

## NOTES AND NEWS

## Recent Letters

Dear Sir,

A paper by Benton and Jennings (1975, *Lepid. Soc.* 29: 192-194) . . . gives a photographic figure of a pupal anomaly. It also mentions in the text examples of hysterotely by Cockayne (1927) and Haggett (1954) with the comment "None of these cases is similar to the *R. neomexicana* pupal anomaly."

The LITERATURE CITED, at the end of the paper, omits several quite important references, among them:

Hawkins, C. N. 1933. *Trans. Roy. Ent. Soc. Lond.* 81: 223.

———. 1938. *Proc. Roy. Ent. Soc. Lond.* 13: 92.

Evans, E. 1940. *Entomologist* 73: 134.

Cockayne, E. A. 1942. *Ibid.* 75: 49.

Classey, E. W. 1942. *Ibid.* 75: 151.

In the last mentioned paper, figures are given of the anomalies of segmentation in the larva, pupa and adult of the same specimen.

From the figure of the pupa, it will be seen that the segmentation is very closely similar to that of *Rhyacionia neomexicana* shown in Benton and Jennings' paper. The main differences are that an extra segment is involved and the spiral in the case of Classey (1942) for *Malacosoma neustria* Lin. is sinister and in the other, dexter.

E. W. Classey

Dear Dr. Godfrey,

The pupa described and figured in Benton & Jennings' paper (1975, *J. Lepid. Soc.* 29: 192-194) appears, from the photograph, to be a fairly typical example of spiral segmentation, the spiral affecting the 2nd, 3rd and 4th abdominal somites. The authors, whilst referring to Cockayne's paper on prothetely and hysterotely, quite different phenomena, rather strangely make no mention of Cockayne's papers dealing specifically with spiral segmentation (1929, *Trans. Ent. Soc. Lond.* 77: 177-184 and 1934, *Ibid.* 82: 165-172). In these papers Cockayne describes and figures spirals in a number of insects belonging to various Orders, and discusses the probable origin and cause of the phenomenon. He is definitely of the opinion that it arises during the development of the ovum. There is a later paper by Cockayne (1942, *Entomologist* 75: 49-54) in which he records further cases that had come to light since his 1934 paper, and in which he records his opinion that the condition has a genetic basis, the gene probably being recessive and with very poor penetration.

Since these papers were published, I can trace very few accounts of spiral segmentation in the English language journals available to me. Classey (1942, *Entomologist* 75: 151-152) describes and figures an example in the lasiocampid *Malacosoma neustria* L., and there are three papers dealing with examples that I have bred, viz. a brood of *Leucania irregularis* Wlk. (Noctuidae) (1948, *Entomologist* 81: 38-40), a brood of *Euxanthe wakefieldi* Ward (Nymphalidae) (1965, *Entomologist* 98: 107) and a single *Acherontia atropos* L. (Sphingidae) (1966, *Entomologist* 98: 107).

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