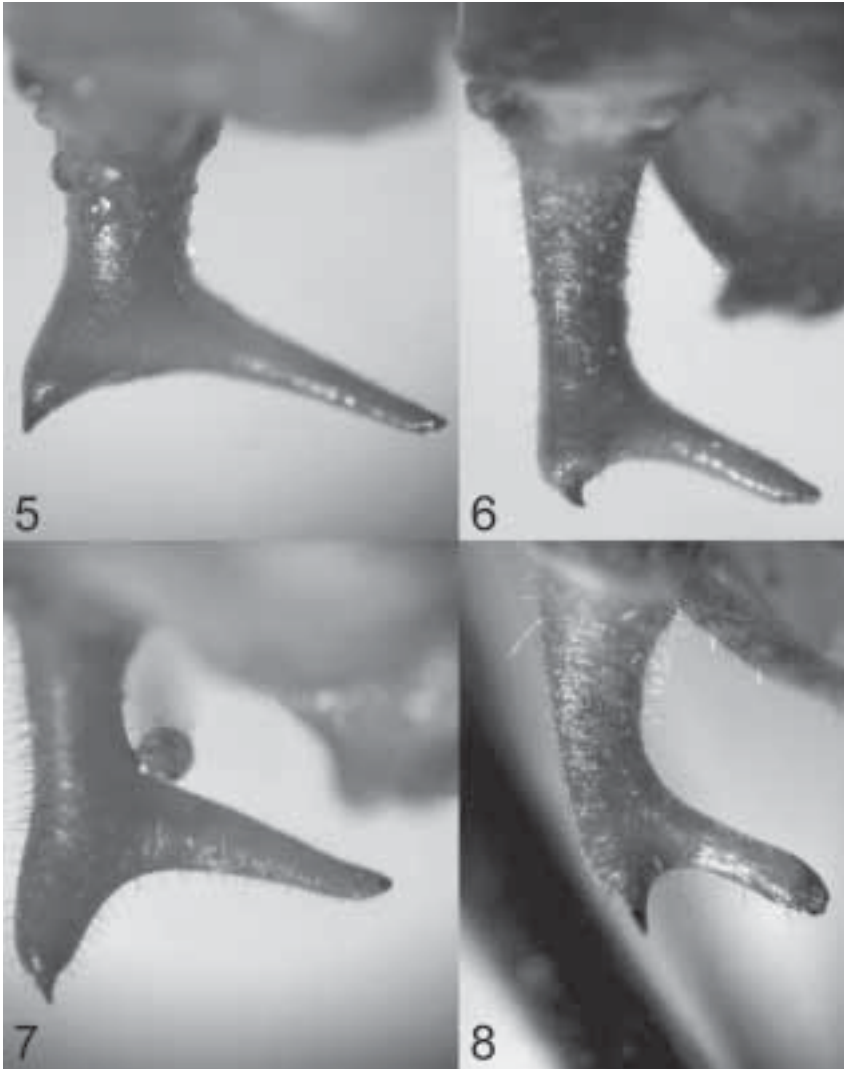
Fig. 4. *P. klausgerhardi* n. sp.. Male *holotype* cercus with indications of main portions; Greece, Kikladhes, island of Andros, Apikia, 800 m, 30.5.1973. Drawing P. Fontana.

Female (Fig. 3) with general appearance, colour pattern and size (Tab. 1) as in the male. Tegmina completely concealed under pronotum (Fig. 14). Subgenital plate subtriangular, with rounded apex (Fig. 17). Cerci conical. Ovipositor more upcurved and relatively shorter than in *P. hamatus* and *P. paros* and with a peculiar colour pattern: basal part reddish and apical part yellowish, separated by a narrow blackish transversal stripe (Fig. 18). This pattern can be observed in *P. hamatus* and *P. paros* too.

measures	male	female
Total length (from vertex to hind femur apex)	18,81	19,89
Pronotum length	4,59	4,89
Pronotum maximum height	2,83	2,60
Tegmina length (visible portion)	1,07	–
Hind femur length	12,54	13,00
Length of male cerci principal branch	2,04	–
Length of male cerci apical inner branch	0,84	–
Ovipositor length (from subgen. plate end to apex)	–	6,42

