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A new *Bradyporus* Charpentier, 1825 species from Iran (Orthoptera, Bradyporinae)

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The species of *Bradyporus* Charpentier, 1825 found in Turkey has been revised by the second author (M. Ünal, 2011). *Bradyporus* comprises thirteen species and subspecies at present. The species of the genus have a range of Central Palaearctic distribution; most of the species are Balkanian-Anatolian-Iranian, whereas some of them are restricted to Ukraine, the Caucasus, Transcaucasus, being inhabitants in the continental mountain steppe belt. It seems that Anatolia, with 8 species, and Balkans, with 6 species, are two diversity centres of this genus. Iran represented by only species, *B. latipes* (Stål, 1875). But, one more peculiar species is described from north west of Iran herein. The species of this genus are very similar to one another in their external features, however, detailed descriptions and characterizations are given for the authentic separation of the known species in the exhausting revision of the genus by the second author (Ünal, 2011).

Bradyporus (Callimenus) picurka sp. n.

(pl., figs. 1–16)

Type material. Holotype: IRAN, prov. Azerbaijan, Garbi, 1600 m., 16 km E of Mahabad, 45°35'12"E, 36°51'13"N, 26.04.2001, leg. Gy. Fábán & K. Vigh, coll. A. Garai (later to be deposited in the Hungarian Natural History Museum, Budapest, Hungary).

Paratypes: 4 males, 4 females, with the same data as the holotype, colls. A. Garai, M. Ünal; Slides No. m 135 and 138 Garai

Diagnosis. The new species has unique characters such as the shape of titillator, male cercus, female ovipositor and its basal projections which are easily separated from the all known species of the genus *Bradyporus*. It belongs to the *B. latipes* species group by the following shared features: the pronotum of the new species is not inflated in metazona, the male cercus short and stout, its inner arm is situated near to apex in ventral view, the female subgenital plate broad, without spine-like projecting.

Morphologically the new species resembles to the members of the *latipes* group (*Bradyporus (Callimenus) latipes* Stål, 1875, *B. (C.) toros* Ünal, 2011 and *B. (C.) karabagi* Ünal, 2011). The closest related species is the *Bradyporus latipes* Stål, 1875 (Figs. 19-36). Externally the new species can be separated from the three sister species by its considerable smaller size, the almost parallel lateral keels of the pronotum; in the males the short cercus with a slight plate like distal part, symmetrically rounded depression in the terminal part, with a very short inner arm; the short and strong, basally broad and distally tapering apical arms of the horn-shape titillator; and in the females the characteristic ovipositor, in which the dorsal valva exceeds the ventral one, the shape of basal projection of ventral valve which is subtriangular and not pointed at apex.

Description. In comparison with the other species of the genus, it is a rather small-sized species. Head is relatively broad, 1.18 times higher than broad in frontal view. Eye is somewhat larger than antennal foramen. Lateral carinae of pronotum (Fig. 1) are distinct, gradually raised posteriorly; prozona shallowly depressed; metazona slightly raised, with four distinct tubercular folds, from which the inner two ones are much longer; in dorsal view the prozona is 1.2 times narrower than metazona, and in lateral view 1.16 times higher than the metazona; pronotum is 1.8 times longer than its average height. Anterior margin of the pronotum in dorsal view is almost straight, posterior margin slightly concave; paranota broadly rounded (Fig. 2). Fore -, mid - and hind femurs are unarmed. Prosternum with two parallel long and

strong spines; mesosternal and metasternal lobes collar-like, rounded at apex, as those of the other species. Subgenital plate (Fig. 3) is 1.25 times wider than long, with two long lateral carinae; posterior margin between the terminal part of the lateral carinae rather straight.

Cercus (Fig. 4) moderately stout, short and broad in dorsal view, apex rounded; inner arm very short, positioned vertically, bidentate, the apex of the teeth blunt (Figs. 5–6).

Titillator (Figs. 7–8) stout, apical arms short and strong, basally broad, distally slender apically pointed, slightly curved outwards; basal arm moderately long, its proximal and distal part almost the same wide and upper margin wavy; bridge between left and right arms is the same wide as the basal part of arms; in lateral view the titillator particularly the basal arm narrow; apical arms almost straight.

Female. In most of the external features is the same or similar to the male, with the distinctive as follows: Head is slightly narrower than that of male, 1.3 times higher than wide; the outer (shorter) two tubercular folds of the metazoan absent or slightly visible in most of the females; prozona is 1.4 times higher than metazoan (Figs. 9–10). Subgenital plate (Fig. 11) is large, shield-like, large and angular, margins are almost straight; 1.5 times wider than long at the broadest part; basal pits are moderately deep, extending only the anterior third part of the subgenital plate. Cercus (Fig. 12) is subconical, evenly tapering distally, apex pointed, basal lobe is moderately high. Ovipositor (Fig. 13) is medium size, 1.3 times shorter than hind femur, upcurved; ventral valva with a row of irregular apical teeth; dorsal valva is significantly longer than the ventral one, valvae are clearly divergent terminally; basal part of ventral valva (Fig. 14) bears one subtriangular lamini form projection, with rounded apex.

Measurements (mm). Holotype (male): length of body 35.0; pronotum 13.5; hind femur 16.0. Paratypes: length of body: male 29–36, female 32–38.2; pronotum length: male 12–13.5, female 11.5–12.5; hind femur: male 15–17.5, female 16–18; ovipositor: 12–14.

Colour. Body is hazel brown, reddish brown and black. Head: frons and gena are light brown, or fawn coloured; vertex is variable black, or some of the specimens with black diffuse colouration; upper half of clypeus with two lateral brown spots; lower half of clypeus and labrum brown; mandible without stripe. Pronotum is reddish brown - hazel brown; prozona black, rough, metazona reddish brown - light hazel brown; in lateral view the same colour. Femora light brown sparsely with many black dots; inner side of hind femora is reddish brown. The femur of all of the legs are scattered with black dots on the outer side. The terminal part of the mid and hind femur is black. Fore tibia and tarsi are reddish brown; the tibia bears reddish brown spines, ventral surface of tarsi is blackish brown. Abdomen is black with two conspicuous longitudinal reddish brown bands; hind edge of the tergites with a row of small dark orange spots; in lateral view the lower part of tergites is somewhat lighter, dorsal surface of male cercus brownish, or reddish brown, ventral surface blackish. Subgenital plate is hazel brown. Ovipositor is reddish brown, margins and apical part are blackened, and the apical teeth are reddish brown with darker apex. Sternites are brownish.

Etymology. The species name, *picurka* refers to the smaller size of this species among the *Bradyporus* species, in Hungarian language.

Habitat. The habitat is rocky tall grassland in the continental steppe belt in moderate altitude of a hilly area S of the lake Orumyeh.

Bionomics and distribution. Known only from the type locality in a series.

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