

An Assumed Instance of Compound Protective Resemblance in an African Butterfly.

Hamanumida dædalus, Fabr., generally quoted by its better known synonym *Aterica meleagris*, has been recorded as a good instance of protective resemblance.

Mr. Wallace ("Darwinism," p. 207) writes:—"A common African butterfly (*Aterica meleagris*) always settles on the ground with closed wings, which so resemble the soil of the district that it can with difficulty be seen, and the colour varies with the soil in different localities. Thus specimens from Senegambia were dull brown, the soil being reddish sand and iron-clay; those from Calabar and Cameroons were light brown with numerous small white spots, the soil of those countries being light brown clay with small quartz pebbles; while in other localities where the colours of the soil were more varied the colours of the butterfly varied also. Here we have variation in a single species which has become specialized in certain areas to harmonize with the colour of the soil."

Now in the Transvaal this butterfly never settles on the ground with closed wings, and the only example sent from Durban by Colonel Bowker to Mr. Trimen was described as "settled on a footpath with wings expanded" ("South African Butterflies," vol. i. p. 310). I have seen and captured a number of specimens in this country, and always found them with wings expanded and nearly always on greyish coloured rocks or slaty hued paths, with which the colour of the upper surface of their wings wonderfully assimilated. We have large tracts of bare ground of a reddish-brown colour with which the under surface of the wings would be in perfect unison, and for months I have watched to see a specimen thus situated and with its wings vertically closed, but without success.

If the reports as to its habits from Senegambia, Calabar and Cameroons are correct, and I believe for the last localities the authority was the late Mr. Rutherford (but I do not possess the necessary reference here), then we not only have a change of habit with difference of latitude, but also what I have ventured to style a "compound" condition of protective resemblance. For we thus see that while in Senegambia, Calabar and Cameroons, where according to report the butterfly always settles with wings closed, and which "so closely resemble the soil of the district that it can with difficulty be seen, and the colour varies with the soil in different localities," here in the Transvaal and Natal where it rests with expanded wings, its protection is almost equally insured by the assimilative colour of the upper wings to the rocks and paths on which it is usually found.

W. L. DISTANT.

Pretoria, Transvaal, January.