



xxi

EUROPEAN
CONGRESS OF
LEPIDOPTEROLOGY

BOOK OF
ABSTRACTS

Natural enemies of *Euphydryas aurinia provincialis* (Boisduval, 1828)

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Euphydryas aurinia (Rottemburg, 1775) is one of the most seriously threatened European butterflies, suffering a severe decline in most countries. Although there are several studies on its ecology and biology, the factors affecting its mortality and the role of natural enemies on its population dynamics are yet not fully known.

Larval survival plays a key role in establishing butterfly population size and distribution range; thus, knowing the sources and variation in larval mortality is essential to understand and predict population dynamics. The larval mortality of *E. aurinia* is mainly attributed to abiotic factors, parasitoids and predators.

In this paper, we present new data on natural enemies of caterpillars of a population of *Euphydryas aurinia* spp. *provincialis* in Central Italy. In the study area, females oviposit on several plants, including *Gentiana cruciata*, and caterpillars live in a communal silken web at I-III larval instar.

During July-August, we photographed in the field and/or collected on sight any potential predator that visited the larval webs on gentians. We visited the larval webs during day-light and every 2-3 hours per day along the same transect path; this was marked by numbered flags, located at each of the host plants. For each visitor observed, we recorded the date and time of the observation and took notes on prey-predator interaction.

Various arthropods, from spiders to insects, have been recorded frequenting the larval web of *E. aurinia*. Among insects, the greatest number of observations was on hymenopterans and dipterans. Of these, females of the tachinid *Erycia furibunda* stayed at butterfly larval webs to parasitize the I-III instar larvae. They visited a single larval group repeatedly through time, acting as a potential and substantial mortality factor for our endangered study species.

Key words: butterfly, larvae, predators, parasitoids