

Systematics of *Schinia cupes* (Grote) complex: Revised status of *Schinia crotchii* (Hy. Edwards) (Lepidoptera: Noctuidae: Heliiothinae)

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Abstract

The revised status of *Schinia crotchii* is based on differences in male and female genitalic structures and distribution of larval host plant. *Schinia navarra* Dyar remains a synonym of *S. cupes* (Grote). Genitalia of both sexes of *S. crotchii*, *S. cupes*, and *S. deserticola* Barnes and McDunnough are described and illustrated for the first time. Distributions of larval hosts of both *S. crotchii* and *S. deserticola* are mapped and compared with adult moth distributions.

Key words: systematics, genitalia, morphology comparison, host plant, *Calylophus berlandiera* Spach var. *berlandiera*, *Camissonia claviformis*

Introduction

We are currently preparing a fascicle on the Noctuidae subfamily Heliiothinae for the “Moths of America North of Mexico” series. Several projects must be resolved before this fascicle can be completed. One of these is a phylogeny of *Schinia*, the most diverse genus in the subfamily, currently with 112 species (Hardwick 1996). We have discovered taxonomic problems within several species complexes that must be resolved before a phylogeny can be constructed. The most efficient way to treat such a large genus is to define and revise species groups within *Schinia* based on morphological characters within the context of a phylogeny. This paper addresses one of these species complexes.

During routine dissections of *Schinia cupes* (Grote), as defined by Hardwick (1996), it was discovered that the large hair pencil on the second sternite of the male was either