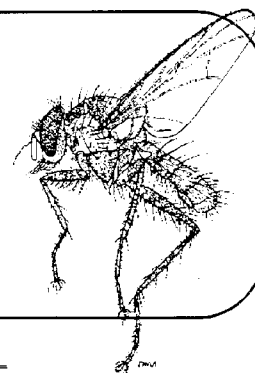


# ANTHOMYIIDAE NEWSLETTER



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## A note on *Delia cardui* (Meigen) by D.M. Ackland

This is a rather large *Delia* species (body length 7-8mm), in the male with rather brownish dusting (especially on the scutum), 2nd segment of middle tarsi swollen ventrally in basal half, wings and squamae brownish tinged, and 3rd and 4th abdominal sternites widened (the 3rd being nearly as wide as the 4th at distal margin), the sternites almost bare medially but with longish lateral setae.

This species was originally on the British List as '*brunnescens* Zett.' but examination of the types by Hennig showed that *brunnescens* and *cardui* were distinct species; only *cardui* has so far been found in Britain. *D. brunnescens* also has widened abdominal sternites in the male, but the 3rd sternite is distinctly narrower than the 4th.

*D. cardui* is probably widely spread in Britain, though I have only found it in a few localities. I first caught several males flying rather rapidly around fruit trees on a disused allotment at Long Ashton, near Bristol in August 1962. My only record from a non-cultivated area is from Lashford Lane nature reserve (BBONT) near Oxford in 1991. In 1997 it appeared in my garden in Kidlington, apparently for the first time. A male arrived on July 7 at about 5 pm on a warm and sultry evening. It was rapidly and erratically flying around a hazel bush, and landing on the tip of a projecting branch, about 9 feet from the ground. After settling for a few minutes, it would fly off but return to exactly the same spot a few seconds later. Its flight was very quick and erratic. On subsequent evenings specimens arrived at almost exactly the same time, and selected the same branch. The last specimens were observed on August 7. At the peak of the emergence, half a dozen males would be competing for position of dominating this branch, which was preferred to any other possible perching sites on the bush. In spite of intensive observations, only one female was caught on the same branch (July 7th).

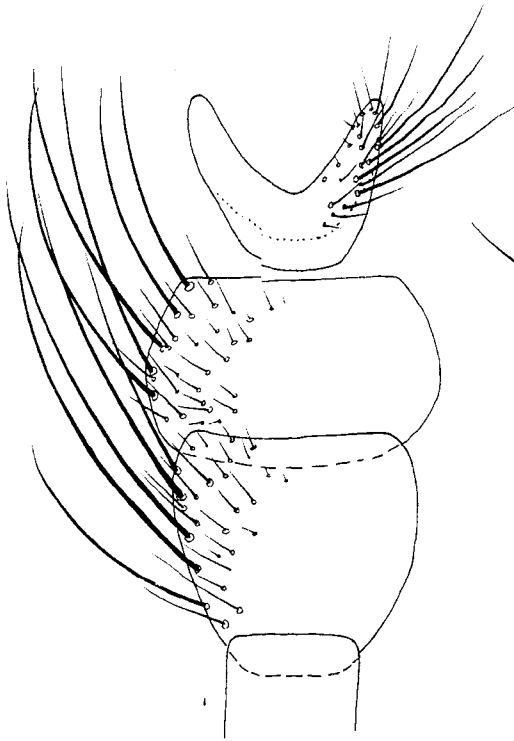
Hennig stated in 1974 that he had seen no specimens of *cardui* from Great Britain, and he attributed all records of the immature stages to *brunnescens*. Miles (1957) in her studies on the economic species of British Anthomyiidae, described the immature stages of '*Delia brunnescens*' attacking carnations in Kent. Her collection is in the University Museum of Natural History in Oxford, and I can confirm that the species bred from carnations at Wye in Kent is *Delia cardui* (17 males and 16 females). According to Miles, the larvae feed in blotch mines, and also tunnel into the shoots. *D. cardui* (and *brunnescens*) have been recorded from carnations (*Dianthus caryophyllus*), pinks (*Dianthus* spp.) and sweet williams (*D. barbatus*). In the Verrall-Collin collection in the University Museum there are several males and females bred from sweet williams from Norfolk. Further earlier records from ragged robin (*Lychnis flos-cuculi*) and white campion (*Melandrium album*) may well refer to other species of Anthomyiidae.

