

New records of *Pholidoptera* Wesmael from Greece (Orthopteroidea, Decticinae)

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ABSTRACT

Two *Pholidoptera* species were known from Greece: *femorata* (Fieber) and *cavallae* Kaltenbach. To these are added: *griseoptera* (De Geer), *macedonica* Ramme, *stankoi* Karaman and *lucasi* sp. n. A survey of the distribution of all species in Greece is given.

INTRODUCTION

Up to now, two *Pholidoptera* species were recorded from Greece: *femorata* (Fieber) and *cavallae* Kaltenbach. On account of recently collected material, another four species can be added to the Greek fauna: *griseoptera* (De Geer), *macedonica* Ramme, *stankoi* Karaman and *lucasi* sp. n. Still more species of the genus can be expected to occur in Greece, especially in its northern continental part.

Unless otherwise stated, the material studied was collected by the present author and his family and has been deposited in his collection. The localities listed under the species are numbered (in parentheses) as indicated on the distribution maps.

I acknowledge gratefully the help of Dr. A. Kaltenbach, Vienna, in studying the new species and for giving some additional information.

1. *Pholidoptera griseoptera* (De Geer, 1773) (Map 1)

Material studied: Vernon Mts., (1) 4 km E. of Pissoderion, 1600-1700 m, 26. VII. (3 ♂) & (2) 6 km SW. of Drosopigi, 1200 m, 25. VII. (4 ♂); Vermion Mts., Naoussa, (3) refuge "Tria Pigadia", 1350 m, 10. VIII. (1 ♂, 1 ♀) (all 1972).

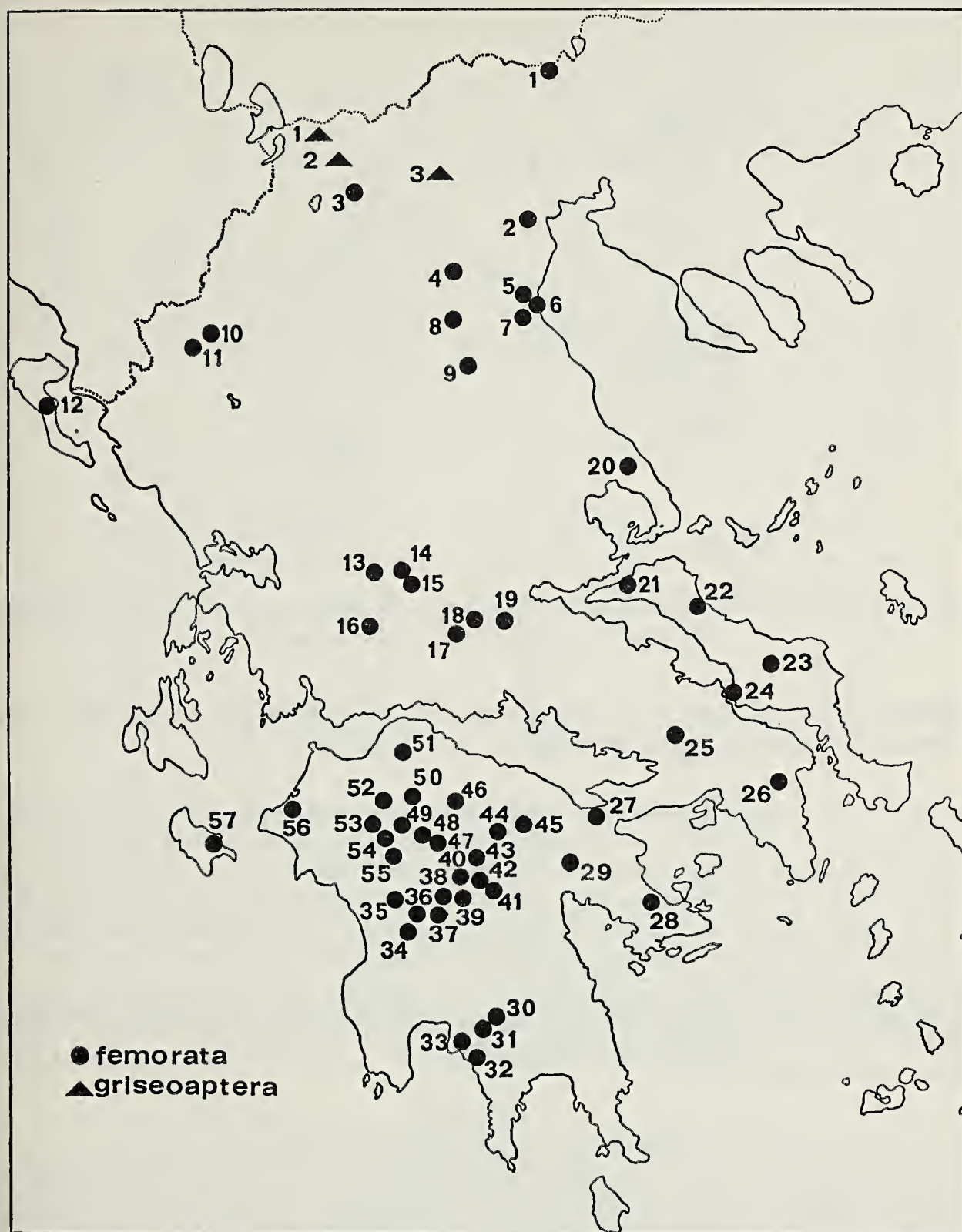
Morphology, colouration and habitat of the present material is similar to that from outside of Greece.

