

forest; (2) "The Central Plateau," including the 'Altos,' which is an arid upland region becoming higher towards the Mexican frontier and bordered southward by volcanoes which protrude from the main cordillera—pines and oaks here clothe the mountain sides, on which cereals, maize, and, at high elevations, potatoes are cultivated; (3) "The Pacific slope," which has forest in the 'tierra caliente' and on the mountain sides, now largely replaced by second growth (rastrojo) or cultivated with sugar-cane, cacao, or (at elevations up to 4500 feet) coffee. The plain of Salama, in Baja Vera Paz, with San Gerónimo at its eastern end—draining to the Atlantic,—is very hot and arid, abounding in Cacti, Yuccas, Agaves, &c., like the Motagua valley, from which it is separated by the Chuacus range of mountains. The mountains to the north of this plain, as shown by the abrupt change in the nature of the vegetation between Salama and Purula or Tactic, form the dividing line between the humid Atlantic slope and the plateau. These lower central valleys must either be included under district 2 or treated as a separate faunal subregion. A comparison of the Lepidoptera Rhopalocera alone illustrates the great difference in the fauna of the two slopes \*—many Erycinids, Ithomiids, *Heliconius*, *Papilio*, *Leptalis*, *Thecla*, &c., are peculiar to the Atlantic; while *Drucina*, *Euterpe*, a few special *Euptychia* and *Heliconius*, a *Morpho*, &c., are found on the Pacific. The dry central plateau doubtless forms an impassable barrier for many species, and it has altogether a very restricted butterfly fauna. In the mountains in the neighbourhood of the plain of Salama a few peculiar Rhopalocera occur, such as *Anæa nobilis* and *excellens*, &c. The 'tierra fria' or 'tierra helada' (10,000 feet and upwards) produced no alpine or subalpine forms, merely stragglers from below.

In Panama, April 17th, 1881–May 21st, 1883, Mr. Champion spent nearly all his time in Chiriqui, on the Pacific slope, between the Rio Chiriqui Viejo (near the Costa Rica frontier) and Tolé, making his headquarters at the various coffee-plantations on the mountain-slopes, at an elevation of 3000–4000 feet, or else at David or Bugaba. The Volcan de Chiriqui was ascended on June 7th, 1882, to 8000 feet, and the Cordillera above Tolé explored. The old route across the mountains from David and Caldera to the Chiriqui lagoon and the Bocas del Toro Islands, on the Atlantic side (used during the early days of the gold-mining in California, and before the Panama Railroad was finished), was found to be almost impracticable, and the northern slope was therefore not visited. The principal forests in Chiriqui are situated on the mountain slopes, in the low country to the east of David, and in the 'tierra caliente' to the west of Bugaba and Divala; the forests alternate with extensive savannas along the lower part of the Pacific slope and in the country immediately adjacent to the western precipices of the Volcan de Chiriqui. The whole of the towns and villages are situated in the 'tierra caliente,' and the Indians living in out of the way places in the Cordillera

\* Unfortunately this could not be very well shown in the Table of Distribution of the genera given in the Introduction to the Rhopalocera.