

A GENUS WITH TWO SPECIES AS NEW RECORDS FOR IRANIAN HOVER FLY FAUNA (DIPTERA: SYRPHIDAE)

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ABSTRACT: The genus *Anasimyia* Schiner, 1864 is recorded for the first time from Iran. Nine and six specimens were identified as *Anasimyia contracta* Claussen & Torp, 1980 and *Anasimyia transfuga* (Linnaeus, 1758) respectively. The related key besides their diagnosis characters and photos are provided.

KEY WORDS: *Anasimyia*, *Anasimyia contracta*, *Anasimyia transfuga*, Syrphidae, Qurigol lake, Iran.

The genus *Anasimyia* was described by Schiner (1864) with *Musca transfuga* Linnaeus, 1758 designated as the type species (Peck, 1988). This genus belonged to Milesiinae subfamily and Eristalini tribe which almost break down into two groups: the *Helophilus* group with a distinctly striped thorax (including *Anasimyia*, *Lejops* and *Parhelophilus*) and the remaining genera without strips on the thorax. However, in *Anasimyia* the build is narrow and the appearance is dark, the thoracic stripes being narrow (occasionally absent) and the grey or yellowish marking on the abdomen being restricted (Stubbs & Fulk, 2002).

Anasimyia may be treated as a subgenus of *Lejops* in the future, but there are opposing opinions. Certainly the two genera are close in a number of characteristics such as the narrow build, the double-banded hind tibia and the heavily dusted sternites. The genus has been revised by Claussen & Torp (1980) and the position in Ireland and Great Britain reviewed by Speight (1981) and Stubbs (1981) respectively. Adults will be found at their aquatic breeding sites, often in association with tall emergent vegetation.

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

MATERIAL AND METHODS

The specimens were collected from west of Qurigol lake on reed beds and bulrush using common entomological net (Fig. 1). Qurigol is a small, about 200 hectares expanse, fresh to brackish lake with associated marshes in the steppe uplands of northwestern Iran. There are extensive areas of reed beds. It is situated about 40 km East-Southeast of Tabriz city. The surrounding area is semi-arid, and there is wheat cultivation on the west and damp grasslands on the southwest. The geographical coordinates are 37° 55' N; 46° 42' to 46° 44' E. The specimens were identified based on valid keys such as Claussen & Torp (1980), Bei-Bienko (1988), Stubbs & Falk (2002) and Speight (2010).

RESULTS

Anasimyia Schiner, 1864

Diagnostic characters: Hind tibia with tow dark bands (sometimes faint), yellow in between. Antennae reddish-orange, at least in part. Sternites densely grey-dusted, unlike *parhelophilus* (Fig. 2).

***Anasimyia contracta* Claussen & Trop, 1980**

(Claussen et Torp Pedersen, 1980): Mitt. Zool. Mus. Univ. Kiel, 1(4): 4 (*Anasimyia*). Type-locality: "Denmark, WJS: Graerup Langso vest".

Material examined: 9 specimens (5♂♂, 4♀♀): West of Qurigol lake; 37°55' N 46°41' E, 1911 m, 4 Aug. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

Diagnostic characters: This is a dark species which is especially slender in the male. The species name is derived from the contracted margins on tergite 2 which are quite distinct. The markings are narrow and strongly angled hooks, but the outer limb can be reduced leaving the inner portions as small colored spots. Wing length 5- 7.25 mm (Fig. 3).

Flowers visited: white umbellifers; *Myosotis*, *Potentilla palustris*, *Ranunculus*, *Sorbus aucuparia*.

Note: Larvae are of the 'long-tailed' type, living in ponds and ditches where decaying vegetation is abundant, especially in fen (Imhof, 1979). There is a very close association with bulrush at the margin of ditches, ponds and lakes. The adults rarely more than a few meters from margins of ponds, where they fly low over the water and settle in the sun, usually on foliage of large-leaved emergent vegetation, such as *Menyanthes*; they also fly in and out of stands of sedges and reeds, making their movements very difficult to follow (Stubbs, 1981; Speight, 2010).

Distribution: Europe Sweden, Finland, Great Britain, Denmark, Netherlands, Belgium, German Federal Republic, Poland, Hungary, Ireland; Scandinavia south to the Mediterranean basin; USSR: Estonian, Latvian, Byelorussian, Ukrainian (Peck, 1988; Ball & Morris, 2000; Speight, 2010).

***Anasimyia transfuga* (Linnaeus, 1758)**

(Linnaeus, 1758): Syst., Ed. 10, 1: 594 (*Musca*). Type-locality: "Svecia" (Sweden).

Material examined: 6 specimens (4♂♂, 2♀♀): West of Qurigol lake; 37°55' N 46°41' E, 1911 m, 4 Aug. 2009 (Collected by S. Khaghaninia, Deposited at Insect Museum of Tabriz University).

Diagnostic characters: This dark hoverfly has steeply inclined hooked marking, like a tick, with the inner limb strongly oblique. Similar marking are found in *contracta*, but *transfuga* has the lateral margins of tergite 2 straight. Wing length 6.5- 7 mm (Fig. 4).

Flowers visited: white umbellifers, *Caltha palustris*, *Ranunculus repens*, *Sonchus arvensis*, *Sorbus aucuparia*, *Taraxacum*.

