Integrated disease management in *Capsicum annum* (Chilli)

Chilli (Capsium annum) is one of the major cash crops in Sri Lanka and diseases are found to be the major production constraints of this crop. Researchers showed that the reduction of agro-chemical use can increase the profitability of this croup. In this context, studies were carried-out in *Yala* 1997 and *Maha* 1997/1998seasons to investigate an economically viable integrated method to control major Chilli diseases such as reduction of seedling emergence due to Damping-off, Chilli Leaf Curl Complex (CLCC), Anthracnose and Cercospora leaf spot (CLS) in order to minimize the use of pesticides used in Chilli cultivation. The experiments were carried out at Field Crops Research and Development Institute, Mahailluppallama.

Soil solarization by a wooden frame cover with double layered transparent polythene, seed treatment separately with orthocide 50% (Captan 50 WP) and thiram 80% (Thiram 80 Wp) alleviate seedling emergence and burning with paddy husks increased the seedling emergence significantly (P=0.05), compared to the untreated control and black polythene treatment.

Polythene mulch reduced the disease incidence Of CLCC as compared to *Gliricidia* and Paddy straw mulches and Maize (Zea maize) as barrier crop. This is probably due to insect repelling properties. Polythene mulch was effective as insecticides sprayed at 7 day intervals.

Varietal screening studies showed that "Arunalu", Chinese andANK-31 were resistant to the CLCC. Varieties "Arunalu" and BL-44 were resistant to Anthracnose disease. Of the fungicides tested, Copper Sandoz (cuprous oxide) was found superior in controlling Anthracnose disease affected pods. It appears that these component technologies could be appropriately integrated to alleviate seed emergence, CLCC, Anthracnose and CLS in Chilli