

## New finding of *Scelio rugosulus* Latreille (Hymenoptera: Platygasteridae, Scelioninae) in Iran

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**Abstract.** During faunistic study of the family Platygasteridae (Hymenoptera: Platygastoidea) in East-Azərbayjan province, some specimens were collected and examined. Based on this study a species of the genus *Scelio* Latreille was identified as *Scelio rugosulus* Latreille, 1805, that is a new record to Iranian fauna.

**Key words:** Platygasteridae, new record, East-Azərbayjan, fauna, Iran.

The family Platygasteridae includes solitary endoparasitoids of insect and spider eggs (Masner 1976, O'Connor & Notton 2013). This family has received little attentions in Iranian fauna. Recently Samin et al. (2011) catalogued the Iranian species including only 18 species from former Scelionidae. The genus *Scelio* Latreille with about 500 known species, worldwide, are one of specious taxa of the family Platygasteridae. These parasitoids has an important role in bio-control of grasshoppers egg (Orthoptera: Acrididae) (Yoder et al. 2014). This genus was revised taxonomically in Worldwide (Yoder et al. 2009), Australian (Dangerfield et al. 2001) and African (Nixon 1958, Yoder et al. 2014) regions.

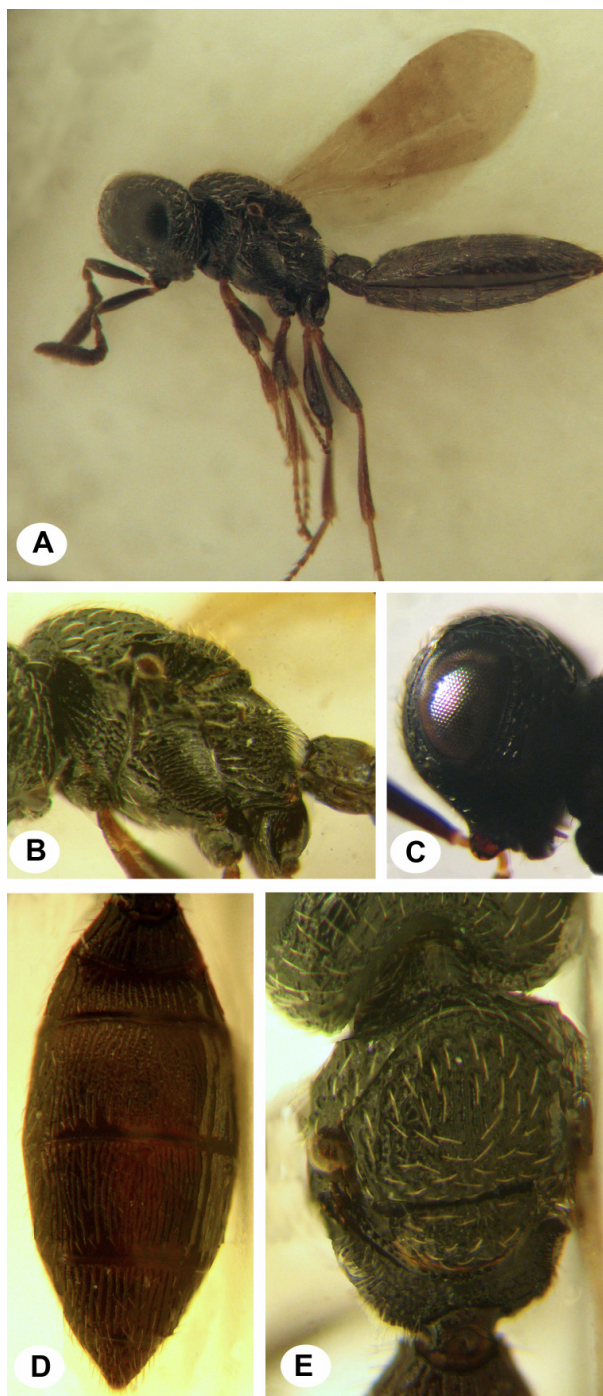
Musebeck (1972) listed following characters for the genus *Scelio*: head transverse or subquadrate; inner edge of antennal scape at most carinate apically; occiput more or less excavated; lateral ocelli close to eyes, eyes bare; maxillary palpi short, 3-segmented; labial palpi also very short and 2-segmented; mandibles rather long, curved, and bidentate, the teeth subequal; notaulices obliterated or more or less indicated but rarely sharply defined; propodeum angulate laterally behind; abdomen sessile, depressed, the lateral margins acute; six tergites present in the female abdomen and eight in the male, the last two tergites in the male very short, the last sometimes visible only from behind.

