EXTENSIONS OF RANGE AND A NEW HOST PLANT OF PHILOTES SPECIOSA

(Lepidoptera: Lycaenidae)

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The capture of a specimen of *Philotes speciosa* (Hy. Edw.) by Mr. William Hedges of Spring Valley on March 8, 1959 at Sweeney Pass, fifteen miles north of Jacumba, San Diego County, is a noteworthy extension of range. This record came to my attention too late in 1959 to permit exploring the area for additional specimens.

On March 11, 1960 Mr. O. E. Sette of Los Altos, California, and the writer spent some time in scouting Sweeney Pass, but were unsuccessful in finding the insect despite ideal weather conditions. However, on March 15, 1960, on our return from a collecting trip to Arizona, we stopped at the bottom of In Ko Pah Gorge east of Jacumba, where Mr. Sette collected two freshly emerged specimens near the thousand foot elevation marker on U. S. Highway 80. This location is approximately thirty miles west of El Centro in western Imperial County. An intensive search of the canyon disclosed no additional specimens.

On March 16, a trip to this spot was made in company with Mr. Hedges, and in two hours, thirteen specimens including eight females were taken, leaving no doubt that this species is established well south of the recorded range in the Mojave Desert.

The larval foodplant in the Mojave Desert was found to be Oxytheca perfoliata T. and G. by Comstock and Dammers, but this plant is absent at Sweeney Pass and at In Ko Pah Gorge. The insect semed to be associated with a small species of annual Eriogonum in the gorge and here on April 2, 1960 a female was observed ovipositing on the involucres of the flowers of this plant. Mr. Oscar F. Clark of Riverside, Calif. has kindly identified this plant as Eriogonum reniforme Torr. and Frem. A careful search disclosed several more eggs, and at Sweeney Pass ova were found abundantly on this same plant as well as at Mountain Palm Springs a few miles north of there where speciosa was flying in large numbers.

On April 9, 1960 the insect was found in abundance in the Kramer Hills near Boron in San Bernardino County where

females were observed ovipositing on the terminal involucres of Oxytheca perfoliata. However, two days later at a location south of Rabbit Dry Lake in Lucerne Valley, Mr. John Montgomery of Redwood City, Calif. and the author each took a single specimen of P. speciosa where no Oxytheca could be found. A search of E. reniforme plants in the area disclosed several eggs, hence this plant appears to be a suitable host in the Mojave desert area also.

Comstock and Dammers have recorded the curious larval habit of feeding only on the small fleshy points which arise from the stem around the leaf junctures on O. perfoliata. Since these points are lacking on E. reniforme the larvae probably feed on the floral parts but there was no opportunity to verify this.

This choice little blue was described by Henry Edwards in 1876 from a single specimen taken by R. H. Stretch at Havilah, Kern County, California. Comstock and Damners have recorded captures in Upper Mint Canyon, Los Angeles County; from the lower Mojave Desert near Victorville; and the "Box S" Ranch in San Bernardino County, as well as the Randsburg area of eastern Kern County.

Dr. R. H. T. Mattoni of Los Angeles, an authority on the Philotes, has kindly verified identification of the specimens reported herein, and has also added a record of a single specimen from Maricopa, Kern County, and captures in the vicinity of Little Rock, Los Angeles County where Oxytheca trilobata Gray appears to serve as the foodplant. Mr. Robert Langston of Berkeley has shown me a fresh male specimen captured Apr. 9, 1960 west of Lone Pine in Inyo County on Tuttle Canyon Road in the Alabama Hills.

The discovery of this butterfly in the southwestern edges of the Colorado desert indicates that it should extend into adjacent northern Baja California which offers very similar habitats, and from whence *E. reniforme* has been recorded. It may extend onto the Colorado Desert and perhaps into western Arizona where Oxytheca perfoliata grows.

It has undoubtedly escaped the observation of experienced collectors, either because it is difficult to see, flying as it does close to the ground over highly reflective surfaces in the intense desert sunlight, or because it has been mistaken for the ubiquitous *Brephidium exilis* Bdv. Indications are that collectors might expect to discover colonies over a much broader range than is presently known, but that it may require special diligence to locate them.

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