New to the Greek fauna.

2. *Pholidoptera femorata* (Fieber, 1853) (Map 1)

Previous records: (12) Kerkyra (= Corfu) (Brunner v. W. 1882: 343); (23) Steni (Werner 1937b: 110); (24) Chalkis (Werner 1937a: 148 & 1938: 169); (26) Moni Penteli (Werner 1927: 428); (27) Korinthos (Werner 1933: 407); (29) Mykene (Ebner 1912: 109; Werner 1937a: 148); (31) Taygetos (Brunner v. W. 1882: 343); (32) Xechori (Werner 1937a: 148); (51) Mt. Panachaikon (= Voidea) (Werner 1929: 482); (57) Zakynthos (= Zante) (Ramme 1939: 102).

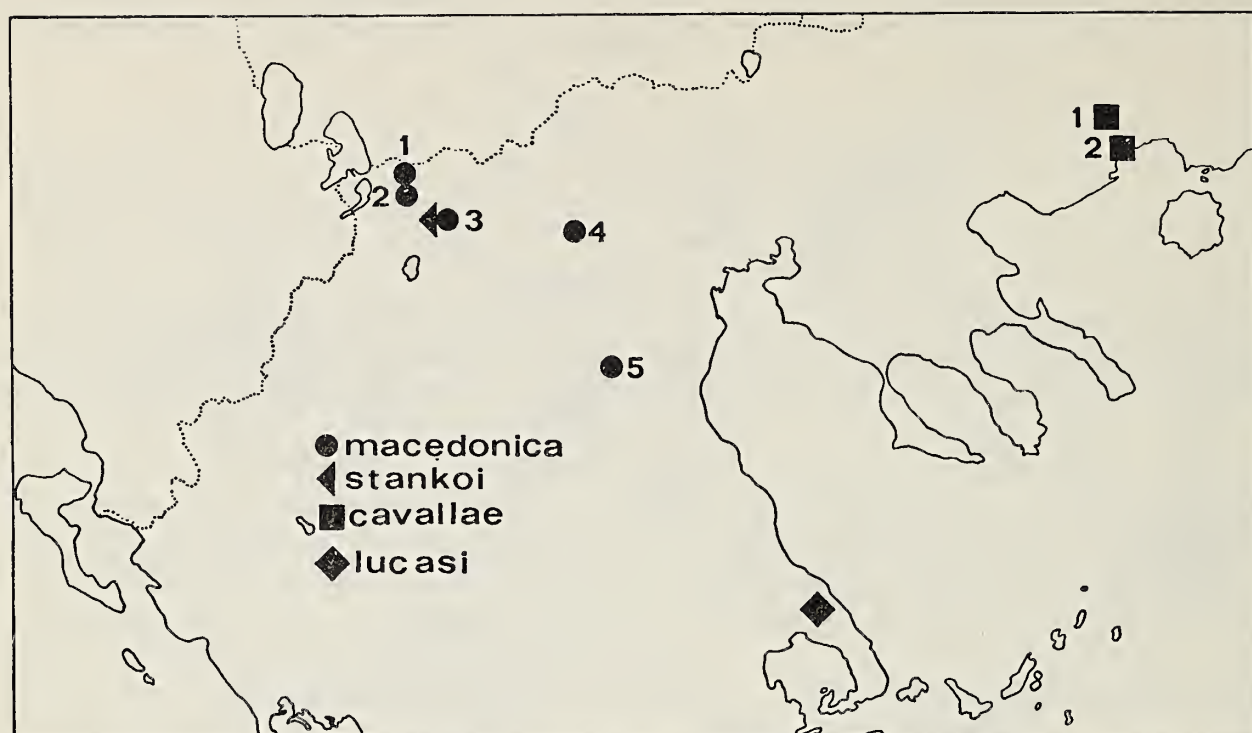
Material studied: (1) Evzoni (2 ♀); (2) Kolindros (1 ♀) (1965, Blommers e.a., Zoöl. Mus. Amsterdam); (3) Lekhovon (1 ♂) (1965, Blommers e.a., Zoöl. Mus. Amsterdam); (4) Velventos (1 ♀); (5) Stavros, above Litochoron (3 ♂, 2 ♀); (6) Litochoron, beach (3 ♂, 2 ♀); (7) Leptokaria - Karia (1 ♂, 1 ♀); (8) 20 km NW. of Elasson (2 ♂); (9) Elasson - Domenikon (1 ♀); (10) Papikon (1 ♂); (11) Kalpakion (1 ♂, 3 ♀); (13) Kalesmenon (1 ♀); (14) Mt. Timfristos, above Karpenision (3 ♂, 1 ♀); (15) Timfristos village (1 ♂, 1 ♀); (16) Mt. Panetolikon, above Proussos (3 ♀); (17) Mt. Vardoussia, above Mousonitsa (1 ♂); (18) Mousonitsa - Stromi (1 ♀); (19) Iti village (1 ♀, 1 ♂); (20) Mt. Pilion, Portaria - Zagora (2 ♀); (21) Neos Pirgos (1 ♂, 1 ♀); (22) Strofilia (2 ♂, 2 ♀); (23) Steni - Kateni (1 ♂); (25) Paradisea (1 ♂); (28) Ag. Eleni (2 ♂, 1 ♀); (30) Mistras (2 ♀); (33) Kambos (1 ♂, 1 ♀); (34) Bassae (5 ♂, 7 ♀); (35) Kallidea (2 ♂, 2 ♀); (36) Rovia (1 ♂, 1 ♀); (37) Karitena (4 ♂); (38) Ipsous (10 ♂, 12 ♀); (39) Chrissovitision, 12 km W. & 3 km W. & 5 km E. (2 ♂, 5 ♀); (40) Vytina (4 ♂, 3 ♀); (41) Kapsia (1 ♂); (42) Kardari (1 ♀); (43) Panagitsa (1 ♀); (44) Lafka (2 ♂, 1 ♀); (45) Kaliani (1 ♂, 1 ♀);



Map 1. Distribution of *Pholidoptera griseoaptera* (De Geer) and *femorata* (Fieber) in Greece.

