

Mung bean (*vigna radiata* L.) Disease management in North Central province

Mung bean is one of the important food legumes cultivated as subsistence crop in Sri Lanka. This crop not only provides a cheap source of protein for rural masses but also improve the soil fertility through nitrogen fixing ability. Statistics showed that the yield of the average farmer is very low and estimated to be less than 1 mt/ha.

Diseases are found to be one of the major constraints responsible for low productivity. Among these, Mung bean Yellow Mosaic Virus (MYMV) disease is predominant during yala season, whilst *Cercospora* leaf spots and Powdery mildew caused by *Erysiphe polygonii* are predominant during *Maha* season. Therefore, a study was undertaken at Field Crops Research and Development Institute, Mahailuppallama during *Yala* 1985 and *Maha* 1985/86 to introduce low cost and appropriate disease management techniques for minimizing crop losses caused by diseases.

Fifteen varieties were screened to identify resistant material to MYMV during *Yala* 1985. Artificial defoliation studies, varieties with diverse resistance to foliar diseases and fungicides were tested during *Maha* 1985/1986 to control foliar diseases.

Mung bean varieties namely 76-187-MI-5-9A and S37 showed high tolerance to powdery mildew. Of the ten varieties tested 7715, Type 77 and TV-79-1 are resistant to *Cercospora canacense*. Seed treatment with Thiram (Pomarsol forte) or foliar spraying with Benomyl (Benlate) at 10 days interval after disease appearance significantly reduced disease severity of *C. cruenta*.

Artificial defoliation studies showed that the pod filling stage was very sensitive to treatment directly affecting the crop yield. Therefore, defoliation due to foliar diseases should be controlled at this stage. MYMV tolerant namely Harsha and TV -9-11 varieties can be recommended to cultivate during Yala and resistant varieties and fungicides are appropriate to control foliar diseases during *Maha*.