

SOME STUDIES ON THE AGGREGATION PHEROMONE IPSENOLO OF *IPS GRANDICOLLIS*

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Ips grandicollis is a bark beetle inhabiting subcortical tissues of *Pinus radiata* trees. The population aggregation pheromone, ipsenol, is produced in the hindgut of male beetles following feeding and is released with the faecal pellets (Hughes, 1974.)

Conditions under which the pheromone is produced was investigated. For the quantification of the amount of ipsenol present in extracts of whole beetles, a modification of the method used by Byers *et al* (1979) was adopted. The minimum period of feeding required for the production of ipsenol was 9-12 hr., which coincided with the initial production of faecal pellets.

Both mated and unmated males contained similar amounts of the pheromone contradicting earlier findings. Dispersing adult males contained variable amounts of ipsenol, which was in agreement with the known behaviour of the beetle.

Male beetles that bored into 'resistant' *P. radiata* trees during test-boring did not produce any ipsenol, while males that bored into 'susceptible' material (logs obtained from *P. radiata* slash) produced a maximum concentration of 25.75×10^{-9} gm of ipsenol per beetle.

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References:

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