

9 MAY 1960

THE
NEW ZEALAND ENTOMOLOGIST

Vol. 2. No. 1.

November, 1956.

A MUSCARDINE FUNGUS ON A CATERPILLAR OF
ANTHEREA EUCALYPTI SCOTT
(LEPIDOPTERA, SATURNIIDAE)

By R. CLOSE

Department of Agriculture, Horticulture Division, Wellington.

Three Emperor Gum Moth caterpillars (*Antherea eucalypti* Scott), collected in May, 1956, by G. Morrison of Wellington, from a Pepper Tree (*Schinus molle*) which was growing in the grounds of Massey College, Palmerston North, were taken to Wellington and fed on gum leaves (*Eucalyptus sp.*). Two of the caterpillars soon pupated normally whereas the third sickened and died on May 27.

After the caterpillar had been dead for approximately five days white mycelial growth began to appear. It first appeared in the thoracic region and then progressed over the remainder of the body so that by June 9 the body was completely covered. The fungus sporulated on June 12 when slides were made and culture tubes were inoculated. From a microscopic examination of the spores and associated structures, the fungus was tentatively identified as a *Beauveria sp.*

As soon as the fungus had grown sufficiently, one of the culture tubes was despatched to Dr. Steinhaus of the University of California for confirmation and identification of the particular species concerned. The culture has now been identified as *Beauveria bassiana* (Bals.) Vuill. In making this identification Dr. Steinhaus was following the new taxonomic arrangement of *Beauveria spp.* as proposed by McLeod (1954) in which the genus *Beauveria* has been revised and now has only two valid species. These are *B. bassiana* and *B. tenella* (Delacr.) Siem. and they are distinguished by the fact that *B. bassiana* has about 50% of its spores globose whereas *B. tenella* has only 2% of its spores globose, the remainder being oval.

It is interesting to note that these muscardine fungi can be of some importance in the natural control of many insect pests.

They have been known for a long time in the sericultural industry where it is difficult to control the heavy losses which they can cause in the rearing of silk-worms.

REFERENCES

- STEINHAUS, E. A. (1949). *Principles of Insect Pathology*. McGraw-Hill Book Company, New York.
- MACLEOD, D. M. (1954). Investigations on the genera *Beauveria* Vuill. and *Tritirachium* Limber. *Can. J. Bot.* **32** (6), 818-890.