

DISEASE MANAGEMENT

Application of fungicides is a popular strategy to control SALB.

Many older fungicides (chlorothalonil, propineb, mancozeb, benomyl) and newer systemic fungicides (triadimephon, thiophanate methyl, prochloraz, propiconazole, triadimenol and azoxystrobin) are effective.

These fungicides are applied by aerial or ground mistblowing.

Persistent use of a systemic fungicide may induce fungicide resistant strain.

In the past, so called 'resistant clones' are severely infected when a new race of *M. ulei* occurs.



THREAT OF SALB TO ASIA AND PACIFIC REGION

Several diseases for example potato late blight, coffee rust and Dutch elm's disease had crossed oceans and established themselves in new areas. The spread was attributed to either through wind-borne spores or importation of infected plant materials. Hence, SALB is a threat to Asia and Pacific region due to increase of communication between SALB endemic countries and the rubber growing countries in the region. It is predicted that rubber in South East Asia will be destroyed within 5 to 7 years of SALB introduction due to the contiguous growing pattern, conducive environment and susceptible clones.

For Further enquiries, please contact:
(Contact point for each country)

South American Leaf Blight (SALB) of rubber



1. INTRODUCTION

South American leaf blight (SALB) is the most serious disease of the rubber tree due to its devastating effects. Historically, SALB had destroyed several rubber plantations established in the 1930s in Central and South America. The Asian rubber growing countries that produce more than 90% of the world's natural rubber are very concerned about the threat of SALB. This is because the climatic conditions in the major rubber producing countries are conducive to serious SALB infection.

2. THE PATHOGEN

South American leaf blight is caused by the fungus that is called *Microcyclus ulei*. It produces three types of spores i.e. conidia, pycnospores and ascospores.



3. HOST RANGE

M. ulei infects only *Hevea* species. There are 11 *Hevea* species but *M. ulei* infects only five species (*H. brasiliensis*, *H. spruceana*, *H. guianensis*, *H. benthamiana*, *H. camporum*).

4. SYMPTOMS

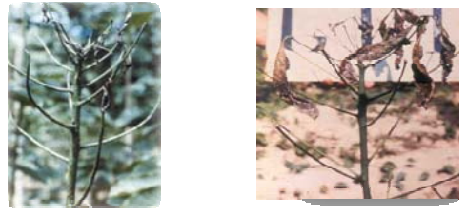
The fungus only infects young plant part



The first signs of infections are deformation of young leaflets; eventually severely infected leaflets shrivel and turn blackish.



The leaf tissues at the centre of the lesions become necrotic and turn papery white and later tear off leaving shot-holes in the leaf.



Severely infected leaflets defoliate, the petioles remain intact on the branches for sometimes, but they eventually drop-off



Infection of the stem may cause tip die-back. The severely infected trees will have poor canopy with dead branches



M. ulei also infects leaf petioles, young stems, inflorescences, flowers and young fruit.

