

and has a conspicuous black oblique streak crossing the end of the cell. In Haiti a fourth race is found, which is of nearly the same pale tawny colour as *C. cillene*, but the black streak in the primaries of the males extends nearly or quite to the outer margin, and the second streak at the apex is but faintly indicated. This Haitian insect seems to have no specific name. Both *C. delila* and *C. julia* are included in Mr. Strecker's Catalogue of the Butterflies of North America as occurring in Texas.

### AGRAULIS.

*Agraulis*, Boisduval & Leconte, Hist. Gén. Léop. Am. Sept. i. p. 142 (1833); Doubl. Gen. Diurn. Lep. p. 153.

*Dione*, Hübn. Samml. exot. Schm. ii. t. 20; Verz. bek. Schm. p. 31 (1816).

Though Hübner in 1816 gave the name *Dione* to one of his groups of butterflies containing species of this genus, the genus itself was not properly defined until 1833, when Boisduval and Leconte characterized it under the name of *Agraulis*, afterwards adopted in the 'Genera of Diurnal Lepidoptera.'

The relationship of *Agraulis* with *Colænis* as here restricted is very close, the chief if not the only important difference being in the middle and hind legs. These, as already pointed out by Doubleday, in *Agraulis* are without either paronychia or pulvillus, both being well developed in *Colænis*.

The secondary sexual male organs are like those of *Colænis*, and also very similar to those of *Heliconius*, especially as regards the form of the tegumen, which has an internal projecting piece terminating in a point in the middle line, which points outwards and slightly upwards towards the hook of the tegumen. Nothing of this sort is to be found in *Argynnis* and its allies, so far as we have as yet been able to discover. The antennæ have thirty-nine joints, whereof ten form a gradually thickened terminal club. The palpi have the terminal joint short but swollen; the middle joint is long and but slightly dilated. The front legs of the male are clothed with fine hair; coxa =  $\frac{2}{3}$  femur, tibia = femur; tarsus long (single-jointed \*) =  $\frac{2}{3}$  tibia. The claws of the middle and hind legs are very straight, and there is neither pulvillus nor paronychia; the outer surface of the tibia is slightly spiny. The primaries have the first subcostal branch thrown off before the end of the cell.

Six species are included in the genus *Agraulis*, three of which (*A. vanillæ*, *A. moneta*, and *A. junonia*) have a very wide range in Tropical America. *A. glycera* is restricted to the Andes of Venezuela, Colombia, and Ecuador, *A. andicola* to Western Ecuador, and *A. lucina* to the valley of the Upper Amazons. *A. vanillæ* alone is found in the Southern States of North America.

\* In *A. lucina* the remains of some of the joints seem to be indicated by notches.