(46) Aroania (43 ♂, 24 ♀); (47) Potamia (1 ♂, 3 ♀); (48) Paos (1 ♂); (49) Psophis (1 ♂, 2 ♀); (50) Vlasia (2 ♂, 2 ♀); (51) Mt. Panachaikon, above Romanou (4 ♂, 2 ♀); (52) Kalentzi (3 ♂, 2 ♀); (53) Skiadas (1 ♂); (54) Ag. Kiriaki (1 ♀); (55) Marmara (5 ♂, 3 ♀); (56) Lechena (3 ♂); (altitude of localities ranging from 0-1700 m, collected between 8. VII and 10. VIII. in 1970 - '71 - '72 - '73 - '74 - '75).

The species is not known from north-east continental Greece, the Aegean islands and Crete. The difference in size between specimens from various localities is conspicuous. The measurements (length in mm) vary as follows: body ♂ 20.0 - 28.0, ♀ 22.0 - 32.0; pronotum ♂ 7.8 - 10.5, ♀ 8.9 - 11.2; hind femur ♂ 23.0 - 28.0, ♀ 26.0 - 30.0;



Map 2. Distribution of *Pholidoptera macedonica* Ramme, *stankoi* Karaman, *cavallae* Kaltenbach and *lucasi* sp. n. in Greece.

ovipositor 19.0 - 23.0. Due to its less shy way of life, *femorata* is not so easily overlooked as the cryptically living species of the *macedonica*-group.

3. *Pholidoptera macedonica* Ramme, 1928

(Fig. 1, Map 2)

Material studied: Vernon Mts., (1) Mt. Bela Voda, 1700 - 1971 m, 27.VII.1972 (1 ♂) & (2) 4 km E. of Pissoderion, 1600 - 1700 m, 26.VII.1972 (1 ♂, 1 ♀) & (3) 6 km SW. of Drosopigi, 1200 m, 19.VII.1969 & 25.VII.1972 (3 ♂, 9 ♀); Vermion Mts., Naoussa, (4) refuge "Tria Pigadia", 1350 m, 10.VIII.1972 (3 ♂, 1 ♀); Pieria Mts., (5) 10 km NW. of Fteri, 1500 m, 25.VII.1974 (2 ♂).

Comparison of the Greek material (Fig. 1) and that from adjacent Yugoslavian Macedonia (13 ♂, 11 ♀) reveals no clear differences.

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4. *Pholidoptera stankoi* Karaman, 1960

(Fig. 2, 6, Map 2)

Material studied: Vernon Mts., 6 km SW. of Drosopigi, 1200 m, 25.VII.1972 (2 ♂).

As far as could be traced, this species is known after the type-series only (2 ♂, 1 ♀, Karaorman Mts., Yugoslavian Macedonia). The Greek material (Fig. 2) agrees with Karaman's description and some additional material (1 damaged ♂, 5 ♀) from Stepanci, Yugoslavian Macedonia. The only difference is found in the apical parts of the epiphallus (Fig. 6) of the Greek material, which diverge slightly more than in Karaman's figure. Because the variation is known insufficiently, I propose preliminarily to consider the material at hand as conspecific with *stankoi*.

New to the Greek fauna.

5. *Pholidoptera cavallae* Kaltenbach, 1965

(Map 2)

Previous records: the species is known after its type-series only (5 ♂): (1) Krinides (holotype); (2) Kalamica (Kaltenbach 1965: 474).

