## *Myolepta dubia* (Fabricius, 1805) Diptera: Syrphidae in Shrawley Wood, Worcestershire.

## Mick Blythe

On 13 March 2017 an improvised emergence trap was set over a rot hole near the base of a small-leaved lime tree *Tilia cordata* in Shrawley Wood, SO80656621 (01). The hole contained a pool of tea-coloured water above a basal deposit up to 18cm deep which graded vertically from dead leaves above to a fine reddish sludge below (02). This trap (03) proved very productive of insects, especially Diptera, in contrast to a dry hole with a similar trap nearby.



01. Rot hole at base of Tilia cordata, Shrawley Wood. Mick Blythe.

On 7 July 2017 three female specimens of the hoverfly *Myolepta dubia* (Fabricius) were collected from the trap. This is a woodland species and a specialist in rot holes in deciduous trees (Rotheray 1993). It has a "rat-tailed maggot" larva in which the rear end of the body is extended into a siphon with a pair of spiracles for breathing at the tip. This is thought to be an adaptation for gas exchange at the surface of the water while the maggot lies buried in anaerobic sludge. The species has the status of Nationally Scarce, and Worcestershire is outside the previously recorded range of the species in the south and east of England.

Presumably the flies emerged from the hole at some time in the preceding 14 days since the trap was previously emptied on 23 June 2017

*Myathropa florea* (Linn) is the most abundant hoverfly of the wet rot-hole specialists. Compared with *Myolepta* its maggot has a very much longer tail. One male and nine females of this species were collected from the emergence trap between 31 May and 10 September.

Two females of *Xylota sylvarum* (Linn) were also collected from the trap on 19 July and 4 August. This species is also associated with rot holes and also with decaying heartwood, often deep underground

(Rotheray 1993). The basal positioning of our rot hole may have favoured it. Unlike the other two species it has a "short-tailed" maggot.



02. Rot hole at base of Tilia cordata, Shrawley Wood. Mick Blythe.



03. Improvised trap set over rot hole. Mick Blythe.

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## Reference

Rotheray, E. G. 1993. *Colour guide to hoverfly larvae (Diptera, Syrphidae)*. *Dipterists Digest* No 9. Published by Derek Whiteley, Sheffield, assisted by Royal Museum of Scotlkand.

**Editor's note:** a full account of the fauna of these rot holes will appear in the forthcoming book *The History and Natural History of Shrawley Wood*.

## Images

01. Rot hole at base of *Tilia cordata*, Shrawley Wood. Mick Blythe. 02. Rot hole at base of *Tilia cordata*, Shrawley Wood. Mick Blythe. 03. Improvised trap set over rot hole. Mick Blythe.