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NOTES ON THE FORMS OF RUSTICUS ACMON (DB.-HEW.), SCUDDER, OCCURRING IN THE VICINITY OF PASADENA, CALIF.

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For some time the writer has made a special study of the different forms of *Rusticus acmon*. This special work has resulted in the possession of large series of four distinct forms.

From Boisduval's description of *R. antagon* (which he admits is the same as *R. acmon*), and by comparison with Doubl.-Hew., Plate 76, fig. 2, also with specimens from Boisduval's type locality, "les environs de San Francisco," I have decided which of these forms is typical. I may also add that Strecker's description in "Lepidoptera: Rhopaloceres and Heteroceres, indigenous and exotic," also describes this form.

Careful observations made during the last two seasons show that of the other three forms two are seasonal, while the other is a new subspecies occurring only in the mountains at an altitude of not less than 3,000 feet, and frequenting only *Eriogonum fasciculatum*, which is probably its food-plant, while that of the other forms is *Hosackia glabra*, generally admitted to be the food-plant of true *acmon* or *antegon*.

The new subspecies, which I have named *Rusticus monticola*, is a much finer butterfly than *acmon*, being larger and more brilliantly coloured. Of the remaining two forms, one occurs from February to April, is small in size, of a darker blue than the type form, and heavily margined in black, which leads me to think that the imagoes are produced from pupae which have hibernated. The remaining form appears about May the 9th, is larger than the preceding, resembling the type form, only is larger, and has not such a pronounced violet tinge.

The writer realizes the value and necessity of applying the test of breeding in order to correctly classify these different forms, but owing to daily observations and also the valuable help which he has received from Mr. Fordyce Grinnell, Jr., feels assured that his deductions would be fully justified by the above-mentioned test. From the length of time that *acmon* is on the wing, from February till October, it may safely be assumed that there are at least three broods; therefore, these different forms are probably seasonal, as previously stated.

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Rusticus monticola, n. subsp.—The type, 233's, 299's, are taken from a series of 21 insects in the author's collection,

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