

**A list of Paussinae Beetles from the entomological collection, Museum of Natural History, Department of Zoology, Tel Aviv University, Israel**  
(Coleoptera: Carabidae: Paussinae)

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**Key Words:** Coleoptera, distribution, Paussinae, Proche Orient, Spain, Africa

**Abstract:** A list of nine Paussinae species collected in Israel and Sub-Saharan Africa is presented. They are kept in the entomological collection, Natural History Museum, Department of Zoology, Tel Aviv University, Israel. Till now, only three species of Paussinae beetles were recorded from Israel.

### Introduction

Myrmecophilous (rarely termitophilous) Paussinae, represent a pan-tropic-subcosmopolitan group (NAGEL 1997). Adult beetles possess fully developed wings which allow them to colonize ant (or termite rarely) host nests. In spite of expected ancient affinity between Paussinae and ants (represented by presumable myrmecophilous species in the Baltic Amber of the lowest Oligocene deposits, WASMANN 1929) their distribution might be related to the specific vegetation formations and not primarily associated with the distribution of particular ant species (NAGEL 1997).

The collection of Paussinae beetles in the Natural History Museum, Department of Zoology, Tel Aviv University, Israel (MNHI) is small but contains some interesting species, and new data about their distribution, especially in Israel.

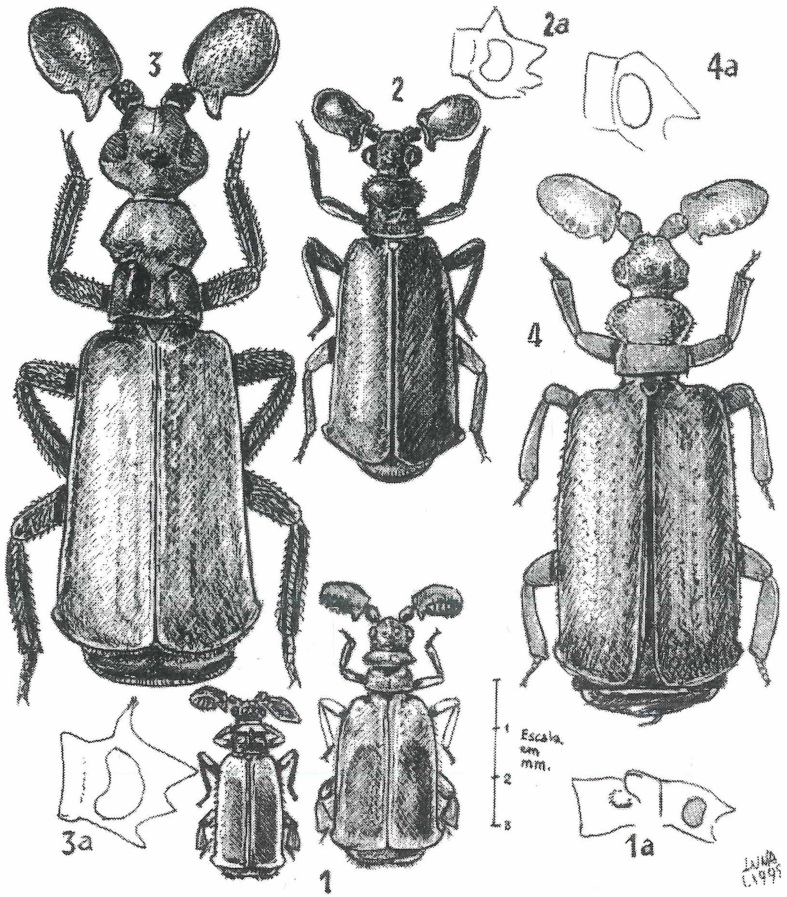


Table 1

1. *Cochliopaussus turcicus* (variation of height), 1a. profile of head;  
 2. *Katapaussus thomsoni*, 2a. profile of head; 3. *Katapaussus armatus*,  
 3a. profile of head; 4. *Edaphopaussus laevifrons*, 4a. profile of head.

### Material and methods

Taxonomic terminology presented here is the same as used by LUNA DE CARVALHO (1987). Geographic coordinates of localities are given in the Greenwich geographic system. General distribution is added for species recorded from Israel.

