

N O T E

EUPHORIA SEPULCHRALIS (COLEOPTERA: SCARABAEIDAE) DAMAGE TO ROSE (*ROSA*) FLOWERS IN MISSISSIPPI¹

J. A. Spencer² and J. H. Jarratt³

Key Words: *Euphoria*, rose insect.

J. Entomol. Sci. 24(1): 7-8 (January 1989)

Adults of *Euphoria sepulchralis* (F.) have been reported as plant pollinators (Norman, E. M. and D. Clayton. 1986. Bull. Torrey Bot. Club 113 (1) : 16 - 22) and feeders of pollen and nectar (Hayes, W. P. 1929. Ill. Biol. Mono. Univ. IL, Urbana. XII (2) : 10). Larvae have been collected from soil in sugarcane fields (Gordon and Anderson. 1981. Fla. Entomol. 64 (1) : 119 - 138) and from manure and decaying vegetation (Hayes, 1929). Adults in the Mississippi Entomological Museum (MEM) have been collected from flowers of *Althea* spp., *Castanea* spp., *Erigeron* spp., *Solidago* spp., *Rosa* spp., and others. However, the beetle has never been reported to damage roses. Adults of *E. sepulchralis* (identified by Terence Schiefer, curator MEM; voucher specimens deposited in MEM) were observed feeding on rose (*Rosa dilecta* Rehd.) flowers (Fig. 1) in the Mississippi Agricultural and Forestry Experiment Station (MAFES) Rose Disease Research Garden at Mississippi State, MS in September, 1987. Although the garden has been established for two years, this is the first observation of the beetle on the flowers. *Euphoria sepulchralis* larvae have not been observed in the soil or bark mulch of the garden to date. Beetles gained entrance to the flower discus area either by eating through unopened petals or by entering through spaces between unfurling rose petals. As many as eight beetles were found in the discus area of a flower (Fig. 2). The beetles consumed stamens and pollen. Attacked flowers appeared to be decaying and were unsightly. Temperatures during this period (September - November) ranged from 36°C (day) to 2°C (night). The rose plants had received Carbaryl (23.7% liquid, 19.7 ml/3.881) and Acephate (75% sp, 4.9 ml/3.881) protective sprays (wetting of leaves and flowers) at irregular intervals and, occasionally, dead beetles were observed on the ground near treated plants. The source of the beetle infestation is unknown. Possibly, as field crops on the adjacent MAFES Crop Science Farm were harvested and refuse was plowed under, the beetles migrated to the rose garden. No attempt was made to check adjacent crops for beetle populations.

¹ Accepted for publication 22 April 1988.

² Department of Plant Pathology and Weed Science, Mississippi Agricultural and Forestry Experiment Station.

³ Department of Entomology and Plant Pathology, Mississippi Cooperative Extension Service, Mississippi State, MS 39762.



Fig. 1. *Euphoria sepulchralis* adult on Rose. Darkened area below insect is a feeding site.



Fig. 2. *Euphoria sepulchralis* adults feeding in rose discus area.