

Short communication

**First report of *Bruchidius plagiatus* (Col.: Bruchidae) from Iran, feeding on a new host plant**

Y. Karimpour<sup>1\*</sup>, K. W. Anton<sup>2</sup> and M. Razmi<sup>1</sup>

1. Department of Plant Protection, Faculty of Agriculture, Urmia University, P.O. Box 165, Urmia, Iran, 2. Emmendingen, Germany.

\*Corresponding author, E-mail: y.karimpour@urmia.ac.ir

چکیده

در طی بررسی‌های مربوط به فون سوسک‌های خانواده‌ی Bruchidae مرتبط با گیاهان تیره‌ی بقولات (Fabaceae) در آذربایجان غربی، نمونه‌هایی از یک گونه سخت‌بال‌پوش از درون نیام‌های گیاه *Astragalus caryolobus* Bunge جمع‌آوری و به نام *Bruchidius plagiatus* (Reiche & Saulcy) شناسایی شد. برخی از مشخصات شکل‌شناسی و زیست‌شناسی این گونه ارائه شده است.

All known beetles in the family Bruchidae feed on seeds of about 34 families of plants but about 80% feed on seeds of the family Fabaceae (Johnson, *et al.*, 2001). Data on the European *Astragalus*-feeding *Bruchidius* species have been reviewed by Delobel *et al.*, (2004). During the study on bruchid beetles associated with Fabaceae in Wes Azerbaijan, infested seedpods of *Astragalus caryolobus* Bunge were collected in Gasemloo (Shohada) valley, 35 km south of Urmia; in mid-June 2006 and kept in laboratory conditions in the glass boxes covered by muslin. In early July, the emerged beetles were collected and identified as *Bruchidius plagiatus* (Reiche & Saulcy). This species, which is newly recorded from Iran, has also been collected on *Astragalus caraganae* Fisch. & Mey. in Armenia (Karapetjan, 1985) and reared on seedpods of *A. macrocarpus* L. in Palestine (Calderon, 1962). It is distributed in Eastern Mediterranean region and Little Asia.

Female *B. plagiatus* laid her translucent eggs on the seedpods when it was still green. The larvae feed first internally, then externally on two to three seeds, and after completion of their development spin a white cocoon within the pod. Emergence occurs through a circular hole in the pod wall.

Some morphological characters of *B. plagiatus* are as follows:  
Width 1.5-2.2 mm and length (apex of pronotum to apex of pygidium) 2.3-3.4 mm. Body oblong-oval with elytra flattened and pygidium large, always visible dorsally. Integument black. Vestiture moderately dense and recumbent, pale-greyish on pygidial disc and ventral side of body, grayish and yellow-brownish on pronotal and elytra disc, not covering

integument completely. Head short, with smooth shiny interocular carina; eyes pronounced and deeply incised. Pronotum doubled punctured, with disc irregular and sides bisinuate. Elytra short, about 1.07-1.09 times longer than their combined width, with sides nearly parallel at middle third and well visible sharp hooked protuberance at basal stria IV. Hind legs with preapical larger spine followed by three smaller spines on mesoventral margin; hind tibia with mucro moderately longer than coronal denticles.

Ten specimens of *B. plagiatu*s were deposited in Natural History Museum of Urmia University, and nine specimens in the collection of the second author.

### References

- Calderon, M.** (1962) The Bruchidae of Palestine. *Rivista di Parassitologia* 23, 207-215.
- Delobel, A., Anton, K. W. & Kergoat, G.** (2004) New data on European *Astragalus* – feeding *Bruchidius*, with description of a new species from southern Italy (Coleoptera: Bruchidae: Bruchinae). *International Journal of Invertebrate Taxonomy (Genus)* 15, 173-185.
- Johnson, C. D., Romero, J. & Raimúndez-Urrutia, E.** (2001) Ecology of *Amblycerus crassipunctatus* (Ribeiro-Costa) (Coleoptera: Bruchidae) in seeds of Humiriaceae, a new host family for bruchids, with an ecological comparison to other species of *Amblycerus*. *The Coleopterists Bulletin* 55, 37-48.
- Karapetjan, A. P.** (1985) *Zernovki (Bruchidae)*. *Fauna Armyanskoy SSR. Nasekomye zhestkroklye*. 171 pp. Akademia Nauk Arminskoy SSR, Erewan.

*Received:* 10 March 2007

*Accepted:* 29 May 2007