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A rearing record of *Homolobus* (*Phylacter*) *meridionalis* van Achterberg (Hymenoptera: Braconidae, Homolobinae) in the south of France

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Synopsis

Homolobus (*Phylacter*) *meridionalis* is recorded parasitizing the noctuid *Dryobota labecula* (Esper, 1788) feeding in spring on *Quercus* in southern France. The adult parasitoid emerged in autumn; evidence is presented to suggest that it is a bivoltine species, likely to parasitize low-feeding noctuids in its overwintering generation. Notes to separate the parasitoid from the closely related *H.* (*P.*) *annulicornis* are given.

Key words: Lepidoptera, Noctuidae, *Dryobota labecula*, *Quercus*, morphology, phenology, Hymenoptera, Braconidae, Homolobinae, *Homolobus* (*Phylacter*) *meridionalis*.

Introduction

In his monograph of the braconid subfamily Homolobinae, van Achterberg (1979) was unable to give a host for the Mediterranean species *Homolobus* (*Phylacter*) *meridionalis* van Achterberg, and neither Shaw (2010) nor Yu, van Achterberg & Horstmann (2012) were able to improve on that. A rearing record is given here to supplement the data provided by Shaw (2010) on other western European species of *Homolobus*.

Rearing and phenological data

In the period 26–31.v.2012 I spent most early mornings beating mixed *Quercus* foliage for caterpillars at the edge of a wood bordering both vineyards and deserted agricultural land near Pouzols-Minervois, a village in the French département of Aude. It was a very late and disappointing spring in that area, after a lethal false start too soon in February followed by eight wet and cold weeks, and the haul was very meagre. It did, however, include a few of the rather spectacularly marked (catkin-masquerading: Fig. 1) caterpillars of the noctuid moth *Dryobota labecula* (Esper, 1788), which eventually made pupation retreats during June (but without pupating until later in the summer).

In one retreat a largely white cocoon of *H.* (*P.*) *meridionalis* formed, from which a male (Fig. 2) emerged on 24.x.2012. This would appear to be the first host record for this species, showing that (like its plurivoltine close relative *H.* (*P.*) *annulicornis* (Nees)) it uses arboreal noctuid hosts in the spring/summer generation (Shaw, 2010). Another similarity is that both species appear to be plurivoltine: other adults of *H.* (*P.*) *meridionalis* in the National Museums of Scotland (NMS) collection were collected at light in Mallorca in x.2010 (3 ♀, *N. J. Riddiford*), and the 7 ♀, 2 ♂ already mentioned by Shaw (2010) were taken, also at light, at sites in southern Spain (Almería and Granada) in v.2008 (*C. Lopez-Vaamonde*). Since arboreal noctuid larvae that overwinter are (even in the Mediterranean area) very limited, the probability is that the spring adults of

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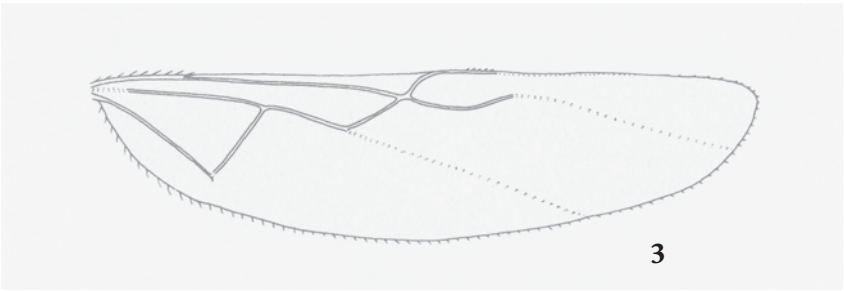
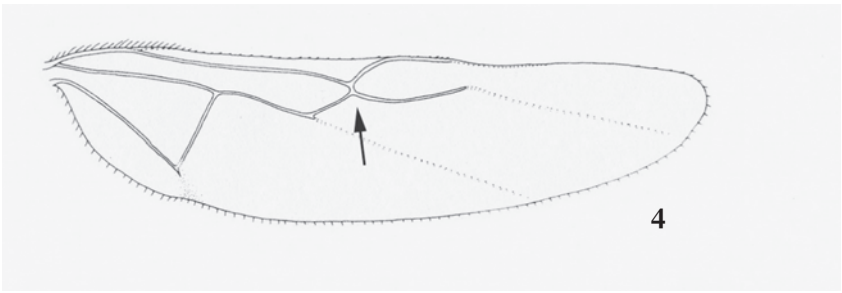
Fig. 1. Final instar of *Dryobota labecula*, with *Quercus* male catkin.

Fig. 2. Mounted male of *Homolobus* (*Phylacter*) *meridionalis*, with cocoon and host remains in gelatine capsule.

H. (*P.*) *meridionalis* would have resulted from noctuids feeding on low plants through the winter, the presence of males indicating that these individuals had not overwintered as adults. This would be another parallel with *H.* (*P.*) *annulicornis*, and it is not an unusual situation for pairs of closely related but distinct parasitoid species to do basically the same thing in, on the one hand, Mediterranean biotopes and, on the other hand, more temperate areas.





Figs 3, 4. Hind wing of *Homolobus* (*Phylacter*) species. 3, *H.* (*P.*) *annulicornis*. 4, *H.* (*P.*) *meridionalis*.

Identification

The two discussed species (which will both run to couplet 5 in the key provided by Shaw, 2010) are similar in size and general appearance, and the females of both have the ovipositor sheath longer than half the length of the hind tibia, but in *H.* (*P.*) *meridionalis* (Fig. 2) the hind tarsus is about the same orange colour as its tibia (in *H.* (*P.*) *annulicornis* the central tarsal segments are significantly paler), and there is a marked difference in hind wing venation: 2–SC+R transverse or sometimes quadrate in *H.* (*P.*) *annulicornis* (Fig. 3) but vertical in *H.* (*P.*) *meridionalis* (Fig. 4, arrowed).

The reared male *H.* (*P.*) *meridionalis* is deposited in NMS.

Acknowledgements

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