Species composition and flower visiting by Syrphidae (Diptera) in north-eastern Iran

by Raheleh Mehrabi and Axel Ssymank

Abstract. In 2006 a study of Syrphidae (Diptera) was carried out in the region of Damghan, Semnan Province of Iran, recording 17 species at five collecting sites, comprising altogether 1076 specimens. Two species, *Cheilosia cumanica* (Szilády, 1938) and *Paragus serratus* (Fabricius, 1805) are new to the Iranian fauna. Flower visiting was recorded on 11 species of plants, *Raphanus sativus* being the most commonly visited plant.

Key words. Diptera, Syrphidae, Damghan, Iran, Middle East, flower visiting.

Introduction

Our knowledge of the fauna of hoverflies (Diptera: Syrphidae) of Iran is still relatively poor compared to other countries in the region, with only a few faunistic studies (DOUSTI & HAYAT 2006). A survey of the syrphid fauna was carried out in Semnan Province in 2006 to assess the species composition in different habitats and to obtain a first idea on flower visits.

Methods and collecting sites

Collecting was carried out at five localities in the surroundings of the city of Damghan, Semnan Province (36°10'N, 54°21'E, approx. 1160 m a.s.l.), exclusively by hand netting. The collecting period covered approximately 60 days between March 2006 and September 2006. Every locality was visited 2-7 times a week, if the weather conditions were suitable for sampling.

Locality No. 1: Kela (south of Damghan) – 54°20'N, 36°03'E, 1092 m a.s.l.; arable field in a very hot and dry region with few bushes, and sparse vegetation with a halophytic character including *Anabasis* sp., *Alhagi maurorum* Medik. *(=camelorum* Fisch.*), Halocnemum strobilaceum* (Pall.) M. Bieb., *Haloxylon aphyllum* (Minkw.) Iljin, *Haloxylon persicum* Bunge ex Boiss. & Buhse, *Medicago sativa* L., *Salsola arbuscula* Pallas, *Salsola turcomanica* Litw., *Salsola* spp., *Peganum harmala* L. and *Seidlitzia florida* (M. Bieb.) Boiss.

Locality No. 2: Dashte boo (northwest of Damghan) (Fig. 1) – 54°09'N, 36°27'E, 1875 m a.s.l.; ruderal vegetation surrounded by low tree and bush vegetation. Dense species-rich vegetation with abundant flowers including many Apiaceae and Asteraceae. Plants growing in the study area included *Acantholimon cymosum* Bunge, *Acanthophyllum crassifolium* Boiss., *Achillea millefolium* L., *Agropyron cristatum* (L.) Gaertn., *Allium sp., Amygdalus sp., Artemisia aucheri* Boiss., *Atriplex leucoclada* Boiss., *Astragalus brachystachys* DC., *Berberis vulgaris* L., *Bromus briziformis* Fisch. & C. A. Mey., *Bunium* sp., *Centaurea virgata* Lam., *Cerasus incana* (Pall.) Spach., *Cirsium arvense* (L.) Scop., *Convolvulus arvense* L., *Cousinia eryngioides* Boiss., *Euphorbia humilis* C. A. Mey., *Daucus carota* L., *Festuca rubra* L., *Lactuca serriola* L., *Malva neglecta*

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