

***LESTRICUS SECALIS* (HYMENOPTERA: BRACONIDAE:
CENOCEOELIINAE), A GENUS AND SPECIES NEW TO BRITAIN**

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ABSTRACT

Lesticus secalis (L.) was inadvertently listed as British on the basis of an old speculation but, as there was neither firm evidence nor the existence of any specimen, it was deleted from the British list by Shaw & Huddleston (1991). However, it was suggested by Shaw (1999) that the species might be found in the native pinewoods of Scotland, and now its presence there can be confirmed. Illustrated notes on its morphology and the means to identify it are given.

INTRODUCTION

As discussed by Shaw (1999), there are three European species of the small braconid subfamily Cenocoeliinae, which are parasitoids of beetle larvae. Rearing records for all three show their hosts to be small Cerambycidae that feed in dead twigs and small branches. Two British species, *Cenocoelius analis* (Nees) and *Cenocoelius aartseni* (van Achterberg), are known from southern England and can be locally common, parasitizing cerambycids associated with broadleaved trees (Shaw,



Fig. 1. *Lesticus secalis*, female. Habitus.

1999). The third European species, *Lestricus secalis* (L.), is associated with conifers and largely northern in distribution (though recently found in Spain: Obregón & Shaw, in press). It has been reared in Poland from *Pogonocherus* species in dead *Pinus sylvestris*, including *Pogonocherus fasciculatus* (De Geer) [specimens in National Museums of Scotland (NMS) reared by J. Hilszczański], which is a rather rare insect in Britain with its core distribution in the native pinewoods of Scotland. This led to a speculation by Shaw (1999) that *L. secalis* might occur there.

Marshall (1889: 190), in a work on specifically British Braconidae, had speculated (but with no evidence) that *L. secalis* might be found in England, as a result of which Shenefelt (1970) included citation of Marshall's publication for *L. secalis*. Owing to a high reliance on Shenefelt's comprehensive work on world Braconidae (*Hymenopterorum Catalogus (novo editio)*), Huddleston (1978) misinterpreted the citation and erroneously included *L. secalis* in the Braconidae part of the British check list. This error was rectified (although without the above explanation) by Shaw & Huddleston (1981) who therefore excluded *Lestricus* Reinhard, 1865 from their list of genera of British Braconidae, an action reinforced by Shaw (1999).

ADDITION TO THE BRITISH LIST

In view of the above, it was on the one hand pleasing and on the other hand not especially surprising that *L. secalis* has indeed turned up in a native pinewood in Scotland. One of us (HM) reared a single female from 2–3 cm diameter sections of a recently dead branch taken from a living but moribund *Pinus sylvestris* in Abernethy Forest, Elgin (VC 95) on 24.v.2014 and sent it to MRS for determination. The wood was placed in an emergence trap (as figured in Mendel & Hatton, 2014) and the specimen appeared in the collecting pot sometime between 21.xi.2014 and 15.v.2015. The only beetles reared were a few *Glisrochilus hortensis* (Geoffroy) (Nitidulidae),



Fig. 2. *Lestricus secalis*, female. Fore leg.

which is considered to be an improbable (though not impossible) host. The specimen, which is ca 5 mm long, is deposited in the NMS collection.

IDENTIFICATION

As a subfamily, Cenocoeliinae may easily be recognised in the British fauna by the insertion of the metasoma high on the propodeum, and clearly braconid fore wing venation (Fig. 1). No other British Braconidae have the metasoma inserted as high as this, but it is of course seen in the three families of Evanoidea (Aulacidae, Evaniidae and Gasteruptiidae) (Hymenoptera), with very different wing venation.

Lestricus secalis is black but the female (not the male) has a reddish head. It differs from other two British cenocoeliines, both of which are in the genus *Cenocoelius*, in having a pronounced flange on the fore femur (Fig. 2), which is present in both sexes but absent in *Cenocoelius*. The anterior surface of the broad fore femur has a groove which runs along its length, below which the flange projects, and when the leg is clenched the tibia fits into the groove with the flange covering its posterior face. Toothed or flanged fore femora occur sporadically in Ichneumonoidea (e.g. in some species of *Acrodactyla* (Ichneumonidae: Pimplinae) which parasitize spiders), but not necessarily in a homologous way; and without observation of the living insect in action it is hard to deduce their functional importance.

ACKNOWLEDGEMENT

We are grateful to Richard Lyszkowski for photography.

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