ZAMMARA.

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This truly Neotropical genus has not been recorded north of Mexico; nor does it probably extend in the opposite direction beyond the South-Brazilian subregion; it appears to be also absent from the Antillean fauna. About seven species of this genus are known, two of which are found in Central America. Some of the species are subject to great variation in the size and number of fuscous spots to the tegmina.

1. Zammara smaragdina. (Tab. I. figg. 1, 1 a, 1 b.)

Zammara smaragdina, Walk. List Hom. i. p. 33. 3¹; ib. iv. t. 1. f. 4; Stål, Öfv. Vet.-Akad. Förh. 1862, p. 483.

Zammara angulosa, Walk. List Hom. i. p. 34. 42; Stål, Öfv. Vet.-Ak. Förh. 1862, p. 483.

Hab. Mexico²; Nicaragua, Chontales (coll. Dist.); Panama, Volcan de Chiriqui (Champion).

A Nicaraguan specimen is figured. Walker¹ gave the origin of his type (Z. smaragdina) as "West coast of America," which habitat appears, from what I have observed with others of Walker's species thus localized, to be clearly referable to the Central-American region. Walker's figure is without structural detail; and no reference is made to it either in the description in part 1, or in the index appended to part 4 of his list. The specimens he has described as Z. angulosa are clearly faded female forms of Z. smaragdina. As in the following species, the macular markings of the tegmina are most inconstant, being either in agreement with typical forms, as the one here figured, or becoming confluent and forming an irregular transverse fascia. The three apical marginal spots are sometimes followed by two or three others. In one specimen examined these macular markings are asymmetrical on the right and left tegmina.

2. Zammara calochroma. (Tab. I. figg. 5, 5 a, 5 b.)

Zammara calochroma, Walk. List Hom. Suppl. p. 41.

Zammara smaragdula, Walk. Ins. Saund. Hom. p. 4.

Zammara callichroma, Stål, Stett. ent. Zeit. xxv. p. 572.

Hab. Mexico ² (coll. Sallé, Mus. Berol.), Orizaba (Bilimek, Mus. Vind. Cæs.); Рамама (Boucard).—Colombia, Bogota ¹, Rio Magdalena (Dr. Thieme, coll. Oberthür).

The specimen figured is a typical Z. calochroma, Walk., from Mexico, in which the tegmina are ornamented with confluent fuscous macular markings, and agrees generally with the form described by Stål, of which, by the courtesy of Dr. Aurivillius, I have been enabled to examine a specimen. These fuscous markings become frequently less confluent and more diminished in area till the form Z. smaragdula, Walk., is reached, and again decrease in number and size, so that in a female specimen from Panama which is now before me they are only faintly indicated. The structural characters of the underside, however, are very distinct; and the pattern and markings of the pro- and mesonotum are always constant.