

***Chrysis gracillima* Förster, 1853 (Hymenoptera: Chrysididae) new for Worcestershire.**

Kevin McGee. Gardeners Cottage, Shakenhurst, Nr Kidderminster, Worcestershire. DY14 9AR.

kevinmcgeeandrena@live.co.uk

A breeding population of *Chrysis gracillima* Förster, 1853 has been discovered at Hartlebury Common, Worcestershire. Grid Ref: SO 82577 70556. *C. gracillima* has a conservation status of RDB2. During bright warm conditions on 05.08.2019 a small unfamiliar 'jewel wasp' in the family Chrysididae was collected from the trunk of a large dead oak on the eastern side of Hartlebury Common. Later microscopic inspection revealed my specimen to be a male, and although noticeably smaller than more familiar *Chrysis* species, definitely in the genus *Chrysis*. Using the Royal Entomological Society keys to the cuckoo wasps (Morgan, 1984) my specimen keyed out readily to male *Chrysozona gracillima* Förster described as "extremely rare in Kent and West Sussex with the host being possibly *Trypoxylon clavericum* Lepeletier (Sphecidae)".



01. Dead oak at Hartlebury Common. 05.08.2019. K.McGee.



02. *Chrysis gracillima* male from Hartlebury Common. 05.08.2019. K.McGee.

Further online investigation revealed that the *Chrysozona* genus has since been re-evaluated and is now included within the *Chrysis* genus. The principal diagnostic features are the complete discoidal cell in the forewing, no teeth or angular prominences at the posterior margin of the third gastral tergite (the end of the abdomen), and a long genal carina (deep linear groove) extending well above the lower eye margin; this last feature is very easy to see clearly when using a microscope.

The specimen collected from Hartlebury Common, and images available online, indicate that the brightness and intensity of pigmentation on *C. gracillima* is less vibrant than related and more familiar species such as *C. ignita* and *C. angustula*, for example. This was the immediate impression I got when I first observed the wasp on the tree trunk.

The host, *Trypoxylon clavericum*, is one of the small black solitary wasp in the family Sphecidae. It is widespread and common and nests in old insect burrows and galleries found in dry dead wood or hollow plant stems where females stock their nest chambers with small spiders (BWARS, 2019). It is therefore important to stress the value of large specimens of standing dead wood left *in-situ* to age and decay naturally. The intact upright dead oak at Hartlebury Common where this record was obtained is a perfect example of a vital niche habitat that should be retained. There is a policy of removing trees from Hartlebury Common to expand the extent of open heath (understandably so), however, it will be equally important to encourage the retention of selected trees to be allowed to achieve full maturity, and eventual death, in order to provide a continuation of dead and decaying wood for a wide range of scarce and threatened saproxylic invertebrates dependent on this declining habitat.

I contacted David Baldock to ask if he needed to examine the specimen to confirm its identity, however, he replied to say it would be unlikely that I have made an error on this occasion due to the relative ease with which this Chrysid wasp can be identified in comparison to most. He also confirmed that *C. gracillima* is being recorded with greater frequency in southern England generally, and is possibly expanding its geographic range (Baldock, pers. comm).

Acknowledgements

With grateful thanks to David Baldock, who has confirmed that my identification is correct and provided an update on its current distribution in southern England.

References

BWARS *Species search* [on-line] <http://www.bwars.com/> [Accessed 13.08.2019]
 Morgan, D. (1984). *Cuckoo-Wasps, Hymenoptera, Chrysididae. Handbooks for the Identification of British Insects. Volume 6, Part 5.* Royal Entomological Society of London.
 NBN Atlas *Species search* [on-line] <http://www.nbnatlas.org/> [Accessed 13.08.2019]

Images

01. Dead oak at Hartlebury Common. 05.08.2019. K.McGee.
 02. *Chrysis gracillima* male from Hartlebury Common. 05.08.2019. K.McGee.