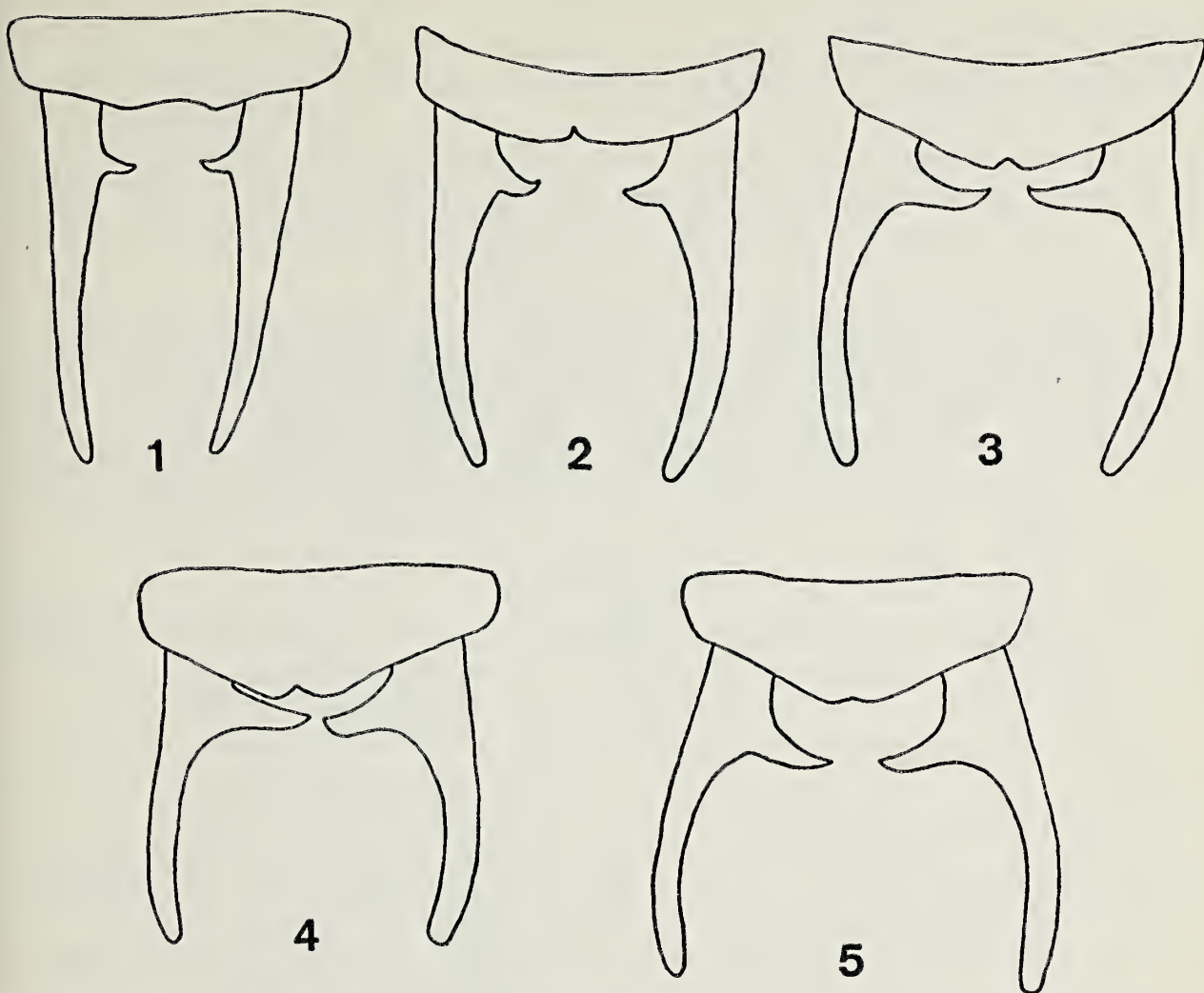


Fig. 1—5. *Pholidoptera* species, ♂, last abdominal tergite and both cerci, dorsal view: 1, *macedonica* Ramme (Drosopigi); 2, *stankoi* Karaman (Drosopigi); 3—5, *lucasi* sp. n. (paratypes).

6. *Pholidoptera lucasi* sp. n.

(Fig. 3—5, 7—9, Map 2)

Material studied: ♂ holotype, labelled: Hellas, Magnisia, Mt. Pilion, between Portaria & Zagora, 900 m, 20.VII.1974, Lucas Willemse; ♀ allotype, 7 ♂, 6 ♀ paratypes, same locality, 19.VII.1975, F. & L. Willemse (author's collection).

