A NEW RECORD FOR IRAN FLOWERFLY FAUNA, BACCHA ELONGATA (FABRICIUS, 1775) (DIPTERA: SYRPHIDAE)

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ABSTRACT: Baccha elongata (Fabricius), 1775 is recorded for the first time from Iran. Three specimens were collected from Aynali forests. The related key, diagnosis characters and photos are presented.

KEY WORDS: Diptera, Syrphidae, New record, Fauna, Aynali forests, Iran.

The genus *Baccha* was described by Fabricius (1805) with *Syrphus elongatus* Fabricius, 1775 designated as the type species (Peck, 1988). This genus belonged to Syrphinae subfamily and Bacchini tribe. All species of the subfamily Syrphinae with an entirely blak scutellum are likely to belong to this tribe of four genera. The only exceptions are *Paragus* which is very distinctive, and some specimens of *Melangyna arctica* wich is included in the next trible, the Syrphini. There is generally a pattern on the abdomen consisting of pairs of colored spots of grey, yellow or orange (Stubbs and Fulk, 2002). They are, however, easily overlooked because of their frequent habit of hovering low down among vegetation or, even if above vegetation, they are inconspicuous in dappled shade. *Baccha* is a small genus including two species in palearctic region, *B. elongata* and *B. obscuripennis* that were separated on the variation in dusting on the male frons and in some apparent differences in the male genitalia.

Recently, the check list of Iran hover flies was reviewed by Dousti and Hayat (2006) which shown no record of this genus from Iran.

MATERIAL AND METHODS

The specimens were collected from wet lands having long reed beds near to wood lands in Aynali forests (Fig. 1). Aynali forests are located in west of Qaradag forests, a registered biosphere in world heritages by UNESCO since 1976 in East Azarbaijan province, Iran. This biosphere reserve situated in the north eastern Tabriz city with a distance of 112.6 km and UTM (Universal Transfer Mercator) coordinate system, X from 654517.66 to 655110.71 E; Y from 4306958.17 to 4308226.18 N and varying latitude from 1271 m to 1336 m. The specimens were identified based on valid keys such as Bei-Bienko (1988), Stubbs and Falk (2002), Ball et al. (2002), Van Veen (2004) and Speight (2006).

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RESULTS

BACCHA Fabricius, 1775

The second segment of abdomen is very narrow, in narrowest part less than half width of first abdominal segment, long and clavate. Alula not developed.

Baccha elongata (Fabricius, 1775)

Syst. entom.: 768 (Syrphus). Type-locality: "Daniae" (Denmark).

Material examined: 3 specimens (1♂, 2♀): Aynali forests; 38°53′ N 46°47′ E, 1271 m, 18 Aug. 2008 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

Diagnosis character:

Male: Frons and face black with grayish white pubescence. Vertex black and yellowish pubescent on it. Antenea brownish red and compound eye bare. Mesonotum and scutellum black. First and second legs are yellow and in third one, femur yellowish red, proximal half of tibia yellow and distal half is yellowish red. Wings in male browish transparent having very small brownish traces around cross veins and stigma, halter yellow with a brown thin stop at the top. Abdomen thin, pedunculate, with more or less distinct yellow bands on tergite 2 and 3 and other tergites are black. Body 8-10 mm. Wing length 6-8 mm (Fig. 2).

Female: the female is very similar to male with a pair small yellow spots in proximal margine of fourth tergite. Body 9.5- 10 mm. Wing length 7-7.5 mm (Fig. 2).

Note: It should be found in most districts by careful observation of sunny herbage along hedgerows or woodland margins, ride edges or in shaded spots under trees where it will often be found in dappled light. Nettle beds in sheltered, humid part of woodland are particularly favored by females and sweeping such areas will often produce specimens. Occasionally it will be seen hovering among low branches of boshes or trees and sometimes at flowers. The larvae are known to be predaceous upon a variety of ground-layer aphids.

Flowers visited: Compositae, Rosaceae and Umbelliferae, *Hedera* etc.

