

M. montezuma) is slight, and not sufficiently constant to justify the maintenance of the two species as distinct. In general, too, the wings of the northern specimens are more rounded and the secondaries less pointed than in southern examples. In default of other trustworthy characters we therefore unite these two under Kollar's name, Messrs. Butler and Druce having already used it for Costa-Rica specimens². Its range, from Southern Mexico to Colombia, seems quite continuous; and specimens fairly typical are not wanting wherever it occurs. With these, however, are mingled others whose position is yet open to question. These occur, for the most part, in the State of Panama; and we find at Calobre, mixed with a dark-blue insect with a wide black border (agreeing with the usual Mexican and Guatemalan form), others of a paler more silvery blue, which show distinct spots and lunules on the dark marginal band and an inner row of white spots on the primaries. One specimen from the same locality diverges much more even than these, in being very pale with the blue much as in *M. octavia*, to which the insect bears a close resemblance. Were it not that the base of the wings in all these specimens is blue, we should class them with *M. marinata* rather than with *M. peleides*. They undoubtedly form a link between the two. In the form found on the line of railway the blue of the wings in both sexes is of a peculiarly dark hue, in strong contrast to the light-coloured Calobre *Morpho*.

In Guatemala *M. peleides* is restricted in its range to the eastern or Atlantic side of the main cordillera, where it is common in suitable localities from the sea-level up to an elevation of about 3000 feet. In the forests of the Pacific slope its place is entirely taken by *M. octavia*, a closely allied species, but with an unmistakable tint of the blue of the wings, which renders it not difficult to recognize.

With this exception *M. peleides* is the only *Morpho* of this form in Guatemala, and is fairly constant in its characters in that country. Dr. Boisduval^{4 6} considered that two species inhabited the northern parts of Central America and Mexico, which he calls *M. corydon* and *M. montezuma*—a view that, in our opinion, cannot be supported.

The relationship of *M. peleides* with *M. marinata* is curious; and we believe it quite possible to arrange a series of Costa-Rica specimens which would lead from *M. peleides* to *M. marinata*—*M. hydorina*, Butl., and *M. limpida*, Butl., being intermediate steps.

The following theory suggests itself as a possible explanation of this state of things:—Before the complete formation of the Central-American isthmus, and when, as was most probably the case, islands existed where Costa Rica and the State of Panama now stand, and just prior to their union, a *Morpho* inhabited Costa Rica like *M. marinata*, and another Colombia like *M. peleides*, none at that time being found in Guatemala or Mexico. When the union of the land took place, *M. peleides* was the one to spread, and pushed its way along the isthmus, passed *M. marinata* in Costa Rica, and then occupied the rest of Central America, Yucatan, and Southern Mexico. For some cause or other, those which established themselves in the Pacific coast-region of Guatemala