Naturalista sicil., S. IV, XLIV (1-2), 2020, pp. 281-284

DOI: https://doi.org/10.5281/zenodo.4095359

BREVI NOTE / SHORT NOTES

Andrea Corso

SOME NOTES OF THE STATUS AND BIOLOGY OF *CHRYSIS EXSULANS* DAHLBOM, 1854 (*Hymenoptera Chrysydidae*) IN THE ISLAND OF LAMPEDUSA (SICILIAN CHANNEL)

Note sullo status e la biologia di Chrysis exsulans *Dahlbom, 1854 nell'isola di Lampedusa (Canale di Sicilia)*

Chrysis exsulans Dahlbom, 1854 is a Hymenoptera Chrysididae belonging to the group of *Chrysis ignita* Linnaeus, 1758, of which the nominotypical subspecies is found in the North Africa (Rosa & Xu, 2015; Agnoli & Rosa, 2020). The first records for Europe were obtained at the island of Lampedusa (Pelagie islands, Sicilian Channel, Italy), where 26 specimens were collected on 24-25.II.1995 at Vallone della Forbice (Arnone & Romano, 1995; Agnoli & Rosa, 2020). Arnone & Romano (1995) however, cited an additional record at Vallone Imbriacola regarding 14 specimens from the same locality on 18-20.V.1987.

Since then, very few if anything were the information published about this fascinating little Chrysididae at Lampedusa. In this short note I report some brief comments in order to update the status of the species in the island of Lampedusa, giving information on its distribution and its biology, including some new findings. In the last fifteen years (2005-2019), Lampedusa and Linosa were visited annually by a group of birdwatchers (MISC) in autumn and spring. I also visited Lampedusa on my own in January, February, March, June and July several times during 1997-2019. For further details see Corso (2020). During the visits to the Pelagie islands, that totalized more than two years of field researches, we walk all around Linosa and Lampedusa on a daily base (Linosa was visited and surveyd more extensively though): the main attention was always devoted to bird migration and to dragonflies, but search for malacofauna and entomofauna had also a relevant part. During these visits, *Chrysis exsulans* was recorded regularly almost at any visit, starting from October 2010 (see further) (Figs. 1, 2). The species was observed always while creeping among either the long lines of dry walls (where it is easily spotted) and/or over the rocky lime stones area of Lampedusa (Fig. 3). The counting regarded from 10 (early May) up to 50 imagoes (October-November) per day of study, with an average of 25 imagoes. As many as 200 imagoes were counted in 12 days in November 2015 and October-November 2016 for example, although it could not be excluded that the counting of some close in searched areas regard the same specimens moving from one site to the next one.

However, up to 20 imagoes were simultaneously counted along the same dry wall. I observed no less than 7 imagoes also in January 2011 at Vallone Imbriacola (1-2.I.2011), as well, during every visits in February and March imagoes were always observed. No adults were

Fig. 1 — Adult *Chrysis exsulans* Dahlbom, 1854 at Lampedusa Island (Is. Pelagie, Sicilian Channel, Italy) 29.X.2012.

Fig. 2 — Adult *Chrysis exsulans* Dahlbom, 1854 at Lampedusa Island (Is. Pelagie, Sicilian Channel, Italy), 29.X.2012.