Distribution: Europe: from Ireland and Finland to Portugal, Spain, Italy, Bulgaria, Greece; USSR: Leningrad, Georgian, Azerbaijan, Armenian (Peck, 1988; Speight, 2008), Turkey (Sarıbıyık, 2000, 2003, 2008).

LITERATURE CITED

Ball, S. G., Stubbs, A. E., McClean, I. F. G., Morris, R. K. A., Falk, S. J. & Hawkins, R. D. 2002. British Hoverflies: an illustrated identification guide, 2nd edition, 469 pp. British Entomological and Natural History Society.

Bei-Bienko, G. 1988. Keys to the insects of the European part of the USSR. Volume V. Diptera and Siphonaptera. Part II. Smithonian Institution Libraries and the National Science Foundation Washington, D.C. 10-148.

Dousti, A. F. & Hayat, R. 2006. A catalogue of the Syrphidae (Insecta: Diptera) of Iran. J. Entomol. Res. Soc., 8 (3): 5-38.

Peck, L. V. 1988. Family Syrphidae. PP. 11-230 in Soos, A. (Ed.) Catalogue of Palearctic Diptera. Vol. 8, 363 pp. Akademiai Kiado, Budapest.

Sarıbıyık, S. 2000. Fauna of Syrphidae in Ilgaz and Isık Mountains and their vicinity (Diptera-Syrphinae). Journal of the Institute of Science and Technology of Gazi University, 13 (1): 55-70.

Sarıbıyık, S. 2003. The Evaluation of the Works on Syrphidae (Diptera) Fauna in the Western Blacksea Region. Gazi University, Kastamonu Education Journal, 11 (2): 461-466.

Sarıbıyık, S. 2008. Contributions to the Syrphidae fauna of Turkey (Diptera: Syrphidae). Entomological News, 119 (5): 501-508.

Speight, M. C. D. 2006. Species accounts of European Syrphidae (Diptera), Ferrara 2006. In: Speight, M.C.D., Castella, E., Sarthou, J.-P. and Monteil, C. (eds) Syrph the Net, the database of European Syrphidae, vol. 54, 252 pp., Syrph the Net publications, Dublin.

Speight, M. C. D. 2010. Species accounts of European Syrphidae (Diptera) 2010. In: Speight, M.C.D., Castella, E., Sarthou, J.-P. and Monteil, C. (eds.). Syrph the Net, the database of European Syrphidae, vol. 59, 285 pp., Syrph the Net publications, Dublin.

Stubbs, A. E. & Falk, S. J. 2002. British hover flies. An illustrated identification guide. Pub. The british Entomology and Natural History Sosiety, Reading, UK.

Van Veen, M. 2004. Hoverflies of Northwest Europe: identification keys to the Syrphidae. 256 pp. KNNV Publishing, Utrecht.

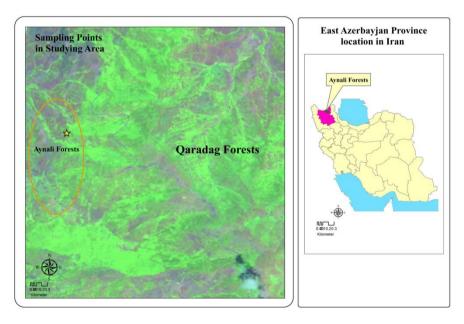


Figure 1. Location of sampling point on satellite image (SPOT) of Aynali forests.

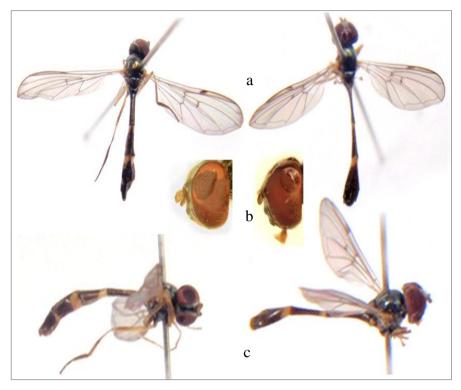


Figure 2. $Baccha\ elongata$, a: the adult at dorsal view, b: the head, c: the adult at lateral view, (right: male, left: female).