AN EXTREME EXPERIMENTAL ABERRATION OF VANESSA CARDUI (NYMPHALIDAE)

During the past four years I have been subjecting pupae of Vanessa cardui (L.) to a lowered temperature of 36°F., the temperature of my refrigerator, to produce aberrations. By process of elimination I have found the "prime time" for chilling the pupae to be between 45 and 90 minutes after the larvae pupate, then leaving them chilled for about 14 days. The mortality rate averages 20% (excluding parasites) for 14 days and climbs with lengthened duration. Longer chilling durations, in turn, produce more extreme aberrants.

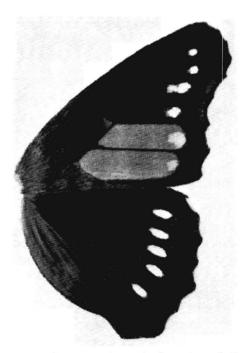


Figure 1.—Wing pattern of an experimental aberration of Vanessa cardui (L.) produced by chilling the pupa.

The figure is copied from a colored pencil illustration made from the wings of a specimen which failed to emerge after having been subjected to chilling for 14 days. It is *V. cardui*, form "elymi" Ramb., but very extreme.

The collector should always be at hand when the butterflies are ready to emerge (the majority emerge eight days after removal from the refrigerator) as they frequently need help emerging. However, knowing when to help is a real test. Specimens usually die prior to distending the wings if left alone (as the specimen figured did).

The advantage of this experiment is its simplicity. Only mature larvae ready for pupation are needed, eliminating foodplant complications.

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