SOOTY CANKER ON SOME THIN BARK TREES CAUSED BY *NATTRASSIA MANGIFERAE*

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Abstract

Most common such thin or smooth bark trees as, *Crataegus azarolus* L. , *Cupressus sempervirens* L. , *Eucalyptus camaldulensis* Dehen, *Platanus orientalis* L., *Pinus brutia* Ten., and *Prunus amygdalus* Batch., were affected by *Nattrassia mangiferae*(H.&P. Sydow) Sutton & Duko, severity of sooty cankers, bark cracking and slough-off were more conspicious after three months of inoculation under field conditions when cankers were expanded to 83mm and girdled by 14.5mm^2 on *p. amygdalus* and *E. camaldulensis* , respectively. Most of inoculated hosts failed in the callus formation around infected sites. Poplar cankers continued their acceleration during January to April in Duhok and December, March, April in Zakho plantations, the symptoms of decline trees increased in June and July with outbreak dissemination of stem borers and forest caterpillars. Thus, the hot dry summer and accumulation effects of biotic and abiotic stress as droughts are supported the detection and development of disease.

Result of chemical and biological control in the field gave no prenvent canker development when applied these treatments either in painting with bentonite and nebranet or as benlate sprays on cankers at 2.5g/l.

Key words: *Nattrassia mangiferae,* Stem Cankers, Poplar.

INTRODUCTION

Nattrassia mangiferae (H.&P.Sydow) Sutton & Duko (Deuteromycetes, Sphaeropsidales) is a polymorphic fungus that is cultured as arthrospore stage *Scytalidium dimidiatum* consist clear arthrospores with 1-3 cells, owing to dark brown. It forms *P.* conidiomata on the host tree, and under right cultural conditions. Pycinidium contains pigmented pycniospores with 1-3 cells, the middle cell is darker than the two terminal cells (1). the colonies are fluffy with grayish to black aerial mycelium.

The most common name of diseases caused by *N. mangiferae* called sooty canker or limb wilt that invades thin or smooth bark trees as mulberry ,ash ,citrus, walnut , fig , sycamore , apple , apricot and poplar trees that has been damaged or wounded by freezing , sunscald ,and pruning or other mechanical injury (2 , 3). It is well adapted to hot, dry weather and progresses in stressed trees during hot summer and most cankers develop on unshaded trunks and limbs that face toward the sun (4).