* Callimorpha quadripunctata Poda, 1761

Nomenclature

Callimorpha quadripunctaria Poda, 1761

Phylum: Arthropoda Class: Insecta Order: Lepidoptera

Family: Arctiidae; Subfamily: Callimorphinae)

Synonyms

Euplagia quadripunctaria (Poda, 1761) Panaxia quadripunctaria (Poda, 1761)

Callimorpha hera L., 1767

Infra-specific taxa

Callimorpha quadripunctaria rhodosensis (Daniel, 1953) Callimorpha quadripunctaria fulgida Oberthür, 1896

The species Callimorpha quadripunctaria is widespread in Europe, in the Near East and in North Africa. The following data refer to the subspecies Callimorpha quadripunctaria rhodosensis (Daniel, 1953) which is endemic to the island of Rodos, Greece and which is considered to be threatened.

Identification

A description with photographs of the egg, larva, pupa and imago can be found in Elger (1969).

Biology

Habitat

Mainly in evergreen riparian forests and maquis. Found in narrow valleys bordered by mountains or hills with steep sides. At the bottom of the valleys run streams with water during the whole of the year. The valleys are fully covered with trees and shrubs. This vegetation, together with the steep slopes, does not allow the sun to pass through during most of the day. All habitats are characterized by a lower temperature and higher humidity compared to the conditions outside the valleys. During summer, the insects migrate to the most humid and cool valleys of the area where they aestivate. They disperse to their original valleys again in the autumn in order to oviposit. During the summer, the insects are found at high densities (up to 50-100 ind./m²) on the trunks, branches and leaves of trees and on humid rocks, migrating during the night towards higher positions in the canopy.

Life history/food and feeding

Oviposition occurs in the autumn, probably from late September until well into November at various suitable sites. The development of the eggs lasts from 8 to 15 days. The larval stage lasts six months. There are five moults. The pupal stage lasts about one month. The adults emerge around May and migrate until June to the most humid and cool sites of the region, where they aestivate without feeding. During September they mate, after which they disperse to oviposit and then die.

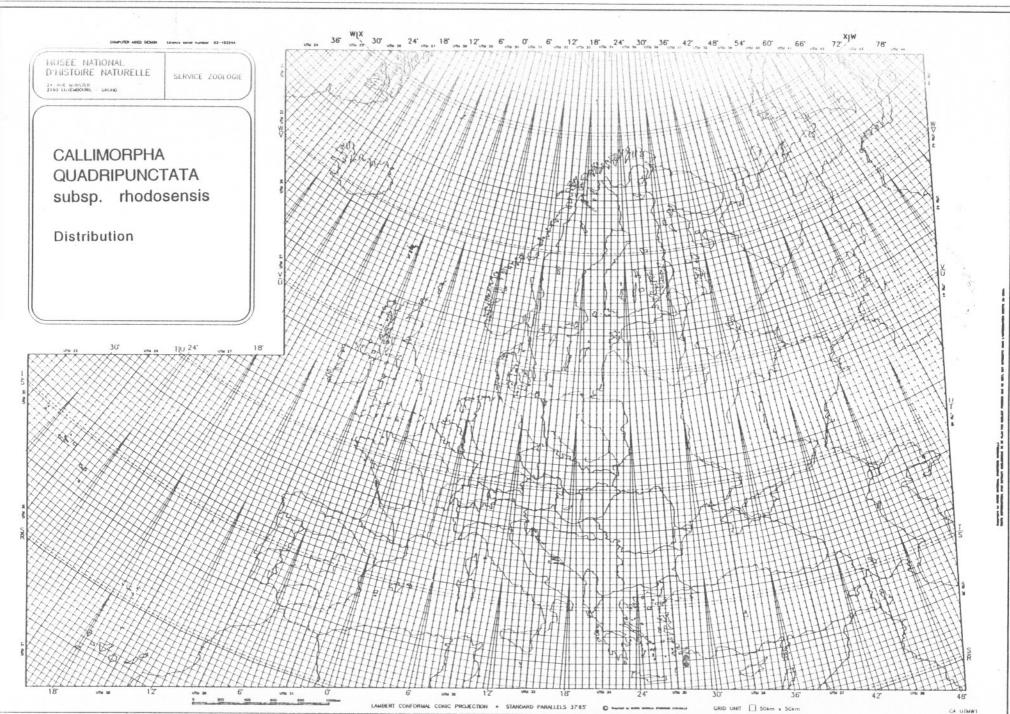
The larvae feed on a variety of plants: Rosaceae, Platanus orientalis, Vitis, Morus, Robinia, Castanea, Pisum sativum and many others.

There are no significant predators of the adults due to the presence of repellent chemicals. There are no data available on larval predation and mortality.

Range

The subspecies *Callimorpha quadripunctaria rhodosensis* is endemic to the island of Rhodos, Greece. In other parts of Greece the species has been recorded everywhere on the mainland and in all the island groups: Ionian, Aegean and Crete. On several sites there are no post-1950 records because of under-exploration.

P.J. van Helsdingen, L. Willemse & M.C.D. Speight (eds.), Background Information on Invertebrates of the Habitats Directive and the Bern Convention. Part I - Crustacea, Coleoptera and Lepidoptera. Council of Europe. Nature and Environment No 79, 1996



Status

Vulnerable. The subspecies *Callimorpha quadripunctaria rhodosensis* on Rhodos in Greece is threatened by the disturbance caused by the large number of tourists massing in the Petaloudes valley to observe the insects. Similar problems are encountered with the other significant populations of the species such as the island of Paros.

Conservation

Actions should be taken to ensure a limited access to the aestivation sites of the species and the establishment of a code of conduct for visitors which will limit the disturbance. The primary habitats of the species where it spends its life during the winter must also be protected from disturbance. Critical habitat parameters such as climatic conditions and the presence of clean running water must be conserved. Better understanding of the habitat requirements, especially of the larval stage, is needed.

Key sites

Rhodos island around the Petaloudes valley.

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