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(Orthoptera: Tettigoniidae) from Israel**

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**A new species of the genus RHACOCLEIS Fieber 1853
(Orthoptera: Tettigoniidae) from Israel**

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ÖZET

Bu makalede, İsrail'den teşhis için gönderilen ve yeni bir Decticinae (Orthoptera: Tettigoniidae) türü olduğu saptanan *Rhacocleis ayali* sp.n.nin tavsifi verilmiştir.

ABSTRACT

A new species of Decticinae (Orthoptera: Tettigoniidae), *Rhacocleis ayali* sp.n. from sand dunes of Palmahim and Yad Mordachai (coastal plain of Israel) is described.

This interesting new species described below distinctly differs from the Anatolian species. Characters of the male genitalia are more similar to the African than to the Anatolian representatives of the genus. Cercus and titillator of new species are more strongly built and are larger than those of the Anatolian species.

I am grateful to Dr. D.R.Ragge, who kindly has drawn the figure of *Rhacocleis dernensis* Salfi.

I am also grateful to Prof. Dr. M.P. Pener for allowing me to describe this new species.

Rhacocleis ayali sp.n.

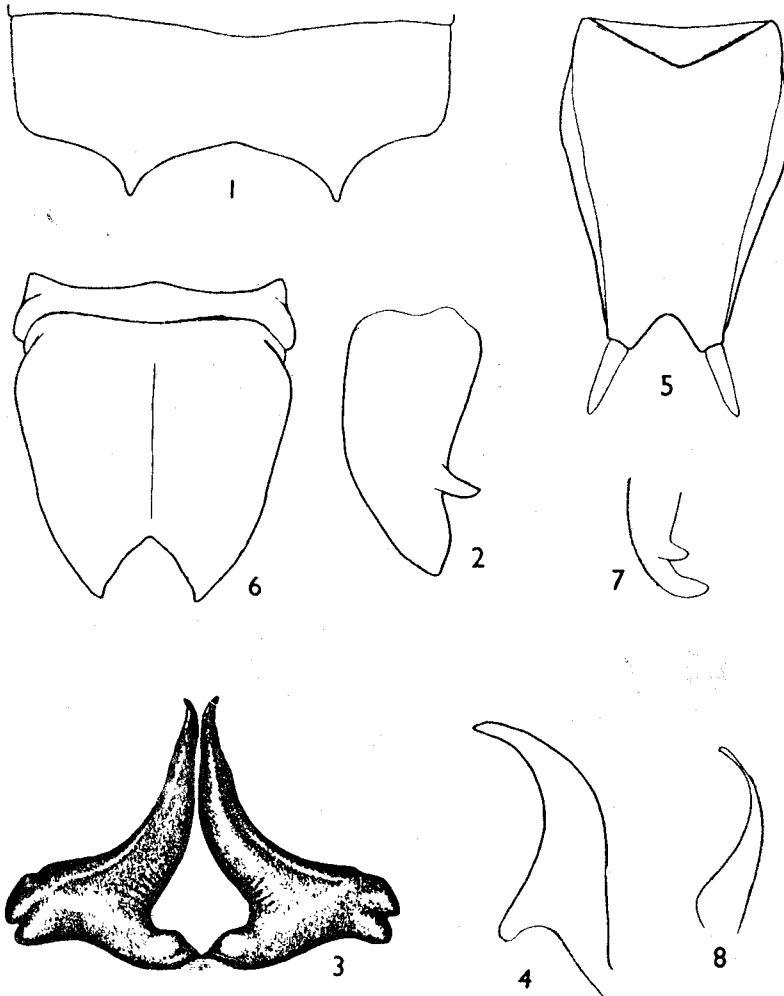
Male (Holotype): Of medium size, slenderly built. Face strongly oblique. Fastigium of vertex distinctly widened above, narrowly truncate below. First antennal segment very large, strongly built, distinctly compressed, second segment cylindrical and normal.

