

FALSE HEAD BUTTERFLIES: THE CASE OF
OXYLIDES FAUNAS DRURY (LYCAENIDAE)

I was most pleased to read the recent paper by R. K. Robbins (J. Lepid. Soc. 34:194-208) on the false heads of the underside patterns in certain species of the Lycaenidae. The bibliography of his paper is also useful. Interesting as that author's research undoubtedly is, I found it even more interesting that there is such a dearth of real research into such a promising and fascinating issue. I had always assumed that false heads were clear-cut and well documented.

The paper evoked memories of my own experiences in the late 1960's in Nigeria with a species called *Oxylides faunas* Drury, a butterfly whose behavior, quite literally, adds a further twist to the story.

Oxylides faunas is common in the darker habitats of the tropical zone, such as dense primary forest and especially dense secondary forest. Neither sex ever ventures out in open sunshine. They normally fly where there is dense undergrowth and usually stay at a height of about one meter. The flight is weak and bumpy, most uncharacteristic of a member of the Theclinae. The underside displays a splendid example of a finely adorned false head. The species almost invariably settles on large, flat green leaves; so, the question of whether it settles head-up or head-down is immaterial.

The special twist is that when *Oxylides faunas* lands it flicks itself around 180° a fraction of a second before landing, so that the false head now faces in the direction of flight, fluttering convincingly in even the mildest breeze.

As luck would have it I received Robbins' paper a few days before leaving for Nigeria on a business trip, and I hoped to substantiate my recollections of more than 10 years ago. Although limited time was on hand, I managed to observe a total of 61 landings made by 1 male at Akure, Ondo State, 1 male at Benin, Bendel State and 5 males and



FIG. 1. A specimen of *Oxylides faunas* seated on a leaf in secondary forest (Agege, Lagos, 14 xii 1980).

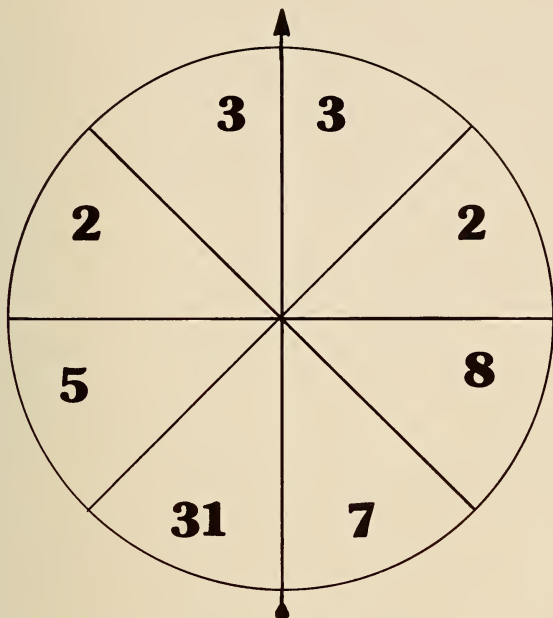


FIG. 2. Position of head in relation to direction of flight in 61 observed landings of 14 specimens of *Oxylides faunas* in Nigeria.

7 females at 4 mi. NW of Agege, Lagos State (Nov.–Dec. 1980). The results of these observations are shown in Fig. 2.

Even the relatively short series of observations clearly shows a statistically significant tendency towards making a complete turn. Fifty-one landings (83%) involved a twist of more than 90 degrees, most of which were close to 180 degrees (62%). Compared to a random distribution the first of these figures is significant at the 0.001 level (Chi-square = 27.85, one degree of freedom). In some of the cases where no turn was made the reason almost certainly was that the specimen had been disturbed by me to the point when normal landing behavior was abandoned. There is a curious leftward bias in the turning behavior, with 62% turning left and only 38% right. This is statistically significant at the 0.01 level (Chi-square = 7.23, one degree of freedom). The species observed by Robbins turned only after landing and did not do so as frequently as *Oxylides faunas*, but there was also a clear leftward bias.

I recalled that specimens often walked backwards after landing and had supposed that this was a further reinforcement of the false head effect. My current series did not support this view. About half the landings were followed by walking, but it was usually forwards, and the purpose appeared to be to get the butterfly a better launch position. There would usually be a pause of three or four seconds between alighting and the start of any walk.

Given the places where *Oxylides faunas* lands, I would expect the main predators to be praying mantisses and hunting spiders, against both of which a false head should offer good protection.