Note: Accumulated data now show it to be less frequent than *contracta* and, though it can occur alongside that species, it shows no obvious association with bulrush, preferring the pollen of other tall emergent pond-side vegetation such as bur-reeds (*Sparganium* sp.) and sweet-grass, the adults, settling on emergent stems etc., often where the water is up to 1m deep (Imhof, 1979; Speight, 2010).

Distribution: Europe: Sweden, Finland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Hungary, Norway, Ireland, Czechoslovakia, Austria, France, Yugoslavia, Romania, Turkey, USSR: Estonian, Latvian, Lithuanian, Russian, Byelorussian, Ukrainian, Moldavian, Georgian, Azerbaijan, Armenian, as far as Southern parts of Central Siberia (Tuva) (Peck, 1988; Ball & Morris, 2000; Reemer & Smit, 2007; Saribyyk, 2008; Speight, 2010).

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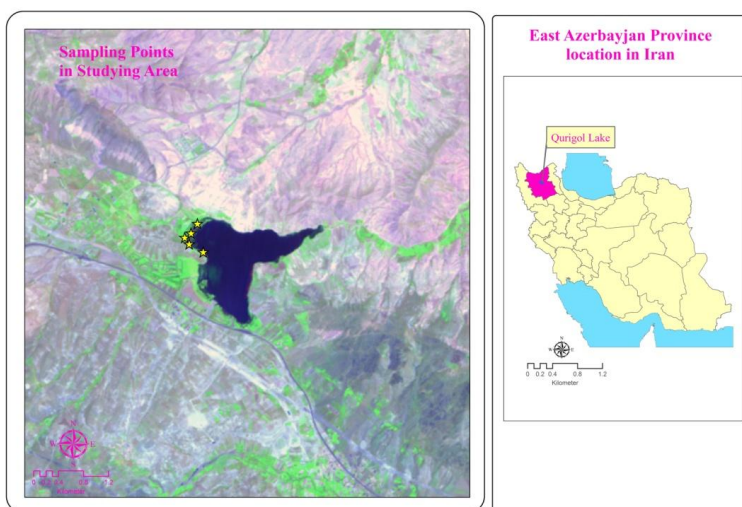


Figure 1. Location of sampling points on satellite image (SPOT) of Qurigol lake environment.

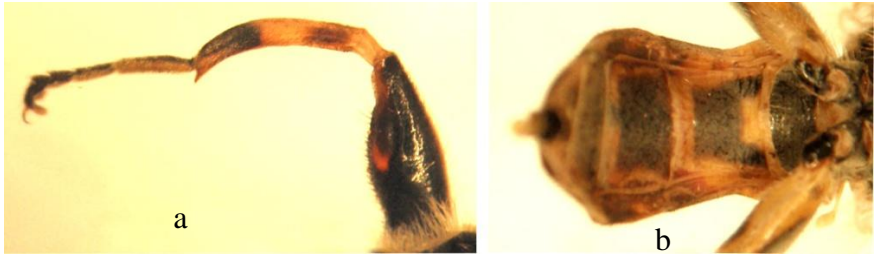


Figure 2. *Anasimyia* Schiner, 1864, a: hind leg, b: abdomen; sternal view.

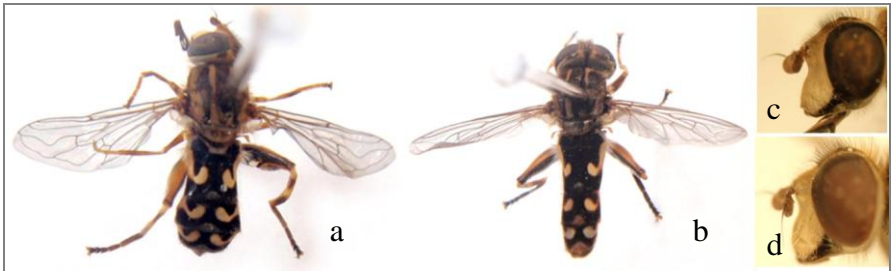


Figure 3. *Anasimyia contracta*, a: male; dorsal view, b: female; the same view, c and d: the head; female and male at lateral view.

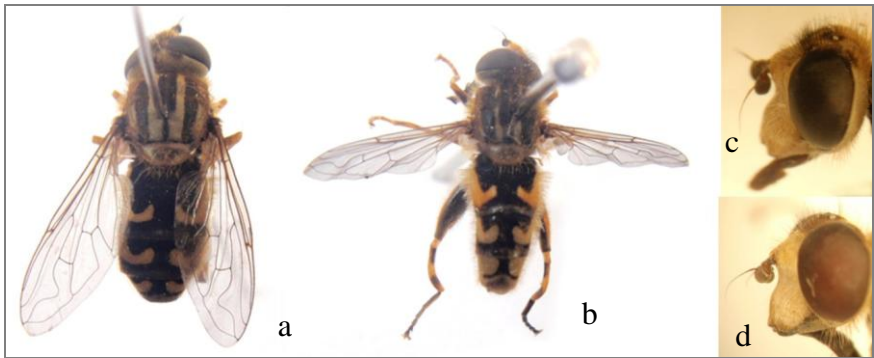


Figure 4. *Anasimyia transfuga*, a: male; dorsal view, b: female; the same view, c and d: the head; female and male at lateral view.