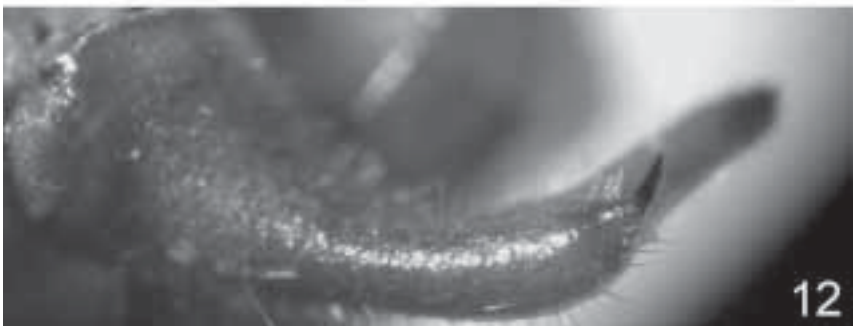
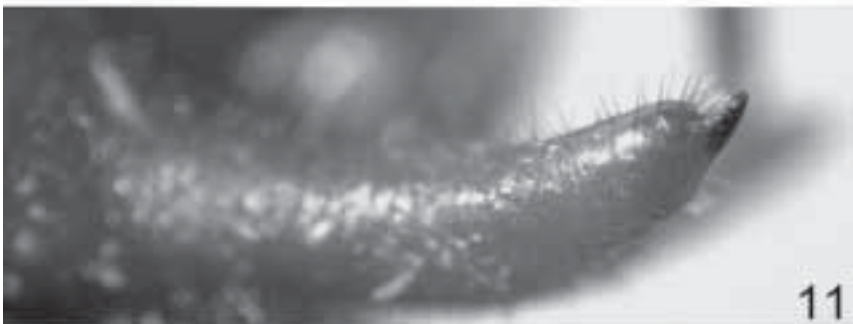
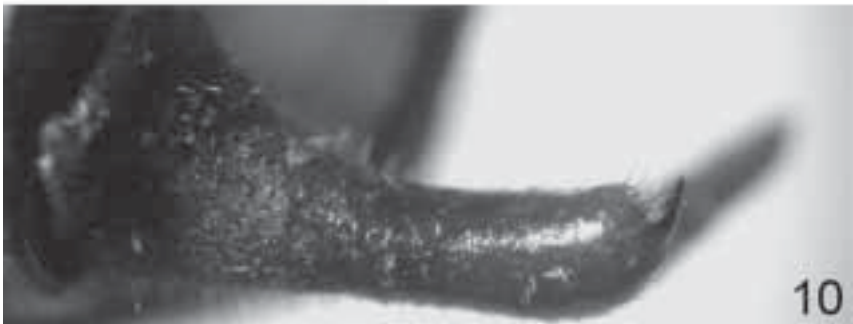
Tab. 1 – Main measures (in mm) of *Poecilimon klausgerhardi* n. sp.

