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A NEW SUBSPECIES IN THE *CERCYONIS MEADI* GROUP (SATYRIDAE)

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Cercyonis meadi (Edwards) is a rare species in collections, due partly to the scattered and isolated geographic distribution of its populations in the Rocky Mountain states and the inter-mountain West. The senior author has accumulated extensive series of this species from all areas, and a full report of the species' biology, variation, and distribution will be published shortly in a comprehensive treatment of the genus *Cercyonis*.

A unique new subspecies of this red-patched *Cercyonis* was discovered by the authors in the San Luis Valley of southern Colorado, in late summer of 1964. This ecologically strange basin is situated at above 7,500 feet elevation, yet is extremely arid and unforested, with saltbush (*Atriplex*) the dominant vegetation. This habitat is quite different from the usual coniferous forest associations of typical *Cercyonis meadi meadi* (Edwards) and *C. meadi mexicana* (Chermock), and the San Luis Valley butterfly is equally distinct. In order to make the name available for inclusion in a forthcoming popular book, this subspecies is described here.

Cercyonis meadi alamosa Emmel & Emmel, new subspecies

Holotype, male. Expanse, 39.3 mm. Forewing length, 21.2 mm. *Forewings, superior surface*: Dull brown, with a russet red patch around the two forewing ocelli. Both ocelli pupilled with white scales. *Hindwings, superior surface*: Dull brown, with well-marked, pupilled black ocellus at anal margin. *Forewings, inferior surface*:

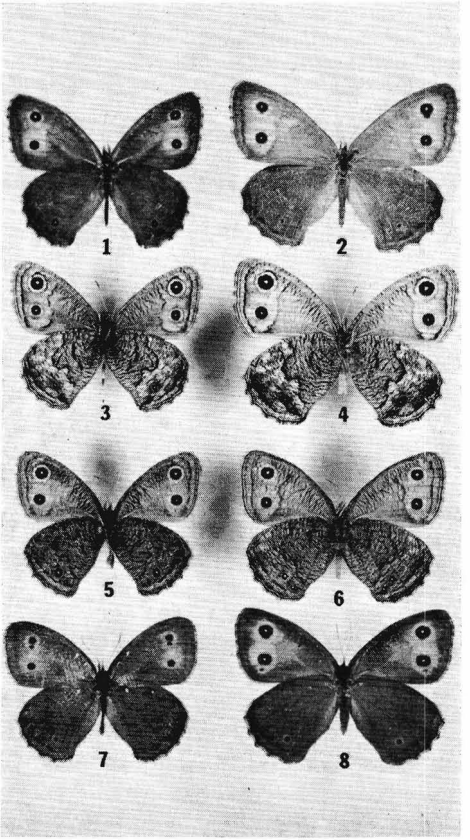

Fig. 1–4. *Cercyonis meadi alamosa* Emmel & Emmel. Dorsal surface of holotype male (1) and allotype female (2); ventral surface of paratype male (3) and paratype female (4), from the type locality, San Luis Valley, Colorado.

Fig. 5–8. *Cercyonis meadi meadi* (Edwards). Ventral surface of male (5) and female (6); dorsal surface of male (7) and female (8). Males from Deckers, Douglas Co., Colorado, Aug. 9, 1959; Ray J. Jae, collector. Females from Big Spring Ranch, nr. Florissant, Teller Co., Colorado, 8600′ elev., Aug. 8, 1962; T. C. Emmel, collector.

Brown areas of typical *meadi* covered with white scaling. The russet red patch extending from ocelli almost to thorax. *Hindwings, inferior surface*: Entire wing, except two heavy brown lines creating the medial band, heavily suffused with white scaling. Only one or two marginal ocelli present; thus resembling typical *meadi* ocellation, differing from the heavy ocellation in *mexicana* populations. Head, thorax, and abdomen as in typical *meadi* and *mexicana*. *Genitalia* (Fig. 9): Lacking dorsal spine on shoulder of valva, which is found in the other subspecies of *meadi*.

Allotype, female. Expanse, 45.4 mm. Forewing length, 24.9 mm. As in male, generally lighter brown in dorsal ground color (fresh specimens).

Holotype male: Colorado, San Luis Valley, 7.0 miles north of junction of Highway 17 & Highway 112, on Highway 17, Saguache County, 7539′

