

Short scientific noteSubmitted: March 10th, 2021 – Accepted: June 18th, 2021 – Published: November 30th, 2021

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***Chorthippus bornhalmi* new to Lebanon and Jordan,
and *Eremippus persicus* new to Jordan
(Orthoptera: Acrididae)**Bruno Massa¹¹ Department of Agriculture, Food and Forest Sciences, V.le Scienze 13, I-90128 Palermo (Italy) (retired) – bruno.massa@unipa.it**Abstract**The author reports for the first time the presence of *Chorthippus* (*Glyptobothrus*) *bornhalmi* Harz, 1971 in Jordan and Lebanon, and *Eremippus persicus* Uvarov, 1929 in Jordan.**Key words:** New records, taxonomy, identification characters, Near East.

Acrididae Gomphocerinae are poorly known from Lebanon and Jordan. Only the following species of the tribe Gomphocerini Fieber, 1853 are recorded: *Chorthippus* (*Glyptobothrus*) *dirshi* Fishelson, 1969 from Mt. Hermon (Israel, Lebanon, Syria), *C.* (*Glyptobothrus*) *peneri* Fishelson, 1969 from Mt. Hermon, Judean Hills, Upper Galilee, Mt. Meron (Israel) and two localities of Lebanon, *C.* (*Glyptobothrus*) *lebanicus* Massa & Fontana, 1998 from Lebanon, *C.* (*Glyptobothrus*) *brunneus* (Thunberg, 1815) from Lebanon, *C.* (*Chorthippus*) *dorsatus palaestinus* Uvarov, 1933 from Israel, Jordan and Lebanon, *C.* (*Chorthippus*) *loratus* (Fischer von Waldheim, 1846) from Israel and Lebanon (Fishelson 1969; Massa & Fontana 1998). Among the tribe Dociostaurini Mistshenko, 1974 no species of the genus *Eremippus* Uvarov, 1926 are known from Lebanon, Syria, Israel and Jordan.

During some entomological expeditions to Jordan and Lebanon a lot of Acrididae specimens have been collected; among them a series of *Chorthippus* (*Glyptobothrus*) *bornhalmi* Harz, 1971 in Jordan and Lebanon and *Eremippus persicus* Uvarov, 1929 in Jordan. The present note reports and discusses on these findings. The material is preserved in the personal collection of the author.

***Chorthippus* (*Glyptobothrus*) *bornhalmi* Harz, 1971**

Material examined. **Jordan**, Ajlun 24.V.1999, B. Massa (2♂, 2♀); **Lebanon**, Ain Zhara 16.V.2010, B. Massa (1♂, 1♀); **Lebanon**, Barouk Reserve (1800m) 16.V.2010, B. Massa (6♂, 18♀); **Lebanon**, Bmehraya (Chouf)

16.V.2010, B. Massa (1♀); **Lebanon**, Mt Kneise (1500m) 17.V.2010, B. Massa (2♂, 5♀); **Lebanon**, Bekaa Valley, Ammiq 17.V.2010, B. Massa (1♀); **Lebanon**, Bekaa Valley, Lake Qaraoun 17.V.2010, B. Massa (1♂); **Lebanon**, plain of Yamouneh 18.V.2010, B. Massa (6♂, 6♀); **Lebanon**, Jebel Mekmel, Aayoun Ourgouch (2000m) 19.V.2010, B. Massa (5♂, 4♀, 1 nymph); **Lebanon**, Tan-nourine Reserve (Batroun) (1400-1800m) 20.V.2010, B. Massa (1♀); **Lebanon**, Ed Dauniye (El Minie), Nabaa Ras en Nahr (2200m) 21.V.2010, B. Massa (2♂, 5♀); **Lebanon**, Jebel Qammouaa (1800-2000m) 21.V.2010, B. Massa (4♂); **Lebanon**, Fnaideq (pinewood) 22.V.2010, B. Massa (2♀).

According to Willems et al. (2009), characters of *C. bornhalmi* are: tegmina extending well beyond tip of hind knee in both sexes, in male from 1.35-1.75, in female 1.35-1.58 times as long as length of the hind femur (in the present specimens 1.35-1.65 and 1.35-1.50, respectively), distance from center of stigma to tip of fore wing in male from 5.3-7.3, in female 7.4-8.8 mm (in the present specimens 5.3-6.3 and 7.4-8.0, respectively) (Fig. 1), pronotum with lateral keels relatively strongly angled, metazona of pronotum relatively long and wide, greatest width of metazona of male 2.15-2.70 (in the present specimens 2.15-2.30) (Figs. 2, 3), in female 3.0-3.9 mm (in the present specimens 3.0-3.5), number of stridulatory pegs in male 105-153 (in the present specimens 110-120), ventral surface of thorax strongly hairy.

