

EFFECT OF FUNGAL PATHOGENS ON THE BLACKCURRENT MITE *CECIDOPHYOPSIS RIBIS*

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A survey was conducted during 1977 and 1978 for fungal pathogens of the blackcurrent gall mite, *Cecidophyopsis ribis* Westwood in England. Also infectivity tests were carried out in the laboratory, using five fungal pathogens of insects.

The infested buds were cut lengthwise into two halves, examined for fungal infection and pieces from freshly cut surfaces inoculated on to agar containing streptomycin. The buds and the inoculated agar plates were incubated at 20°C under high relative humidity for one week and examined. All the mites from a few "big buds" were found dead and associated with *Verticillium lecanii* Zimm (Viegas). In all the other buds there were active mites without fungus. No other fungal pathogens were found.

For infectivity tests fungal spores were applied to half-buds. The buds were incubated as earlier and examined for one week after inoculation. *V. lecanii* killed mites within 2-4 days after application. It grew and sporulated on dead mites. No live mites were seen with fungal growth. Of the other fungi tested *Hirsutella thompsonii* Fisher grew on a few mites. *Metarhizium anisopliae* Sorok grew on some mites, but *Beauveria bassiana* Vuill and *Paecilomyces farinosus* Bain grew on none.

As *V. lecanii* is a facultative parasite it can survive by growing on decaying plant residue when hosts are not available. Therefore trial sprays of spores should be applied as the infested buds are opening in moist spring weather to determine whether *V. lecanii* can prevent the spread of infestation to clean plants.