Pronotum distinctly cylindrical, its anterior margin slightly and widely incurved, posterior margin almost round, first transversal sulcus distinct on the prozona, typical sulcus weakly distinct on the disc; a large and long whitish convexity on the posterior ridge of lateral lobe of pronotum. Tegmina short, reaching end of first tergite. Plantulae librae of hind tarsi longer than metatarsus. Prosternum with a pair of acute spines. Last tergite (Fig. 1) with a semicircular emargination, with subacute lobes. Cercus (Fig. 2) conical, strongly built, short, slightly incurved, with acute tooth in its posterior half. Titillator (Figs. 3, 4) strongly built, shiny black in colour, backward in position, apical arms gradually and slightly incurved, surface slightly rough, basal arms almost absent. Subgenital plate (Fig. 5) much longer than wide, with deep, rounded apical excision; styli long and slender.

General colouration dirty brown, with blackish markings; two small and round black spots on face (above clypeus); pale black stripe behind eyes, reaching pronotum; first and second antennal segments with blackish markings. Lower margin of lateral lobe of pronotum with dirty-creamish band, its posterior part lighter. Mesonotum and metanotum with round black spots. Femoral spines black, base of spines on fore and middle tibiae black. Upper and inner surfaces of hind femora with transversal and parallel dark brown stripes. Upper surface of abdomen light brown, blackish longitudinal stripe on the lateral sides of abdomen; small black spot on middle part of posterior edge of abdominal tergites.

Female: Larger than male. Face, first antennal segment as in male. Pronotum more robust than in male. Tegmina very short, lateral scale like. Length of plantulae librae of hind tarsus as in male. Subgenital plate (Fig. 6) longer than wide, with deep acuteangular excision, and with longitudinal indistinct median carina. Cercus cylindrical, slightly incurved, gradually pointed. Ovipositor short, as long as half of hind femur, stout at basal part, slightly upcurved at posterior half.

Colouration generally as in male. Upper surface of abdomen lighter than in male. Lateral blackish stripe of abdomen distinct only in tergites 1-3. Apical part of ovipositor dark brown.

Figs.1-6 *Rhacocleis ayali* sp.n.

- Fig. 1. Male, last tergite from above.
 Fig. 2. Male, left cercus.
 Fig. 3. Male, titillator, dorsal view.
 Fig. 4. Male, right titillator lateral view.
 Fig. 5. Male, subgenital plate from below.
 Fig. 6. Female, subgenital plate from below

Rh. dernensis Salfi

- Fig. 7. Male, second half part of left cercus.
 Fig. 8. Male, right titillator lateral view.

Measurement (in mm)

Body length: male: 22.3–25.1 (Holotype); female: 26.2–28.1.
Length of pronotum: male: 6.7–7.6 (Holotype); female: 7.1–8.1.
Length of tegmina: male: 2.4–2.7 (Holotype) ; female: 1.3–1.6.
Length of hind femur: male: 24.–26.6 (Holotype); female: 26.9–30.1.
Length of ovipositor: – female: 13.7–15.1.

Specimens of the new species were collected: 2 ♂♂ (Holotype and one Paratype), 3 ♀♀ (Paratypes), sand dunes of Palmahim, 27.vii. 1971, leg. Y. Ayal; 1 ♂ (Paratype) labelled: caught as a young nymph, Yad-Mordachai, 8. vi. 1971 (dunes). Reared to adult 24. vii. 1971, rearing no. 1164, leg Y. Ayal.

The male Holotype, 1 ♂, and 2 ♀♀ Paratypes are in the collection of the Hebrew University (Dept. of Entomology), Jerusalem; 1 ♂ and 1 ♀ Paratypes are in the collection of Systematic Zoology of Ankara University.

This new species is related to *Rh. dernensis* Salfi (Arch. Zool. Ital., vol. xi, p. 87, Figs. 50–52, 1926), but differs from it by the structure of the male's last tergite, subgenital plate, shape of cercus and its acute tooth, and titillator as can be seen by comparing Figs. 2,3,4 with Figs. 7,8. Figures of *Rh. dernensis* Salfi were kindly drawn for me by Dr. D. R. Ragge from the Holotype.

This new species is named in honour of Mr. Y. Ayal who collected it.

Recently I was informed by Mr. Y. Ayal that the above examined specimens were significantly larger than those, collected by Mr. Ayal 1972.

I am thankful to Mr. Y. Ayal for his information.

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