## List of species

### 1. *Cerapterus (Euthysoma) denoiti denoiti* (Wasmann)

Description: *Cerapterus denoiti* Wasmann 1899, Not. Leyd. Mus. 21:36.

Holotype: Uganda (Museum Paris).

Examined material: 1. Kenya, Tseikuru, I.1957 (A. FREIDBERG coll.).

### 2. *Apopaussus ghanensis* (Luna de Carvalho)

Description: *Paussus ghanensis* Luna de Carvalho 1973, Ann. Hist. Nat. Mus. nat. Hung. 65:174-174, Figs. 5-9.

Holotype: Banda-Nkwanta (Museum Budapest).

Examined material: 1 paratype: Banda-Nkwanta (8.21N, 2.08W), LUNA DE CARVALHO leg.

### 3. *Cochliopaussus (Cochliopaussus) turcicus* (Frivaldszky), Figs. 1-1a.

Description: *Paussus turcicus* Frivaldszky, 1835. A Magyar Tudos Tarrasag Exkonyvei 2:263-264, pl. 5, Fig. 5.

Holotype: Sliven (Turkey, now in Bulgaria), Museum Budapest.

Examined material: 5 ex., Palestine (now Israel): Jerusalem, Hulda (31.50N, 34.53E), 7.II.1940 and 10.III.1947 (BYTINSKI-SALZ coll.); Israel: Tel Aviv (32.05N, 34.46E), 1.X.1990 (A. BEN coll.), Sasa (33.02N, 25.33E), J. KUGLER leg.

Comments: Two specimens from Sasa and Tel Aviv (Fig. 1, right) are longer (5 mm) than the others (4 mm, Fig. 1, left). The usual length of this species is 5-6 mm, but the observed nanism probably does not have any taxonomical value.

General Distribution: Bulgaria, Macedonia, Georgia, Southern Caucasus, Turkey, Turkestan, Syria, Lebanon, Iraq, Israel (NAGEL 1987; LUNA DE CARVALHO 1987).

### 4. *Spinicoxipaussus (Spinicoxipaussus) spinicoxis* (Westwood)

Description: *Paussus spinicoxis* Westwood 1850, Proc. Linn. Soc. Lond. 2:59.

Holotype: Port Natal (British Museum of Natural History, London).

Examined material: 1 ex., Kenya, Nairobi (01.17S, 36.50E), A. FREIDBERG coll.

5. *Spinicoxipaussus (Spinicoxipaussus) cridae* (Gestro)

Description: *Paussus cridae* Gestro 1915, Ann. Mus. Civ. St. Nat. Genova 46:355-357.

Holotype: Kassai: (Mus. Civ. Genova).

Examined material: 1 ex. Angola, Dundo (7.22S, 20.50E), 14.III.1954 (LUNA DE CARVALHO leg.).

6. *Flagellopaussus favieri* (Fairmaire)

Description: *Paussus favieri* Fairmaire 1851, Rev. Mag. Zool., p. 521.

Holotype: "Environs de Tanger" (coll. FAVIER, Museum Paris).

Examined material: 3 ex. Moroccan: Oran (35.45N, 0.38E), Spain: Andalusia, Algeciras (36.08N, 5.27W), W. LIEBMANN coll.

Comments: The genus *Flagellopaussus* represents three species, the European and North african species, *F. favieri* (Fairmaire), *F. biflagellatus* Luna de Carvalho, 1973 recorded from Ghana and recently described, *F. krelli* (Kaupp et Rödel 1997) from Ghana and Ivory Coast.

7. *Katapaussus (Katapaussus) thomsoni* (Reiche), Figs. 2, 2a.

Description: *Paussus thomsoni* (Reiche 1860), Thoms. Mus. Scient. 2:73, pl. 9, Fig. 1.

Holotype: Soudan (Humboldt-Museum, Berlin).

Examined material: 1 ex., Israel: Shirta, 29.VI. 1976, M. KAPLAN coll.

Comments: *K. thomsoni* has been sometimes confused with *K. arabicus* Raffray, 1885 (see LUNA DE CARVALHO 1967; NAGEL 1977).

