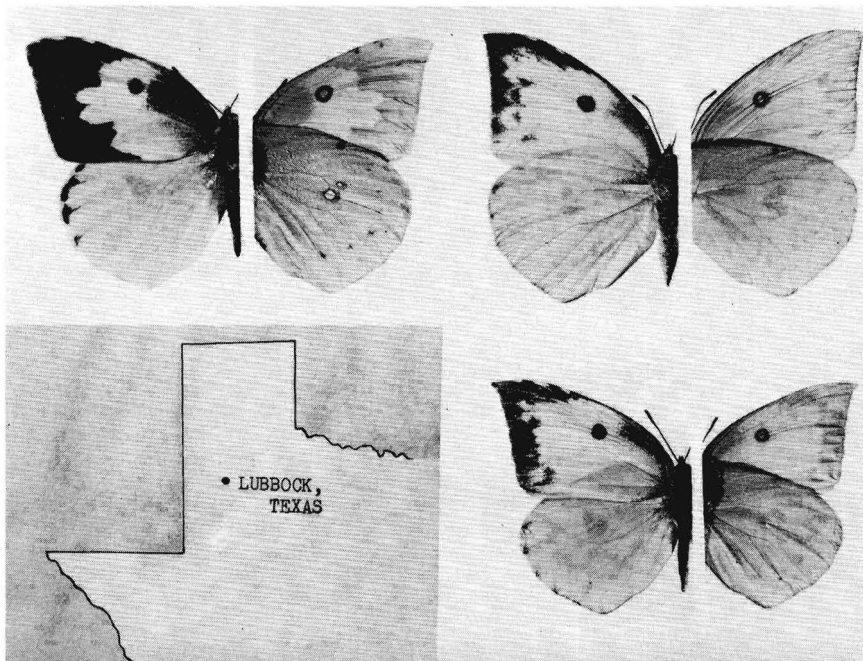


TWO VARIANT FEMALES OF *COLIAS* (*ZERENE*) *CESONIA* (PIERIDAE)

The southern dogshead, *Colias* (*Zerene*) *cesonia* (Stoll), is a fairly common visitor in the Lubbock, Texas area. Fellow collectors and myself who have been collecting in this area for years know the species well. I was quite surprised during the months of October and November, 1966, to find two aberrant *C. cesonia*. Both were collected in my back yard at flowers. The striking feature of both specimens was the great reduction of black bordering on the dorsal side of the forewing. Females of this species commonly have less black bordering than males, but the reduction is slight and primarily in the border of the hind wings.



Colias (*Zerene*) *cesonia* (Stoll). Upper lefthand—typical male, upper and underside; upper right—aberrant female, upper and underside; lower right—aberrant female, upper and underside; lower left—location of capture.

The first of the two females (lower right in photograph) was captured on October 24, 1966; the weather was still very mild and that particular day was sunny and warm. During the previous month we had experienced three mild frosts. October 23 I had taken a perfect male specimen (upper left) on the same flowers. The second aberrant specimen (upper right) was taken 14 days later, November 7, 1966, following another frost. The black border on this female's forewings was even more greatly reduced than in the first specimen. The variations could have been caused by genetic mutations but more likely were related to environmental factors such as a rapid change in temperature during pupation.—DWIGHT BENNETT, 2808-1 Street, Lubbock, Texas 79415.