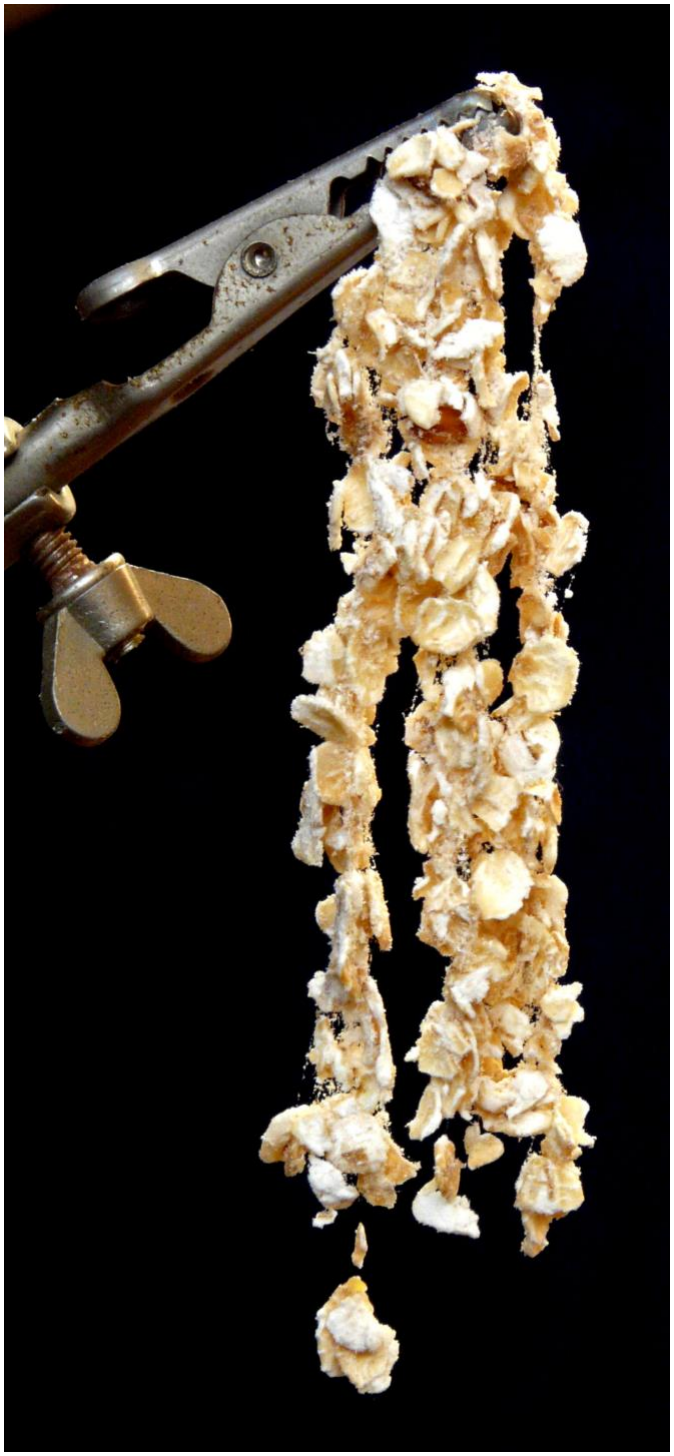
Mediterranean Flour Moth *Ephestia kuehniella* in a packet of porridge oats.

Martin B Skirrow



01. Rolled oats caught up in silky strands from larva of *Ephestia kuehniella*. Martin Skirrow

"Somebody's been eating my porridge!"

The above quote from the traditional fairy tale *The Three Bears* was particularly apt for me last November (2015) when I found strands of silk in a packet of rolled porridge oats (01). The packet had been opened several weeks previously and then closed, probably not very effectively, with a bulldog-type clip. Closer inspection revealed a cocoon containing an empty pupa case and larval skin in a fold in the plastic near the opening (02, 03). Far from being dismayed, I was delighted, for here was the answer to the source of an adult Mediterranean Flour Moth *Ephestia kuehniella* (Zeller 1879), Pyralidae (04), that I had found indoors two weeks earlier (6th November) only 3 metres from the cupboard containing the oat packet. Identity was supported by dissection (a male) and confirmed by Tony Simpson. The features of the cocoon and its contents were consistent with this species. There was no evidence of more than one larva having been present in the packet. The site was my converted dwelling at Carpenter's Farm, near Berrow, SO777339.

02. Cocoon that was in the folds of the oat packet. Martin Skirrow

03. Cocoon opened to show empty pupa case and larval skin consistent with *Ephestia kuehniella*, Martin Skirrow

04. Adult male of *Ephestia kuehniella* presumed to have come from oat packet. Martin Skirrow

The moth is a cosmopolitan indoor species that can be a pest in granaries, bakeries and anywhere where food is stored, but it is uncommon in Britain. The last Worcestershire record was in 1900 in Kidderminster (Rea and Fletcher 1901), but within the last few years one was recorded from Ledbury in Herefordshire by Mike Harper (personal communication to Tony Simpson). In the present case the possibility that the ovum or larva was in the packet of oats when purchased had to be considered. The moth takes about 40 days at 25ºC for complete development. Unfortunately I have no accurate record of the date the packet was opened, but it is possible that it was as long as 40 days before the moth was found. Discrete enquiries with the manufacturer of the oat packet and the pest control company they employed (both extremely helpful) indicated that there had been no recent problems with the moth at the production site. But they pointed out that contamination can occur at any stage, and can take place in warehouses, shops and supermarkets, where eggs are laid in and around the folds of the wrappings. Egg laying at

the mouth of my opened and poorly sealed packet by a moth resident on the farm is probably what happened in my case. This notion was supported by the finding of another adult *E. kuehniella*, this time a female, in a different part of the same dwelling on 18th December. Animal feed is always present on the farm, though not in my dwelling.

Acknowledgments
I thank Tony Simpson for confirming the identity of the moth and for providing references to previous records.

Reference
Rea, C. & Fletcher, J.E., 1901. Lepidoptera in *The Victoria History of the Counties of England: Worcestershire,* Volume 1, Ed Willis-Bund, J.W. Dawsons: London

Images
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