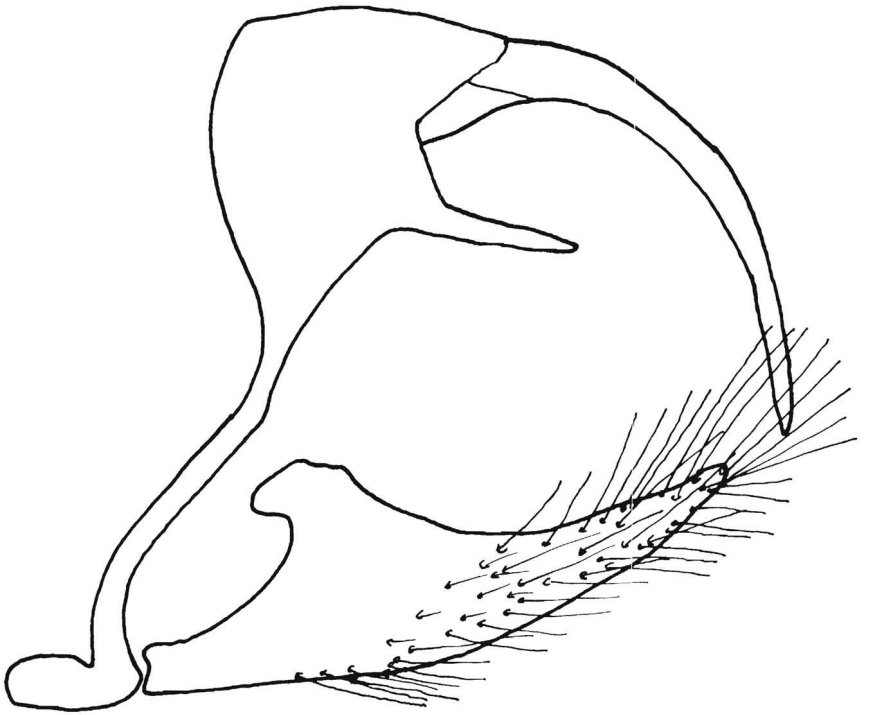

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Fig. 9. Male genitalia of *Cercyonis meadi alamosa* Emmel & Emmel (paratype), lateral view.

elevation, August 17, 1964, T. C. & J. F. Emmel, collectors. Allotype female: Same locality, August 20, 1965, T. C. Emmel, collector. Paratypes: 55 ♂, 8 ♀, same locality, August 17, 1964, T. C. & J. F. Emmel, collectors; 9 ♂, 10 ♀, same locality, August 20, 1965, T. C. Emmel and Michael K. Fosdick, collectors; 1 ♀, at entrance to Great Sand Dunes National Monument, about 8000′ elev., Alamosa County, Colorado, August 18, 1964, T. C. Emmel, collector; 1 ♀, Mosca Pass Trail, 8300′ elev., Great Sand Dunes Nat. Mon., Alamosa Co., Colorado, August 18, 1964, T. C. Emmel, collector.

The holotype and allotype are deposited in the type collection, Los Angeles County Museum of Natural History. Paratypes will be deposited in the following institutions and collections: California Academy of Sciences, American Museum of Natural History, United States National Museum, and Stephen F. & Edwin M. Perkins collection, Portland, Ore-

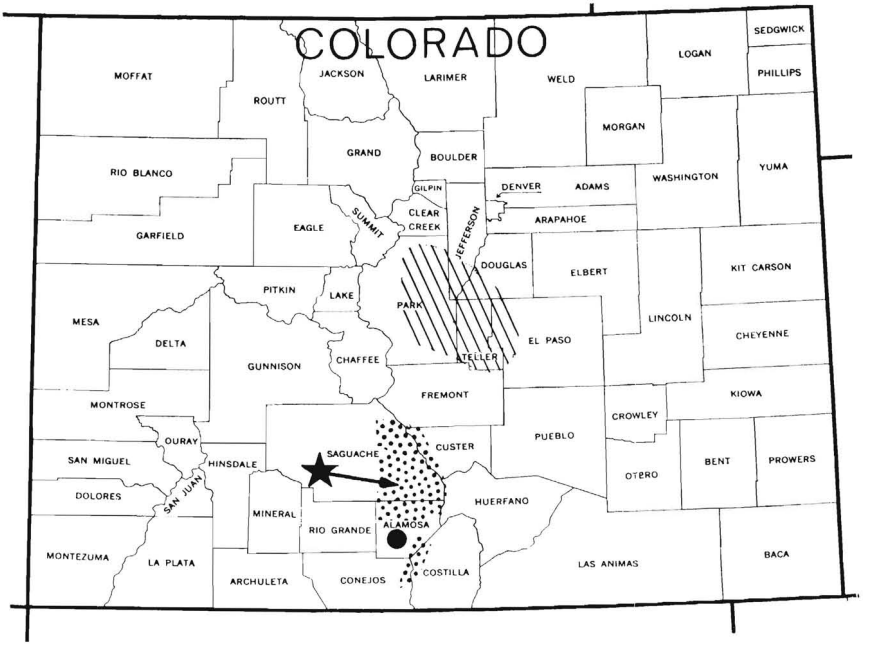

Fig. 10. Distribution of *Cercyonis meadi alamosa* Emmel & Emmel (dotted shading) in southern Colorado and typical *C. meadi meadi* (Edwards) (diagonal lines) in the remainder of the state. A star indicates the type locality of *alamosa*; a black dot indicates the location of the town of Alamosa.

gon. The remainder of the paratypes are being retained by the senior author, but will be deposited in the Los Angeles County Museum collections in the future.

This subspecies differs from previously described forms of *Cercyonis meadi* primarily in its extraordinary white scaling on the undersides of both wings. In this respect and considering its arid habitat, *C. m. alamosa* has the same relation to *C. m. meadi* as *Cercyonis sthenele paulus* has to *C. sthenele silvestris.*

The Colorado distribution of the newly described *C. m. alamosa* and typical *C. m. meadi* is mapped in Figure 10. Alamosa is the largest town in the San Luis Valley and is also the name of a county representing the southern part of this valley.