Danaus plexippus (Linnaeus, 1758) new for Lanzarote (Canary Islands) (Lepidoptera, Nymphalidae)

by

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Zusammenfassung: Es wird vom Auftreten des amerikanischen Monarchfalters (Danaus plexippus) auf Lanzarote (Kanarische Inseln) berichtet. Die Population wurde 1999 an einer einzigen Stelle auf der Insel, dem Barranco de Chafaris bei Haria, entdeckt. Ihre trophische Basis bestand aus eingeschleppten, nicht heimischen Pflanzen. Die Raupen fraßen ausschließlich an Gomphocarpus fruticosus (Asclepcidaceae), insbesondere die frisch geschlüpften Imagines fanden sich zur Nahrungsaufnahme an den Blüten von Eryobothria japonica (Rosaceae) ein.

D. plexippus, originally a nearctic species, has been able to disperse over large parts of the earth during the last two centuries. It reached remote areas such as New Zealand and Australia in 1840 and 1870 respectively, and the Azores in 1864 (Baez, 1998). This expansion is based on the superior flying ability of the species. However, without human activity being responsible for the introduction of the larval food plants, all these dispersals would have failed. The species was first recorded from the Canary Islands in 1887 and has since settled on all islands except Lanzarote. Here we report a population of the butterfly from Lanzarote discovered in the Barranco de Chafaris in October 1999 and the only place on Lanzarote where the species has been found.

Barrancos are deep valleys that only temporarily conduct water and are characteristic of the Canary Islands. The Barranco de Chafaris is situated south of the small town of Haria on the eastern side of the island (fig. 1). It is one of the largest barrancos in Lanzarote characterised by relatively high humidity due to the supply with groundwater leaking out of the surrounding rock. Because of this, the vegetation is better developed throughout the year than in any other region of the island. The barranco also exhibits rather natural conditions, since it is no longer subject to agricultural use. Besides native succulents (Euphorbia obtusifolia, Kleinia neriifolia) and a large number of endemic herbs flowering in springtime, several exotic plant species (Ficus carica, Punica granata) grow, which were introduced earlier when agricultural use was still being made of these parts of the barranco.

Caterpillars of D. plexippus were found in large numbers, feeding exclusively on the leaves of Gomphocarpus fruticosus (Linnaeus) (Asclepidaceae), which is the main food plant of the species. A large number of small bushes of Gomphocarpus, which is also a foreign introduction to the Canary Islands, grow dispersed all over the barranco. Pupae and hatching imagines were observed. Immediately after hatching the butterflies were found feeding at the flowers of another introduced plant species, Eryobothria japonica (Thunb.) Lindley (Rosaceae), only one specimen of which exists at this location. During several visits, surveys revealed a population size of 10 and 15 adult specimens simultaneously occurring in the barranco. This is an unexpectedly low concentration when compared with the large number of caterpillars observed. It is assumed that most specimens regularly leave the barranco and fly away.
Fig. 1: Location of larval stages of *D. plexippus* on Lanzarote.

Literature


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