

On *Zygaena* Fabricius (*Zygaenidae* from Fars, south Iran *)

TOMMASO RACHELI & CLAS M. NAUMANN

Via G. Valmarana 86, I-00139 Roma Italy & Universität Bielefeld, Postfach 8640, D-4800 Bielefeld, Germany

Up to 1975 the genus *Zygaena* F. in Fars was known on the basis of the papers by Kollar (1850) and Reiss (1938), who reported the collections made by Kotschy and Fred Brandt, respectively. More recently, papers by Wiltshire (1952, 1968), Holik (1958) and Ebert (1974) appeared. However, these papers have not covered the genus *Zygaena* thoroughly. Tremewan (1975) gave an account of *Zygaena* for the whole Iran, including Fars, with very interesting notes mainly on early stages.

This is a preliminary report based on field observations of the senior author.

Collecting took place in the province of Fars; the following are the most important biotopes visited: a) Dasht-e-Arzhan biotope n^o1, 2100m, 80 km SW of Shiraz. It is characterized by small ravines, the sides of which are covered with *Astragalus* bushes. b) Dasht-e-Arzhan biotope n^o2, 2200 m, approx. 10 km far from biotope n^o1. It is a hilly spot, covered with oak trees and rather humid. Here five species of *Zygaena* have been observed and Rhopalocera were abundant numerically and as number of species. c) Kuhenjan, 1900 m, approx. 60 km S of Shiraz. An arid, steppe biotope with *Eryngium* plants. *Zygaena freda* Reiss is the only *Zygaena* observed here. d) Qader Abad Pass, 2100 m, approx; 120 km NE of Shiraz. *Z. cyrus xerxes* and *Z. manlia* were observed in a hollow covered with *Eryngium* bushes. e) Pass NE of Sarvestan, 2000 m, approx. 80 km SE of Shiraz. Tall umbelliferous plants were flowering together with *Astragalus* sp. and other thorny bushes. *Z. saadi* and *Z. chirazica* were found. An account of the collected *Zygaena* is given below.

Zygaena (Agrumenia) escalerai saadi Reiss, 1938. The flight of this species is close to the ground and usually slow; it is found often at rest on *Marrubium crassidens* (Labiatae) or visiting *Astragalus* bushes, as already stated by Tremewan (1975). It has been observed that the populations of *Z. escalerai* are predominantly yellow in the west of the country and red in the east. We follow Alberti (1976) in considering *Z. saadi* as a subspecies of *Z. escalerai* Poujade, 1900.

Zygaena (Agrumenia) cyrus xerxes Tremewan, 1975. Several specimens from the type locality, Qader Abad Pass, have been collected. The study of the genitalia and the pattern has shown that this taxon is not conspecific with *Z. brandti* Reiss, 1937, as observed also by Tremewan (1977). The flight is close to the ground and quite similar to that of *Zygaena escalerai saadi*.

*) Read by T. Racheli at the 1st European Congress of Lepidopterology.

Zygaena (Agrumenia) chirazica Reiss, 1938. This species has always been found flying with *Z. escaleraei saadi*, but it was much scarcer. Its resting plants are *Pterocephalus persicus* (Dipsacaceae) and *Marrubium crassidens* (Labiatae). On the wing, it was very hard to distinguish this species from *Z. escaleraei saadi*.

Zygaena (Mesembrynus) seitzi Reiss, 1938. This species occurred, very localized, in Dasht-e-Arzhan biotope n^o2. The specimens usually sat inside the bushes of an *Astragalus* sp. of the subgenus *Tragacantha*; here, specimens in copula and ♀♀ laying eggs were observed. *Z. seitzi* flies for only half an hour in the late afternoon and the ♂♂ buzz around the bushes of *Astragalus* looking for the ♀♀. This unusual flight period might be responsible for the few records of this species, as reported by Wiltshire (1968) and Tremewan (1975). Wiltshire (1952) states that the food plant of *Z. seitzi* is *Prangos ferulacea* (Umbelliferae). If it will be shown that *Z. seitzi* feeds also on *Astragalus* (Labiatae), this is of extreme importance for the reconstruction of the phylogeny of the genus *Zygaena*.

Zygaena (Mesembrynus) haematina Kollar, 1850. Only a single male collected in Dasht-e-Arzhan, biotope n^o2. It is practically identical in pattern with the holotype, stored in the Wien Museum.

Zygaena (Mesembrynus) fredii Reiss, 1938. Found only in Kuhenjan Pass, rarely resting on *Eryngium*, most of the specimens were seen flying very fast, during late afternoon. Batches of eggs have been often observed underneath the leaves of *Eryngium*. Its behaviour is reminiscent of that of *Z. seitzi*. Comparing this series of specimens with the typical material of *Z. fredii* and of *Z. seitzi escaleraiana* Holik, 1958, we found that these two taxa are conspecific.

Zygaena (Mesembrynus) manlia Lederer, 1870. Found only in Qader Abad Pass together with *Z. cyrus xerxes*. Nearly all specimens were found resting on *Eryngium* or on blade of grass; a few specimens have been observed flying heavily and lazy. This population of *Z. manlia* can be referred to the taxon, from the province of Esfahan, described as *Z. excellens isfahanica* Tremewan 1975, which we consider conspecific with *Z. manlia*.

Zygaena (Mesembrynus) cambysea hafis Reiss, 1938. Only a few specimens found in Dasht-e-Arzhan biotope n^o2. This species was bound to small open areas within the oak forest and it has always been observed flying.

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Jahr/Year: 1979

Band/Volume: [2](#)

Autor(en)/Author(s): Racheli Tommaso, Naumann Clas M.

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