Mite with attached *Lestodiplosis* spp. Diptera, Cecidomyiidae parasite in Wyre Forest.

John & Denise Bingham

On the 15th April 2019 whilst on a WFSG meeting at Hitterhill, Wyre Forest Denise Bingham found a small mite with a large red parasite attached. It was of considerable interest to those present but we had no idea what exactly it was. Images were taken and sent via a trail of emails to various people to discover exactly what the species might be. Particular thanks are due to Mark Shaw and Peter Chandler who finally managed to get an answer from Keith Harris who identified our mystery species. His quote follows.

"Yes, this is a cecidomyiid larva and almost certainly a Lestodiplosis. I can see the abdominal prolegs and the setation and colour fit. See Cole & Harris, 2002, Entomologists' Monthly Magazine 138:1-10 for an account of two British species recorded from oaks at Wytham Wood, Oxford and at Ripley, Surrey. Lestodiplosis is an interesting and cosmopolitan genus with 37 nominal British species; 80 Palaearctic and 185 World but the true number of species will be much higher. The larvae are predators on a wide range of insects and other invertebrates, including other cecidomyiids, small caterpillars and even millipedes. They behave like miniature syrphid larvae and are full grown at 2-3 mm long, so adults are some of the smallest insects. But that does not stop them attacking large and well-armoured prey - as in this case. They pierce prey with their small mandibles and probably inject a toxin (as is the case in Aphidoletes, which is a specialised predator on aphids). Some species are generalists and there is probably much undiscovered synonymy, especially in the Palaearctic fauna. They are not easy to study as larvae are usually found singly, which suggests that DNA sequencing would be needed to determine host associations. Keith Harris"



01. Lestodiplosis attached to mite. John Bingham

Image

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