# *Cryptops anomalans* Newport, 1844 (Scolopendromorpha, Cryptopidae) proliferating within Evesham conurbation, Worcestershire

Paul F. Whitehead\* & Melvin M. Crooke \* Corresponding author Moor Leys, Little Comberton, Pershore, Worcestershire, WR10 3EH. Email: <u>paul@thewhiteheads.eu</u>

### Introduction

*Cryptops anomalans* Newport, 1844 is a thermophilous largely southern Palaearctic species (Barber, 2008) naturalised in Britain mostly around the fringes of older large conurbations but is probably under-recorded; it is illustrated in Barber (2008). PFW has regional records only from gardens in the Regency squares of Worcester City (SO85) where two were observed on 1 September 2003. Scolopendromorph centipedes (Lewis, 2010) are voracious nocturnal predators (02) remaining concealed by day and *C. anomalans* is the largest of the three British species reaching up to 50 mm in length.

#### Discussion

During October 2017 PFW was invited to appraise an area of cultivated land within the curtilage of Evesham town (SP04) originally forming part of the Evesham Abbey estate. The area therefore has an extended history of cultivation with surface ceramic evidence extending back from *circa* AD 1900 to at least *circa* AD1300 with a fair degree of continuity. Without evidence to suggest otherwise, It is assumed that *C. anomalans* is a recent colonist linked to the post-Victorian urbanisation of Evesham town.

What makes the Evesham site of particular interest is the high density of *C. anomalans* observed by PFW on 26 October 2017 with the population extending over several hectares. A key feature is light soils cultivated sequentially allowing *C. anomalans* the opportunity to locate and range over and within a variety of unvegetated or weakly vegetated sediments cohesive enough to allow it to access subsurface warm air spaces. A further factor is an abundance of artefacts, such as sheds and old baths that characterise smallholdings and provide refugia for *C. anomalans* in adverse conditions. The numbers of *C. anomalans* appeared to increase in proximity to these structures and to the shelter provided by nearby houses. Such sites also provide unusual concentrations of fruit-producing plants and therefore invertebrates in specific places as a definable mosaic at fixed intervals of time adding scope to the rather catholic dietary tastes of *C. anomalans*.

These conditions reflect in part on the Worcester City populations (*op. cit.*) and also on those around the urbanised fringes of Bath, Somerset, where further study might reveal larger dispersed populations like those cited by Barber (2000) for Greater London. In the Odd Down area of Bath (VC6 ST36) the finding by PFW of a 46 mmm long adult *C. anomalans* 200 mm below ground on 21 February 2015 exemplifies winter survival strategy.

MMC has had awareness of this species in Evesham for some time and was able to demonstrate how, when the centipedes were disturbed during cultivation, Robins *Erithacus rubecula* (L., 1758) consumed them with some alacrity (01). This contribution by a cryptopid to the synecology of British synanthropic systems is almost certainly a novel one.



01. Robin predating *Cryptops anomalans*, Evesham, Worcestershire, May 2017. M.M. Crooke.

Given present climatic trends it may well be that *C. anomalans* extend its European and British range northwards (Wesener *et al.*, 2016) and that other species of *Cryptops* become established in Britain. *Cryptops doriae* Pocock, 1891 is naturalised in southern England evidently only in artificially controlled environments (Lewis, 2007).



02. Scolopendra cingulata Latreille, 1789, 115 mm in length is a typical scolopendromorph centipede ranging widely in southern Europe as far north as Austria, likely to become more expansive with climatic warming. Mt Srd, Dubrovnik, Croatia, 11 October 2013 © P.F. Whitehead.

#### References

Barber, A.D., 2000. The British species of *Cryptops*. *Bulletin of the British myriapod group* **16**:30-35.

Barber, A.D., 2008. Key to the identification of British centipedes. *Field Studies Council Occasional Publication* **130**, pp. i-iii, 1-96. Lewis, J.G.E., 2007. On *Cryptops doriae* Pocock from the wet tropical biome of the Eden Project, Cornwall (Chilopoda, Scolopendromorpha, Cryptopidae). *Bulletin of the British myriapod and isopod group* **22**:12-16.

Lewis, J.G.E., 2010. A key and annotated list of the *Scolopendra* species of the Old World with a reappraisal of *Arthrorhabdus* (Chilopoda: Scolopendromorpha: Scolopendridae). *International Journal of Myriapodology* **3**:83-122.

Wesener, T., Voigtländer, K., Decker, P., Oeyen, J. & Spelda J., 2016. Barcoding of Central European *Cryptops* centipedes reveals large interspecific distances with ghost lineages and new species records from Germany and Austria (Chilopoda, Scolopendromorpha). *ZooKeys* **564**: 21-46.

## Images

01. Robin predating *Cryptops anomalans*, Evesham, Worcestershire, May 2017. M.M. Crooke.

02. *Scolopendra cingulata* Latreille, 1789, 115 mm in length is a typical scolopendromorph centipede ranging widely in southern Europe as far north as Austria, likely to become more expansive with climatic warming. Mt Srd, Dubrovnik, Croatia, 11 October 2013 © P.F. Whitehead.