DESCRIPTION

♂. General appearance as the *macedonica*-group. Pronotum comparatively long and slightly widening posteriorly; hind margin scarcely convex. Elytra reaching beyond the second to just beyond the third abdominal tergite. Hind femur long and strong. Last abdominal tergite (Fig. 3—5) with a narrow, angular, median excision. Cercus (Fig. 3—5) robust, long, slightly incurved, with a very large and slightly downcurved basal tooth. Median incision of the hind margin of the subgenital plate small, acute-angular and narrow, as wide as the width of both styli together. Epiphallus (Fig. 7—9) with the apical parts parallel, close together, flattened, the tips slightly outcurved with a row of three to five moderately developed teeth.

General colouration as in the species-group. Head from slightly to markedly mottled with dark-brown or black; behind the eye a black dot or fascia. Pronotal dorsum from hazelnut to chestnut-brown, in some specimens with fine, dark brown, longitudinal stripes and metazona contrasting paler brown; hind margin with a fine black streak medially; lateral lobe as dorsum or more blackish, with a yellow marginal fascia; the latter is narrower and sharply limited posteriorly and wider and ill defined anteriorly. Elytra yellowish, pars stridulans brown. Legs of general colour, hind femur usually with

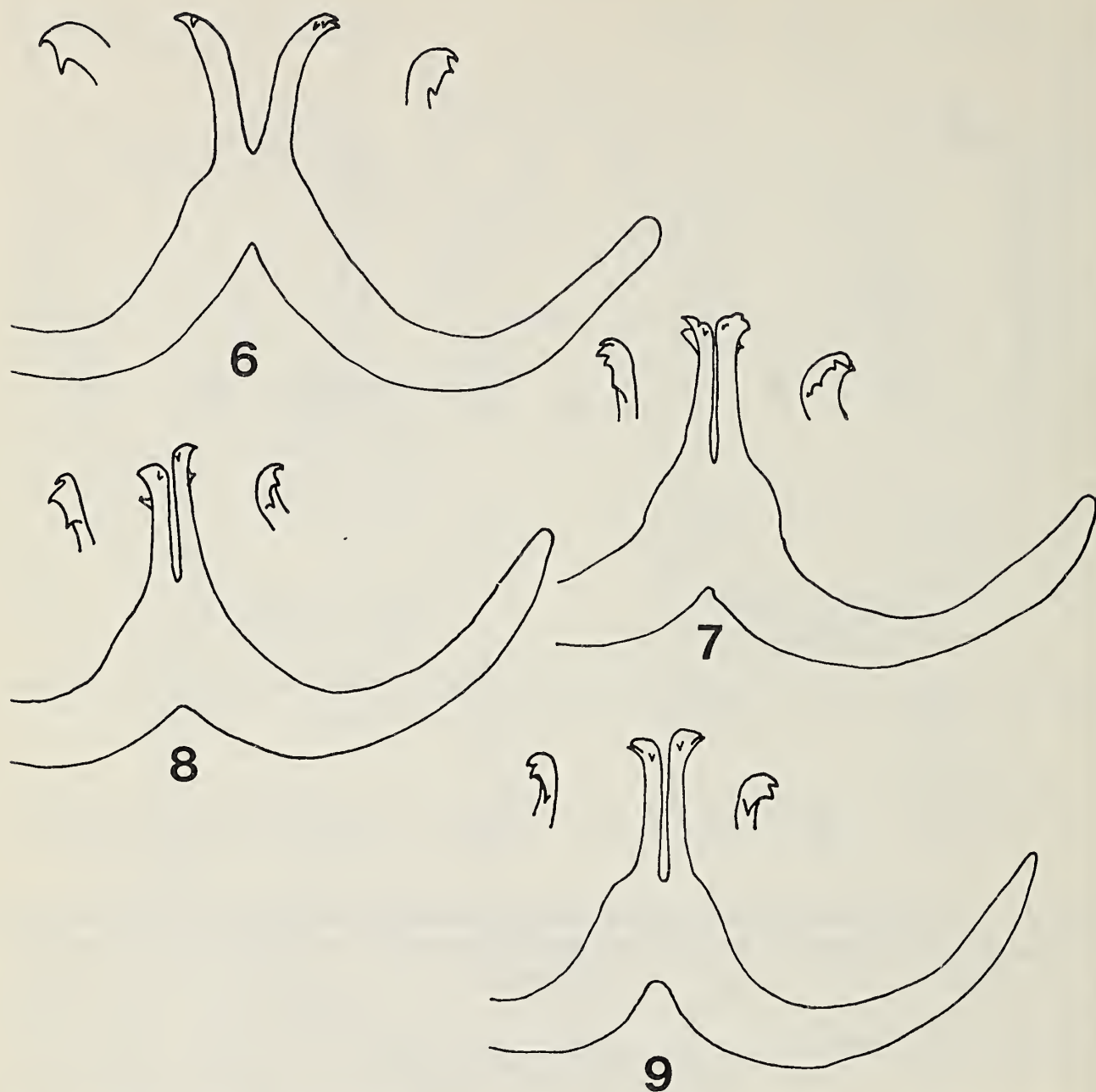


Fig. 6—9. *Pholidoptera* species, ♂, epiphallus, posterior view and tips of apical parts in profile: 6, *stankoi* Karaman (*Drosopigi*); 7—9, *lucasi* sp. n. (paratypes).

a dorso-basal black spot and a longitudinal black fascia on the outer side.

♀. General appearance as in the male. Tegmina and abdominal terminalia as in the *macedonica*-group. General colouration much paler than the male, black markings of head, pronotum and legs inconspicuous.

Measurements (length in mm): body ♂ 21.2 - 25.1, ♀ 23.0 - 24.9; pronotum ♂ 7.8 - 9.1, ♀ 8.1 - 8.7; elytron ♂ 4.8 - 5.3, ♀ 1.3 - 2.4; hind femur ♂ 22.9 - 25.2, ♀ 25.2 - 27.5; ovipositor 20.4 - 22.9.