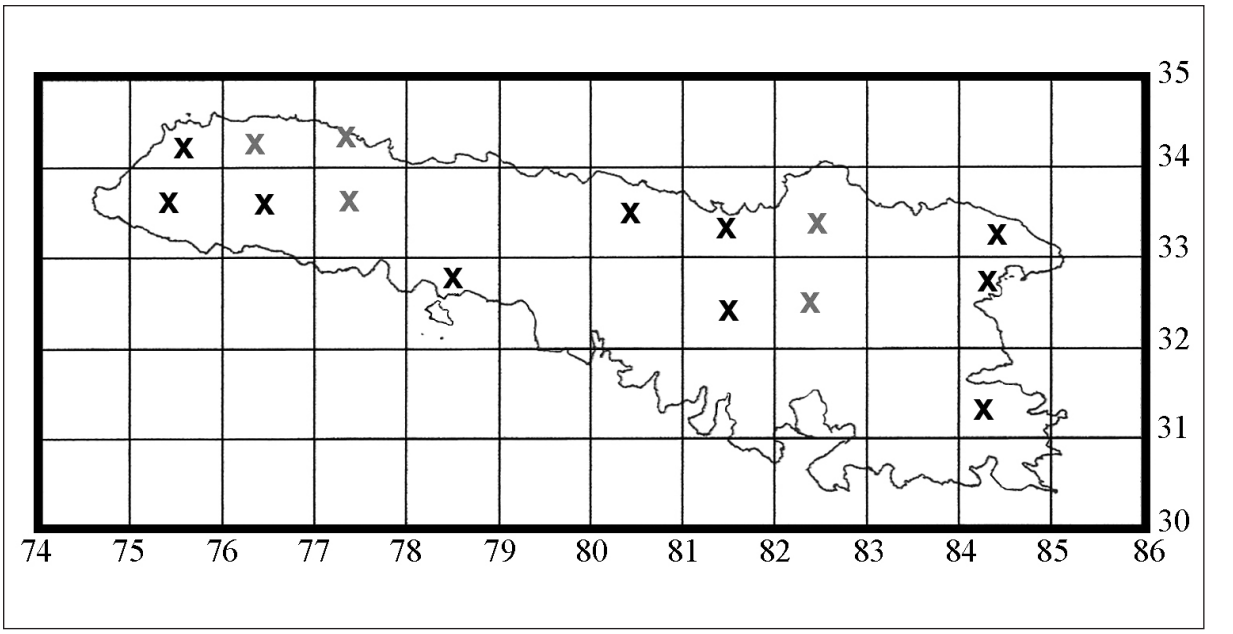

Fig. 3 — Distribution of *Chrysis exsulans* Dahlbom, 1854 at Lampedusa Island (Is. Pelagie, Sicilian Channel, Italy) according to bibliographic and personal data. Grey X indicates the sites with the highest number of adults counted during this study.

ever observed in July, while only 1-5 were recorded in late May-early June. The last date of observation in autumn was obtained on 30.XI.2016. Unfortunately, no later visit were made at Lampedusa to check whatever adults could be found overwintering. ARNONE & ROMANO (1995) report that the species has an extremely early appearance and a typically spring phenology and AGNOLI & ROSA (2020) consider the species as univoltine. No other species of Chrysididae were ever recorded in February or late November at Lampedusa and Linosa (ARNONE & ROMANO, 1995; pers. obs.), for example *Chrysis leachii* Shuckard, 1827 that was observed only in summer (ARNONE & ROMANO, 1995) and as late as mid September (pers. obs.).

As seen, it was regularly found, and with even more conspicuous populations in autumn-winter more than in spring; thus, the species could rather have an autumnal phenology, overwintering with spring-summer activity or, as an alternative it could be bivoltine.

Further targeted study in winter would eventually solve these questions, but up to date its phenology, compared to what until now reported in literature, should be updated.

Acknowledgements – I wish to thank my best friends and usual companions in the field Ottavio Janni, Michele Viganò, Lucio Maniscalco, Raimondo Finati and Igor Maiorano (MISC) for help during this research as all the other at Pelagie islands and abroad. Maurizio Pavesi is warmly thanked for the first confirmation of the identification of the first collected specimens at Lampedusa.

REFERENCES

AGNOLI G.L. & ROSA P., 2020. *Chrysis exsulans* Dahlbom, 1854. In: Chrysis.net Database of the Italian Chrysididae, interim version 23 April 2020. http://www.chrysis.net/database/.

ARNONE M. & ROMANO M., 1995. Arthropoda di Lampedusa, Linosa e Pantelleria (Canale di Sicilia, Mare Mediterraneo). Hymenoptera, Chrysididae. *Naturalista sicil.*, 19 (suppl.): 777-783.

CORSO A., 2020. New Italian records of *Calosoma* (*Caminara*) *olivieri* (Coloptera Carabidae) for the islands of the Sicilian Channel. *Naturalista sicil.*, 44: 247-250.

ROSA P. & XU Z. F., 2015. Annotated type catalogue of the Chrysididae (Insecta, Hymenoptera) deposited in the collection of Maximilian Spinola (1780–1857), Turin. *ZooKeys*, 471: 1-96.

Indirizzo dell'autore — A. CORSO, Via Camastra,10 – 96100 Siracusa (SR) (I).