

BIOLOGY AND HOST-INTERACTIONS OF NATURAL ENEMIES: Posters  
and Abstracts:

ANTIMICROBIAL ACTIVITY OF SECRETORY MATERIALS OF SOME  
SCALE INSECTS.

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The antimicrobial activity of the secretory materials associated with the test or wax covers of five scale insects was tested for Gram-positive and Gram-negative bacteria. The scale insects studied were the margarodid *Icerya aegyptiaca* (Douglas), the soft wax scale *Ceroplastes rusci* (Linnaeus) and three hard scales: *Aonidiella aurantii* (Maskell), *Lepidosaphes beckii* Nerwman and *Parlatoria zyziphi* (Lucas).

The Gram-positive bacteria found included *Staphylococcus aureus* and *Streptococcus agalactia*, while the Gram-negative bacteria included *Escherichia coli*, *Pseudomonas aeruginosa* and *Corynebacterium pseudotuberculosis*.

The results of these observations revealed that there was some highly significant antimicrobial activity associated the secretory materials of the diaspidids *A. aurantii*, *L. beckii* and *P. zyziphus*. The antimicrobial activity observed varied according to type of the pathogenic bacteria it was used against. Thus, the activity from all three species was effective against *Staphylococcus aureus*, but that of *A. aurantii* and *P. zyziphus* was less effective against *Corynebacterium pseudotuberculosis*.