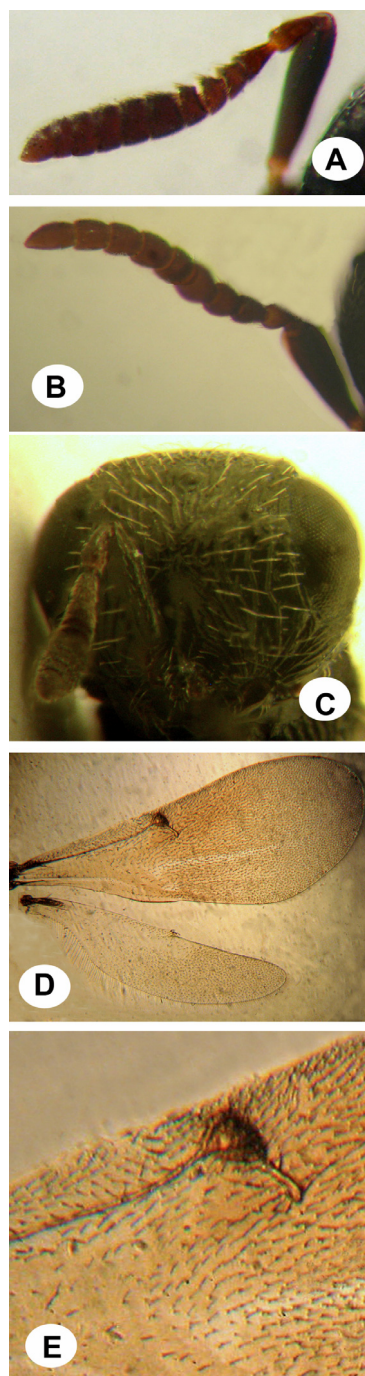
Among recently collected platygasterids wasps in East-Azərbayjan province via Malaise trap, we found 12 specimen of *Scelio*. The specimen was identified according to the keys in Kozlov (1988) and Kononova & Kozlov (2008). It was identified as *Scelio rugosulus* Latreille that is new record to Iran. Distributional data are presented according to Kozlov (1988), Popovici & Popovici (2008) and Kononova & Kozlov (2008).

### *Scelio rugosulus* Latreille, 1805 (Figs 1, 2)

**Material examined:** IRAN, East-Azərbayjan, Khosroshah, 36°58'28"N, 46°02'55"E, 1346m, Malaise trap, 07.ix.2013, H. Lotfalizadeh leg., 2♂♂ & 1♀. Same data, 02.vi.2014, 3♀♀ & 1♂. East-Azərbayjan, Basmenj, 38°01'36"N, 46°26'66"E, 1647m, Malaise trap, M. Shamsi leg., 03.viii.2014, 1♂ & 1♀. Same data, 17.viii. 2014, 1 ♀; 09.ix.2014, 1♂ & 1♀.

**Figure 1.** External morphology of *Scelio rugosulus*: A- Female in lateral view, B- Mesosoma in lateral view, C- Head in lateral view, D- Metasoma in dorsal view, E- Mesosoma in dorsal view.





**Figure 2.** External morphology of *Scelio rugosulus*: A- Female antenna, B- Male antenna, C- Head in frontal view, D- Fore and hind wings, E- Fore wing venation.

**Diagnostic morphological characters:** Body length 3-3.5mm; black colored (Fig. 1A), femora brown, tibiae and tarsi reddish-yellow, forewings brown (Fig. 1A); frons smooth along sides of antennae; antennae of female as in Fig. 1. B and male as in Fig. 1C; mesonotum in middle of pos-terior half generally, and scutellum often longitudinally rugulose; propo-

deum without angular corners; parallel carinae of abdominal tergites thick and project sharply (Fig. 1J).

**Geographical distribution:** France, Hungary, Iran (New record), Ireland, Japan, Kazakhstan, Moldova, Romania, Russia and Ukraine (Kozlov 1988, Popovici & Popovici 2008, Kononova & Kozlov 2008).

**Note:** *Scelio rugosulus* is type-species of the genus *Scelio* (Kozlov, 1988). This species may includes in the group of *pulchripennis* of *Scelio* because of having infuscate fore wing (Fig. 1A), flattened and sub-horizontal propodeum (Fig. 1F), covered with longitudinal wrinkles, without dense, adpressed pubescence laterally; short gaster, broad, with the apical tergite strongly transverse.

Two other species of the genus *Scelio*, including *Scelio flavibarbis* (Marshall, 1874) and *S. remaudierei* Ferrière, 1952 have already been recorded from Iran (Samin et al. 2011). *Scelio rugosulus* is the third species recorded here from Iran. Further studies in different parts of the country are necessary to reveal occurrence of other species.

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