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A New Museum Pest in Britain

started to break down into (presumably) carbon caused by the hydrolysis of sulphate half-ester groups producing minute quantities of sulphuric acid. The problem was noted at the Natural History Museum in 1998, where it was assumed to have been catalysed by humidity, following the humid summers of 1996 and 1997. Even in the mid 1980's a curator in Berkeley, Calafornia noticed that specimens had suddenly deteriorated so severely that the herbarium paper had been eaten away! Although the New Zealand authors have put forward a likely chemical equation showing the sulphate hydrolysis, preventive and remedial measures are still an unknown quantity! No common link to these deteriorated specimens has yet been established; some were only collected about 30 years ago and would have been mounted on different herbarium paper with different adhesive. The condition has affected only a random handful of specimens within each collection.

Once again does anyone have any ideas about this problem and how it can be prevented, bearing in mind that large quantities of carageenophyte specimens cannot, in practical terms, be regularly monitored or stored in expensive and tailor-made herbarium cabinets? Damaged specimens have been photocopied to record the extent of the damage. The carbonised areas have then been cut away, hopefully to prevent the condition from spreading (J. Bryant, *pers. com.*).

Please contact Jenny Bryant at the Natural History Museum (02079425004 or jem@nhm.ac.uk) with any ideas or to monitor further developments.

Reference

Nelson W. A. & Falshaw, R. 1999 Irreversible deterioration of some carageenophytes (*Rhodophyta*) in herbaria. *Taxon* 48(2): 325-329 Darren J. Mann, Hope Entomology Collections, Oxford University Museum of Natural History, Parks Road Oxford, OX1 3PW

A recent paper by Mark Shaw (1999) of the National Museum of Scotland (NMS) reports of a new pest of natural history collections: *Trogoderma angustum* (Solier, 1849) (Coleoptera: Dermestidae). This beetle, originally from the Americas has spread across Europe, and was first noted in Britain in the mid 1980s' in the Royal Botanic Garden of Edinburgh herbaria. In the collection of NMS the beetle has been found in glazed cases of mounted birds and primates where, in the former it only caused slight visible damage, feeding upon skin beneath the feathers. As with other members of the genus *Trogoderma*, of which there are four in Britain, *T. angustum* is polyphagous, being able to feed on material of both animal and plant origin.

As this species has only recently been added to the British list of insects, it is not included in any readily available identification guides. In the Handbook by Peacock (1993: 25-26) on the Dermestidae, problems will arise in the key to genera of the subfamily Megatominae due to *T. angustum* having an elongate body and weakly developed antennal cavities, however, the figures in Shaw (*l.c.*) enable this distinctive dermestid to be identified. The larvae are similar to *Reesa vespula* (Milliron, 1939) and therefore care should be taken if no adults are available for identification.

References

Peacock, E.R. 1993. Adults and larvae of hide, larder and carpet beetles and their relatives (Coleoptera: Dermestidae) and of derodontid beetles (Coleoptera: Derodontidae). *Handbooks for the Identification of British Insects* **5**(3): 1-144

Shaw, M.R. 1999. Trogoderma angustum (Solier, 1849) (Coleoptera: Dermestidae), a museum and herbarium pest new to Britain. Entomologist's Gazette 50: 99-102

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