C. bornhalmi differs from *C. brunneus* mainly by the number of pegs on the hind femur (> 100 in *C. bornhalmi*, < 90 in *C. brunneus*), thus the identification results difficult.

C. bornhalmi is distributed from north-east Italy, Balkans, Greece (many islands included) to Anatolia (Willemse et al. 2009; Willemse et al. 2018). The presence in Jordan and Lebanon was previously unrecorded.

Eremippus persicus Uvarov, 1929

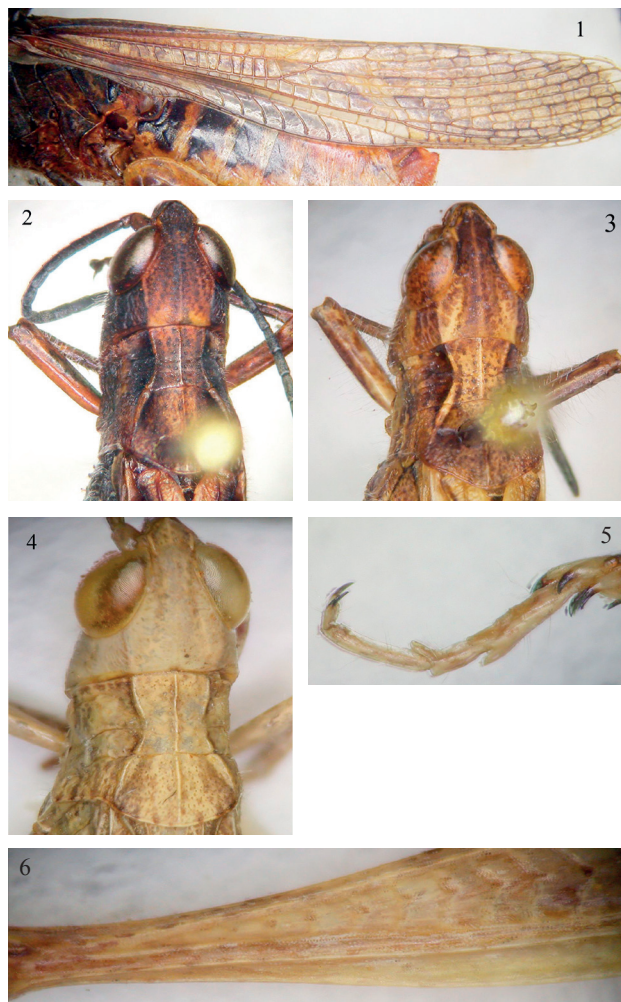
Material examined. **Jordan**, Schaubak 27.V.1999, B. Massa (1♂); **Jordan**, Ajlun, Ba'un 29.X.1999, B. Massa (7♂, 1♀).

The genus *Eremippus* is characterized by small size, male head in profile usually slightly higher than pronotum, lateral carinae of pronotum slightly displaced outwards at level of posterior transverse groove (Bey-Bienko & Mistshenko 1964). About 40 species are known in the genus *Eremippus* from Middle East to China, most of them live in Iran, but no species has been hitherto reported from the area of Jordan, Israel, Syria and Lebanon. The identification of species belonging to the genus *Eremippus* is difficult; following the key to species by Bey-Bienko & Mistshenko (1964), which includes most of those living in the Middle East, the Jordan specimens result to belong to *E. persicus*, characterized by pronotum with a short anterior part, the length of the anterior part significantly less than the length of the posterior part, with the posterior groove extending far before the middle of the pronotum (Fig. 4), hind tarsus of the female with a short first segment (Fig. 5), equal in length to the third segment without claw. The inner surface of the male hind femora has about 60 pegs (Fig. 6).

E. persicus was described from Iran, and it is presently widely distributed in central Asia. The presence in Jordan was previously unrecorded.

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Figs 1-6 – *Chorthippus bornhalmi*, 1, left tegmen of one male from Lebanon; *C. bornhalmi*, 2, 3, dorsal view of head and pronotum of two males from Lebanon (2) and Jordan (3); *Eremippus persicus*, 4, dorsal view of head and pronotum of a male from Jordan; *E. persicus*, 5, tarsi of the female hind leg from Jordan; *E. persicus*, 6, pegs on inner surface of the male hind femur from Jordan.