

NEW PEST ALERT

Buprestid on *Acacia mearnsii*

Background

In February 2024, signs of pest attack were noticed in *Acacia mearnsii* plantations in the Melmoth area, KwaZulu-Natal. Investigations by the TPCP Field Extension team and TPCP Diagnostic Clinic confirmed symptoms were due to burrowing activities of larvae of an unknown weevil of the Buprestidae.

Symptoms

Infested trees showed excessive resin production around feeding sites. Removal of the bark reveals the boring galleries of the larvae in the sapwood and sometimes a single flatheaded larvae is present.

Distribution and prevalence

The pest has been detected around Melmoth, KwaZulu-Natal. Some sites visited had close to 100% infestation. Mortality and recovery rates need to be determined.

Origin

The origin of the species is currently unknown.

Identification

DNA sequence based identification confirmed the larvae are species of the Buprestidae in the subfamily Agrilinae. The species did not match any species for which sequence data is currently available. The specimens were confirmed not to be the emerald ash borer, *Agrilus planipennis* (Coleoptera: Buprestidae), a serious pest of ash in North America. No fungal pathogens were detected on the infested material.

Biology and ecology

Adults of the Buprestidae deposit their eggs on bark cracks and crevices and the larvae tunnel in the phloem and outer sapwood. The larvae are called flatheaded borers and the adult beetles are known as jewel beetles because of their glossy iridescent colors. Most Buprestid species attack stressed or dead trees, but some attack apparently healthy trees. Infestation can result in tree mortality, but vigorous hosts can survive.

Ongoing and future investigations

Infested logs have been collected and placed in rearing chambers at the FABI Biocontrol and Insect Rearing Facility to rear adult beetles to aid in further identification of the pest. Additionally, investigation is underway to understand the origin, biology and distribution of this new pest.

Should potential infestations of this insect be observed in other areas (outside of the Melmoth area), please contact Sandisiwe Jali (Sandisiwe.jali@fabi.up.ac.za). Please distribute this pest alert to spread awareness.

