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TWO SECONDARY PARASITOIDS OF THE PUSS MOTH, MEGALOPYGE OPERCULARIS

Earlier I reported (Khalaf 1975, Biology of the Puss Caterpillar and its Ichneumonid Parasite, Loyola Univ. Press, New Orleans, Louisiana, 43 p.) that the ichneumonid wasp, *Lymeon orbus* (Say), was a parasite of another ichneumonid, *Lanugo retentor* (Brullé), which, in turn, was a primary parasite of the megalopygid moth, *Megalopyge opercularis* (Smith). Recently, two other wasps were found to be secondary parasites of this moth.

On 30 March 1979, tiny eulophid wasps, *Dimmockia incongrua* (Ashm.), started to emerge in the laboratory from a cocoon of *Megalopyge*, which was obtained a few days earlier from New Orleans. The wasps emerged by eating one tiny hole about 1 mm in diameter in the shell of the cocoon. Thirty females and 2 males were recovered. Dissection of the cocoon revealed that the *Dimmockia* developed within the larval cell of *Lanugo retentor* (Brulle), a primary parasite of the moth. The *Lanugo* larva walled off the host *Megalopyge* prepupa, and then it was parasitized by *Dimmockia*, which caused the death of the *Lanugo* larva. Several brownish yellow pupal skins of the hyperparasite were left behind within the *Lanugo* cell.

A eupelmid wasp, Arachnophaga aureicorpus (Girault), emerged on 5 April 1979 from a Megalopyge cocoon that was collected in New Orleans in March 1979. The parasitized cocoon lacked the typical hard and tough texture of a finished cocoon; this lack is a symptom of tachinid fly parasitism, which inhibits the Megalopyge prepupa from reinforcing the cocoon, which causes the cocoon to harden. The emergence hole was 1.4 mm in diameter and was in a Lanugo cell containing a dead adult. Multiparasitism existed between Lanugo and tachinid flies before the eupelmid wasp attack. The Lanugo larva had walled off the Megalopyge prepupa and two tachinid puparia. No special cell was seen which might have belonged to the eupelmid wasp. This is a case of hyperparasitism.

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KAMEL T. KHALAF, Department of Biology, Loyola University, New Orleans, Louisiana 70118.