

2. **Cotinis mutabilis.** (Tab. XXI. fig. 5; Tab. XXII. figg. 4, 4 a, 5, 5 a, 12, 12 a, vars.)

After careful examination of about 250 examples I have come to the conclusion that the characters adduced by Burmeister to distinguish this species from *C. sobrina* are in the highest degree inconstant, and that there are no means of defining the two species. All that can be said is that *C. mutabilis* is, in the great majority of its individuals, larger and broader. The shape of the clypeal horn is very variable, and its varieties do not correspond with variations in size, breadth, and colour, large and robust specimens of the typical *mutabilis* having the horn either dilated towards the apex, parallel-sided, or triangular, and the same diversities may be seen in small and slender oblong examples of *C. sobrina*. It is the same with regard to form and colour; for it is far from the case that the large and broad examples (*C. mutabilis*) only are unicolorous; smaller and narrower individuals exist equally unicolorous and of nearly all the colour-varieties displayed by the larger set. It is true that the variegated varieties described by Burmeister under *C. sobrina* are, as a rule, smaller than the others; but they are connected by the most finely graduated series of variations, so that it is impossible to draw a distinction between the two series. The case is a very difficult one to deal with. It would not be satisfactory, and scarcely practicable, to include under one specific diagnosis all the numerous varieties, some of which are possibly local, thus presenting an interesting study to future collectors and students; the better course seems to be to treat the more distinct separately, giving the localities of each:—

Typical form.—*Gymnetis mutabilis*, Gory & Perch. Monogr. Cétoin. p. 334, t. 66. fig. 5¹; *Cotinis mutabilis*, Burm. Handb. der Ent. iii. p. 255². Robusta, supra viridis, opaca, subtus splendide viridi-ænea vel viridi-aurata, ventre interdum flavo-translucente; cornu clypeale plerumque quadratum vel apice paullo dilatatum et subsinuatum, sed interdum breve obtuse triangulare.

Hab. MEXICO^{1 2}, Matamoros Izucar in Puebla, Jalapa (*Höge*), Cordova, Vera Cruz, Campeche (*Sallé*), Temax in North Yucatan (*Gaumer*); ? COSTA RICA (*Van Patten*).

Var. 1. Eadem, sed corpore subtus saturatius viridi-æneo vel subchalybeo.

Hab. BRITISH HONDURAS, R. Sarstoon (*Blancaneaux*); GUATEMALA, near the city alt. 5000 feet (*Salvin*), Volcan de Atitlan (*Champion*).

Var. 2. *Gymnetis mexicana*, Gory & Perch. Monogr. Cétoin. p. 335, t. 67. fig. 1¹; *Cotinis sobrina*, var., Burm. Handb. der Ent. iii. p. 256². Paullo minor et angustior; quoad colores *C. mutabilis* formæ typicæ similis.

Hab. MEXICO^{1 2}, Cuernavaca (*Sallé*, *H. H. Smith*), Jalapa (*Höge*), Temax in North Yucatan (*Gaumer*); GUATEMALA, Chimaltenango (*Conradt*).

Var. 3. Var. 2 quoad formam similis, sed interdum robustior, differt elytrorum lateribus et versus apicem obscure rufo-translucentibus; cornu clypeale variabile.

Hab. MEXICO, North Yucatan (*Gaumer*); GUATEMALA, San Gerónimo (*Champion*).