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FOODPLANTS OF *CALLOPHRYS* (*INCISALIA*) *IROIDES*

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In contrast with other members of the subgenus, which are restricted in host selection, *I. iroides* (Boisduval) is polyphagous. The diverse host plants credited to this West Coast butterfly are summarized by Clench (1961), who indicates some of the early records are doubtful.

Recorded foodplants for *iroides* include "young apples" (*Malus*, Rosaceae) in British Columbia (Bethune, 1904) and both *Ceanothus* (Rhamnaceae) and *Cuscuta* (Polemoniaceae) in southern California (Comstock and Dammers, 1933). Field oviposition was observed and larvae reared on *Cuscuta*, a leafless, parasitic plant which lacks chlorophyll. Clench also lists *Gaultheria* and *Arbutus* (Ericaceae) as hosts but does not cite the original source of these records.

Recent investigations during California Insect Survey activities confirm use of two of these foodplants in central and southern coastal California and have disclosed the use by *I. iroides* of *Chlorogalum pomeridianum*, a monocotyledenous plant in the foothills of the Sierra Nevada.

A nearly mature larva was collected on *Arbutus menziesii* at China Camp, Marin County, June 3, 1964, from which an adult *iroides* was reared, emerging on April 19, 1965. *Ceanothus* probably is commonly used by *iroides* over much of its range. One larva was swept from *C.*

cuneatus near Middletown, Lake County, on May 14, 1966. It fed on the green fruit of this plant in the laboratory prior to pupation in mid-June. Emergence did not occur, but a fully developed adult was dissected from the pupal shell in May, 1967. Additional larvae were taken on an unidentified species of *Ceanothus* at the north end of Casitas Reservoir, Ventura County, on March 15, 1967, by P. A. Opler. One *iroides* emerged April 16, 1967, suggesting, as did Comstock and Dammers' observations, that populations in southern California develop two spring generations.

Six larvae of varying ages were found on *Chlorogalum pomeridianum* (Liliaceae) about two miles south of Grass Valley, Nevada County, California, on July 3, 1967. They were located on lateral branches in the spreading inflorescences, feeding on the flowers and buds. Pupation occurred by late July and adults emerged April 21 and May 15, the following year.

Incisalia iroides was early reported to feed on *Sedum* (Crassulaceae) in California. Comstock (1927) states that the larva and pupa were described by Henry Edwards (1878) from this plant. Possibly this record refers to *I. fotis* (Strecker), which is represented by a recently rediscovered *Sedum*-feeding race near San Francisco, where Edwards did much of his work. Adults of the two butterflies are similar in appearance.

It is curious that *I. augustinus* (Westwood) of the eastern United States is restricted to Ericaceae (Cook & Cook, 1904, 1906; Clench, 1961), yet is considered by Clench to comprise with *iroides* a single widespread, polytypic species. Other workers have treated *augustinus* and *iroides* as closely related species, each with its own subspecific diversity (e.g., dos Passos, 1964). Perhaps further data on host selection by the various races of this complex will help clarify taxonomic relationships.

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