General Distribution: Ethiopia, Kenya, Northern Africa (Moroccan, Algeria, Sudan), Arabia (Yemen) (LUNA DE CARVALHO 1987), Israel.

8. *Katapaussus (Katapaussus) armatus* (Westwood), Figs. 3, 3a.

Description: *Paussus armatus* Westwood 1833, Trans. Linn. Soc. Lond. 16:645-646., Figs. 62-64.

Holotype: Senegal (Museum Zoology, Humboldt-University, Berlin)

Examined material: 1 ex.: Nigeria: Jos, Kaduva, 500-1000 m., 10.XII. 1987, R.T.A.-236 (KAPLAN coll.).

9. *Edaphopausus (Edaphopausus) laevifrons* (Westwood), Figs. 4, 4a.  
Description: *Paussus laevifrons* Westwood 1833, Trans. Linn. Soc. Lond., pp. 661-662, Pl. 23, Figs. 65-67.

Holotype: Senegal.

Examined material: 1 ex. Kenya: Tseikuru, XI.1957.

## Paussinae fauna of Israel

Israel's Paussinae fauna is represented by three species only, but the reasons for such low species richness are not very clear. The species richness probably will not dramatically increase in the future, because surrounding regions (the Sinai, Jordan, Syria, Lebanon) do not have richer Paussinae fauna, at least as recently known.

The third species, not presented in the entomological collection of MNHI, *Crenatopausus piochardi* (Saulcy, 1874) was described from Jericho (Israel) and lately also recorded from Egypt (ALFIERI 1976, LUNA DE CARVALHO 1987). Two species, *C. turcicus* and *C. piochardi*, were mentioned from Palestine (now Israel) by BODENHEIMER (1937) also.

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## References

- ALFIERI, A. (1976): The Coleoptera of Egypt. - Mém. Soc. Ent. d'Égypte 5:1-361.  
BODENHEIMER, F. S. (1937): Prodromus Faunae Palestine. - Mem. Inst. d'Égypte 31:141-145.  
KAUPP, A. & RÖDEL, M. O. (1997): Ein neuer westafrikanischer *Paussus* Linnaeus aus der *P. favierei* Gruppe (Coleoptera: Carabidae: Paussinae). - Koleopterol. Rundschau, Wien 67:5-12, Figs. 1-6.  
LUNA DE CARVALHO, E. (1969): "Missione 1965 del Prof. Giuseppe Scortecci nei Yemen (Arab. Meridionale) Coleoptera: Carabidae: Paussinae". - Atti Soc. It. Sc. e Museo Civ. St. Nat. Milano, 109/1: 87-90.

- (1975): "Coléoptères Paussides du Musée Hongrois d'Histoire Naturelle (Coleoptera). - Ann. Hist.-Natur. Mus. Nat. Hungarici **65**:171-180, Figs. 1-35.
- (1987): Essai monographique de Coléoptères Protopaussines et Paussines. - Mem. Inst. Inv. Cient. Trop., Lisbonne, **70** (2nd ser.): 1-1026 (+ Figs. 1-599).
- NAGEL, P. (1977): Revision der *Paussus armatus*-Gruppe (Coleoptera, Carabidae, Paussinae). - Stutt. Beitr. Z. Naturkunde (Ser. A): **293**:1-95.
- (1980): Systematik und Verbreitung der *Paussus inermis* -Gruppe (Coleoptera, Carabidae, Paussinae). - Revue Zool. afr. **94**: 341-379.
- (1987): Arealsystemanalyse afrikanischer Fühlerkäfer (Coleoptera, Carabidae, Paussinae). - Erdwissenschaftliche Forschung, XXI, Stuttgart, 362 pp., 21 Figs, 71 Maps.
- RAFFRAY, A. (1847): Matériaux pour servir à l'étude des Coléoptères de la famille des Paussides. - Nouv. Arch. Mus. Paris (2<sup>e</sup> ser.) **IX**:307-389, 1-52, per. 15-19.
- WASMANN, E. (1929): Die Paussiden des baltischen Bernsteins und die Stammesgeschichte der Paussiden. - Bernsteinforschung **1**:1-110.

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