

B-98 Performance of hybrid maize under rainfed upland conditions

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Hybrid varieties of maize are new to Sri Lankan farmers. Private sector and other organizations make efforts to promote the hybrid maize varieties. Since, there is a dearth of information on agronomic and economic feasibility of growing hybrid maize, this study was undertaken to compare yield potential and economic viability of hybrids with Open Pollinated (OP) varieties under rainfed upland conditions.

Hybrids, Pacific-II, Pacific-47 and TAY-DA-WA-60 were compared with 2 OP varieties, Muthu and Bhadra-1 under 3 nitrogen levels 0, 60, 115 N kg/ha during Maha 94/95 season at 7 locations in Anuradhapura District as a non-replicated trial. The experiment was repeated during Maha 95/96 season under 65 N kg/ha level.

Both OP and hybrid varieties have shown a positive response to added nitrogen. The average yield of OP varieties at 0, 65 and 115 N kg/ha levels were 2.4, 4.3 and 5.4 t/ha respectively, whereas the yield of hybrids at respective N levels were 3.2, 5.3 and 6.2 t/ha. The Overall average yield of hybrids and OP varieties were 3.1 and 2.3 t/ha. During Maha 95/96 season also hybrids produced 36% higher yields. Benefit cost ratio figures indicated that the investment on hybrids gives an attractive profit over the OP varieties. Therefore, it can be concluded that the cultivation of hybrid varieties is profitable under rainfed conditions.