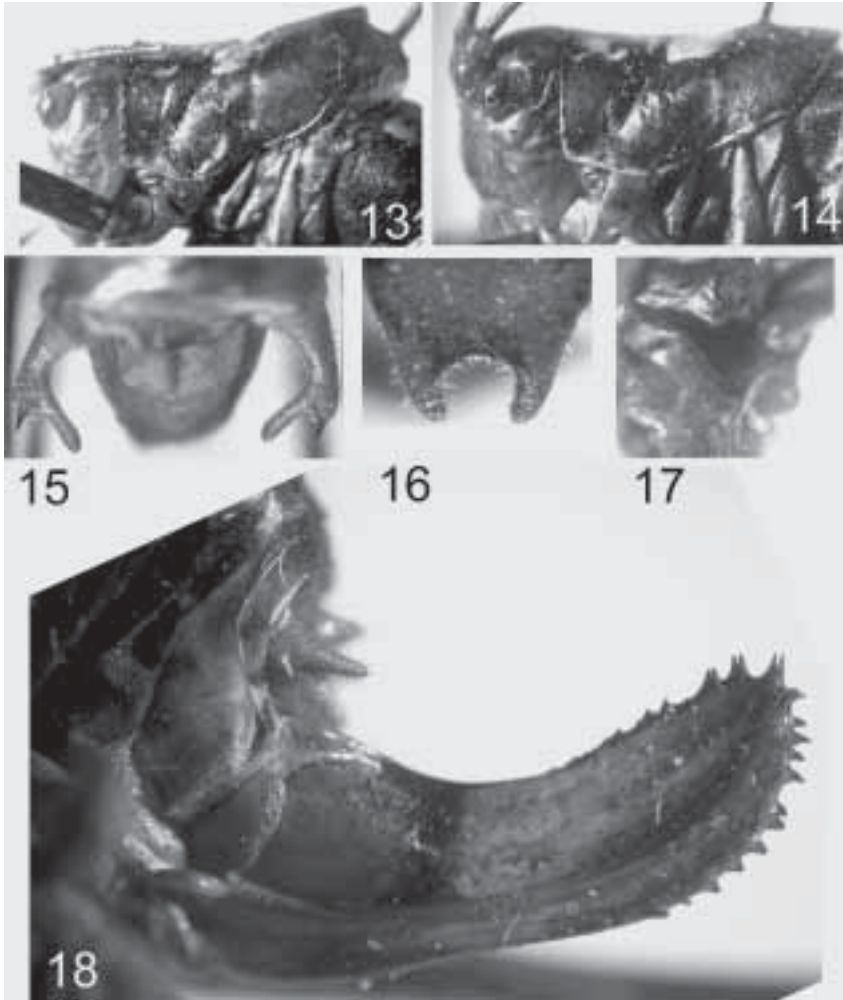
Etymology: the new species is named after the dear colleague and friend Klaus-Gerhard Heller (Magdeburg, Germany), who often helped



Figg. 5-8. Male right cercus in dorsal view. 5: *P. hamatus*, Greece, Rhodes, Lindos, 20.IV.1984; 6: *P. hamatus*, Turkey, Efes-Martyemana, vill. Aydin, 700 m, VII.1973; 7: *P. paros*, Greece, Kikladhes, island of Paros, Ag. Ilies-Pantes, 500-600 m, above the village of Lefkes, 17.V. 1991; 8: *P. klausgerhardi* n. sp.. Greece, Kikladhes, island of Andros, Apikia, 800 m, 30.5.1973. Photos P. Fontana.

me providing literature, material and useful advices and in particular loaned me type material of *P. paros* and topotypical specimens of *P. hamatus*.





Figg. 13-18. *P. klausgerbardi* n. sp.. Type material main morphological characters: Greece, Kikladhes, island of Andros, Apikia, 800 m, 30.5.1973. 13: Male *holotype* pronotum left lateral view; 14: female *allotype* pronotum left lateral view; 15: male *holotype* abdomen apex dorsal view; 16: male *holotype* subgenitalplate from posterior view; 17: female *allotype* subgenitalplate from ventral view; 18: ovipositor from left lateral view. Photos P. Fontana.

Figg. 9-12. Male right cercus in lateral view. 9: *P. hamatus*, Greece, Rhodes, Lindos, 20.IV.1984; 10: *P. hamatus*, Turkey, Efes-Martyemana, vill. Aydin, 700 m, VII.1973; 11: *P. paros*, Greece, Kikladhes, island of Paros, Ag. Ilios-Pantes, 500-600 m, above the village of Lefkes, 17.V. 1991; 12: *P. klausgerbardi* n. sp.. Greece, Kikladhes, island of Andros, Apikia, 800 m, 30.5.1973. Photos P. Fontana.

Differential diagnosis: *P. klausgerhardi* may be easily identified within the genus *Poecilimon* and in particular from the *P. hamatus* group taxa for the peculiar shape of male cerci and subgenital plate. The taxonomical value of the completely concealed tegmina and markedly upcurved ovipositor in the female must be supported by the examination of further specimens.

Distribution: the new species is known only for the type locality.

Bioacoustics: The song of the new species is up to date unknown.

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