

## **B-70: Field control of freckle disease in banana**

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Last year we reported the biology of Freckle disease of banana and its relation to weather conditions. The disease, caused by *Macrophoma musae* and *Phyllostica musarum*, is widespread in Sri Lanka affecting every commercial cultivar and has become a major problem in the production of good quality fruits for export. Primary infections which occur in the leaf provide inoculum to the fruit.

Field control trials using the cultivar 'ambul' were conducted in a location (2 acre) close to the University premises, adopting a combination of measures i.e. removal and destruction of infected and hanging leaves, bagging of newly emerged bunches and monthly spray with a fungicide. The development of disease was monitored weekly for 20 weeks in 100 plants from treated and control plots from the onset of bunch until harvest.

The bunches harvested following 20 weeks, from treated plots, showed a very high (75-85%) reduction in freckling when compared to the control. The fingers from treated bunches were smooth skinned, unstained and of complete contrast in appearance compared to the bunches from the control fruit. Moreover the fingers from treated plots were larger in size, had 45-50% more fresh and dry weight than control, while the total number of fingers in both was similar. The results indicated that these measures can achieve very high control of freckling and improvement of fruit quality and size and were therefore suitable for export oriented cultivation.