

**B-45 The correlation between yield and other agronomic characters as a selection criteria for yield improvement in Okra [*Abelmoschus esculentus* (L.) Moench]**

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Okra is a high nutritive vegetable crop grown in Sri Lanka. The extent of cultivation has increased in the 12 year period between 1976 to 1988 from 3296 ha to 5230 ha. With the onset of yellow vein mosaic virus disease in the Batticaloa region, farmers have abandoned the cultivation of land races such as Batticaloa local and Palvendi.

The virus resistant variety such as HRB<sub>10</sub> named as "Haritha" have gained popularity and they are being introduced into the farming system in a remarkable way. But the land races, Batticaloa local and Palvendi have certain desired traits such as higher yield, high pod length, high pod weight, higher number of pods per plant and good local adaptation. In order to combine these characters with disease resistance, crosses were made and the plant and yield characters were studied in parents and their F<sub>1</sub> hybrids at the Agronomy Farm of the Eastern University. To have an effective selection criteria for the future, a correlation study was performed between yield and other agronomic characters.

Data collection was focused on characters such as yield, leaf area, number of branches, plant height at first flowering, plant height at last harvest, girth of the pod, length of the pod and number of leaves at last harvest.

Among the agronomic characters observed, yield showed highly significant coefficient of correlation with pod length, number of pods per plant and pod weight at  $p=0.01$  and showed a significant value with number of leaves at last harvest at  $p=0.05$ .

From this study it appears that the criteria for selection for high yield should focus on plants which have higher values in number of pods, pod weight, pod length and number of leaves at last harvest.