There are a few carnations growing in my garden, but I found no larvae on them. It seems most probable that the flies were breeding in an adjoining garden.

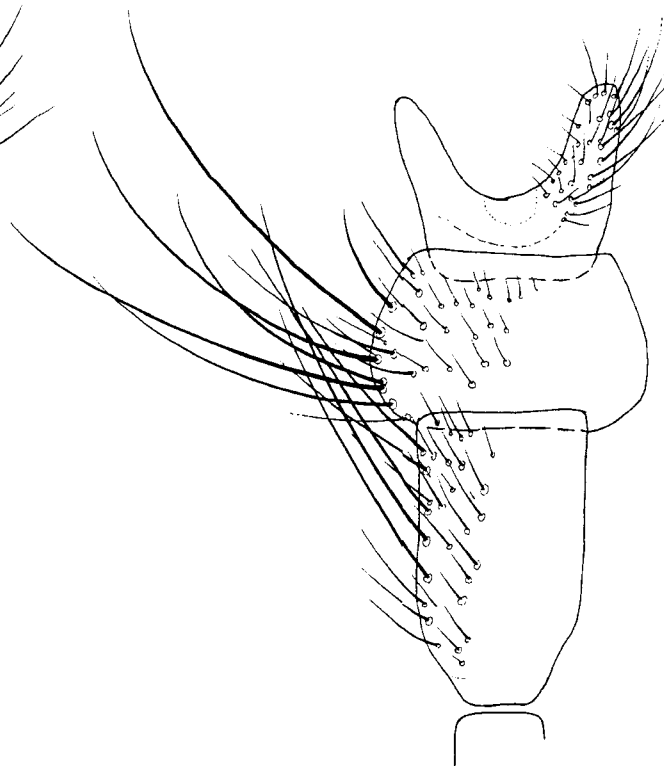
Griffiths (1991: 1036) records *D. cardui* from British Columbia, where it was a pest on cultivated carnations grown in greenhouses between 1927-30; he suggests that this very restricted Nearctic distribution suggests that the species has been recently introduced. *D. brunnescens* has not been recorded from North America.

REFERENCES

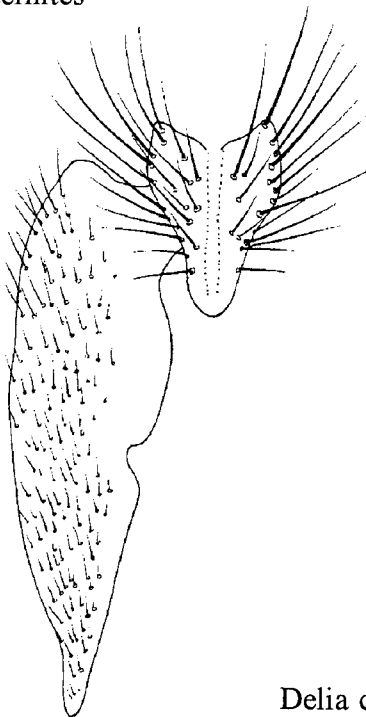
- Griffiths, G.C.D.** 1991. In: (1982-1996 continuing). Cyclorrhapha 2 (Schizophora : Calyptratae) Anthomyiidae. Flies nearct. Reg. (1-11 continuing): 11-1872 continuing, illustr., E. Schweitzerbart. Stuttgart.
- Hennig, W.** 1974 In :1966-76. Fam. 63a. Anthomyiidae. In: Lindner, E., (ed.), Fliegen palearkt. Reg. 7(1), lxxviii + 974 pp., 114 pls. Stuttgart.
- Miles, M.** 1957. Studies of British Anthomyiid flies, VIII.-The carnation fly, *Hylemyia brunnescens* (Zett.). Bulletin of Entomological Research, 48(1): 219-228.



*Delia cardui* Mg. Male abdominal sternites



*Delia brunnescens* Zett. Male abdominal sternites



*Delia cardui* Mg. Cercal plate and surstylus

