

A New Form of *Hesperia Metea* Scudder from Texas (Lepidoptera HesperIIDae)

By H. A. Freeman

Hesperia metea belfragei new form

Male: Upperside. Primaries. Dark fuscous with the fulvous areas confined to the cell area and below the stigma. There are two or three fulvous subapical spots and one extradiscal spot just beyond the upper tip of the stigma. The stigma is black.

Secondaries. Fuscous with an even suffusion of fulvous scales over the greater part of the wing. There is a black marginal border. The muscular band on the under surface shows through in only one male, the others are immaculate.

Under side. Primaries. Fuscous with a little fulvous overscaling in the cell and black at the base. The subapical spots reappear, better defined and sordid yellow in color. There are two sordid yellow, V-shaped spots just outside the stigma. These spots are very poorly defined in three of the specimens.

Secondaries. Fuscous with some brownish overscaling in two of the specimens. The macular band is present in a variable degree ranging from a narrow, obscure, greyish line to a well-defined greyish band. Two of the specimens have a greyish basal spot.

The fringes are lighter than the wings and tend to become white at the tips.

Female. Upperside. Primaries. Sooty black, immaculate except for three sordid white subapical spots and one extradiscal spot of the same color.

Secondaries. Sooty black with a few fulvous scales and hairs on the discal area.

Under side. Primaries. Fuscous with the subapical spots a little better defined and the slightest indication of some extradiscal spots.

Secondaries. Dark sooty black with the faintest indication of the anterior spots of the macular band, otherwise

immaculate. Two of the specimens lack even the anterior spots thus being completely immaculate.

The fringes are concolorous with the wings and are rather long.

Expanse: males, 29-32 mm., females 33-36 mm.

Described from 9 specimens, 5 males and 4 females, collected by H. A. and Erna L. Freeman at Cedar Hill, Dallas County, Texas. The dates are as follows: 1 female, March 31, 1940; 1 male and 2 females, April 5, 1941; 4 males, April 4, 1942; and 1 female April 5, 1942.

The writer takes great pleasure in naming this form for Mr. Gustaf W. Belfrage, one of the best field entomologists who ever lived in Texas.*

Holotype male and *allotype* female are in the collection of the author. There is one female *paratype* in the United States National Museum, Washington, D. C.; one male *paratype* in the collection of Mr. Otto Buchholz, Roselle Park, New Jersey; one male *paratype* in the collection of Stallings and Turner, Caldwell, Kansas. The other 4 *paratypes* will remain for the present in the collection of the author.

The naming of forms in Lepidoptera is not always advisable unless specimens appear that make the accurate determination of the species difficult. The writer believes the above described series of specimens meets this requirement as they are certainly different from typical *metea* from more northern localities. In preparing this description *belfragei* was compared with over a hundred specimens of *metea* from Maine, Massachusetts, New York, Pennsylvania, Ohio, Michigan, Virginia, South Carolina and Georgia and the following differences were noted:

1. *Belfragei* is a much darker form than typical *metea* both on the upper surface and under surface.
2. The spots are clearer white on the under surface of the primaries in *metea* and the extradiscal spots are well defined.

*S. W. Geiser, *Naturalists of the Frontier*, 1937, 289-308; *Southwest Review*, 14, 1929, 381-98; *Entomological News*, 44, 1933, 127-32.

3. The macular band on the under surface of the secondaries is usually well defined and clear white in *metea*, whereas in *belfragei* these markings are very obscure and are gray.

4. There is a tendency in *metea* to become light, nearly white in such cases, whereas in *belfragei* this never happens.

5. *Belfragei* is a slightly larger insect than *metea*. Comparative measurements reveal that the average size of the males of *metea* is 28 mm. and the females 30 mm., whereas the average size of the males of *belfragei* is 31 mm. and the females 34 mm.

An examination of the type series would suggest that the name "subspecies" be applied to *belfragei*. However, Dr. A. W. Lindsey has examined the type of *licinus* Edwards, collected near Waco, Texas, by Belfrage, at the Carnegie Museum, Pittsburgh, Pennsylvania and here is his comment concerning the type: "The type of *licinus* is a normal specimen of *metea*. The upper surface, illustrated by Holland, is less distinctive than the lower." If *licinus* was one of the dark specimens like the type series of *belfragei* then the term "subspecies" would better fit this form. The writer has not seen any specimens that are near typical *metea* from Texas.

The writer believes that the insect described by Edwards as *horus* may turn out to be one of these dark *belfragei*. If the unique type of *horus* is the same as this form then *belfragei* will naturally fall to the older name. *Horus* was collected by Jacob Boll in the Dallas (Texas) region around 1869 and described by Edwards two years later. There have been no males associated with the single female type of *horus* so far and only an examination of the type at Cambridge, Massachusetts, will reveal the correct placement of this species or form. Dr. A. W. Lindley believes that *horus* might belong in another genus.