Discussion. The species is well characterized by the abdominal terminalia in the male. It belongs to the *macedonica*-group. In addition to the description of *cavallae*, Kaltenbach (1965: 475) discussed the group and gave a review of its distinctive features. The characters of *lucasi* can be inserted as follows: Analtergit schmal ausgeschnitten; Lamina subgenitalis, Ausschnitt spitzwinkelig; Epiphallus Schenkel parallel; Epiphallus Zähne mittel 3—5. Another feature is added now: the basal tooth of the male cercus, which is conspicuously larger in *lucasi* than in any of the other members of the group.

The habitat of *lucasi* is similar to that of *macedonica*, *stankoi* and *aptera* (Fabricius): forest glades, with a rich vegetation, especially ferns. These species live rather cryptically. Their metallic, single sound is heard on cloudy days or, if sunny, in the after-

be indicated as follows. The road connecting the villages of Portaria and Zagora, has, coming from Zagora, a secondary forest road at 12.2 km distance from the centre of noon and during twilight.

The type-locality is the wooded Mt. Pilion, above Volos. The precise locality may Zagora. We collected *lucasi* at an open area along this forest road, where it turns sharply to the right, about 200 meters after the fork of the main road.

7. *Pholidoptera littoralis* (Fieber, 1853)

Brunner von Wattenwyl (1861: 296) recorded a female from Mt. Parnassos under the name *Thamnotrizon punctifrons* (Burmeister) and later (1882: 339) he referred to the same specimen as *Thamnotrizon littoralis* (Fieber). Mr. Kaltenbach kindly informed me (in litt. 8.VII.1975) that neither this specimen nor other material of *punctifrons* or *littoralis* from Greece could be traced in the Vienna Museum. Therefore, the occurrence of these species in Greece has still to be proved.

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