133 B

Effect of leaf pruning and bunch covering on yield and transport of calcium to the bunch of banana CV Mysore- AAB group (Embul banana)

Banana is one of the major fruit crops grown in Sri Lanka. Partial defoliation during early reproductive phase could reduce excessive transpiration and bunch covering would modify microenvironment enhancing fruit growth and mineral accumulation.

Therefore a study was conducted to assess the impact of partial leaf pruning and covering of bunch on yield and calcium content of fruits in banana cv Mysore. The study was conducted at the University farm, Mapalana, Kamburupitiya, under rainfed conditions from 2000 to 2001.

The complete randomized design was adopted and each treatment was replicated five times. Three treatments; partial leaf pruning, bunch covering, partial leaf pruning with bunch covering were enforced four weeks after female flowering. A control (without defoliation and bunch covering) was included.

Bunch weight, total fruit weight, average fruit weight and calcium contents were measured after harvesting. With respect to above characteristics, all tree treatments have shown significant differences from control. The bunch weight, total fruit weight and average fruit weight in the treatment of partial leaf pruning with bunch covering showed the highest significant values over all other treatments. However, differences of bunch characteristics between treatments of bunch covering and leaf pruning were not significant. The lowest calcium content (0.06%) was observed in the control. The treatment of partial leaf pruning with bunch covering has shown the highest calcium content (0.368%). These results indicate that partial leaf pruning with bunch covering enhances both yield and quality of the fruit. This outcome suggested that the partial leaf pruning with bunch covering would enhance both yield and quality of the fruit.