



Research Paper

EVALUATION OF NEWLY-EVOLVED OPEN-POLLINATED MULBERRY VARIETIES

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ABSTRACT

The performance evaluation and selection of open-pollinated mulberry varieties (OPVs) was made based on growth, leaf yield and quality parameters covering five years that included eleven seasons. Alf-004 was observed the best in terms of leaf yield, longest shoot and plant height whereas for leaf quality with the highest moisture content (MC) and moisture retention capacity (MRC), it was Alf-025. Significant seasonal variation on growth, leaf yield and quality were observed. The highest leaf yield of 625.39 g/plant was obtained in July 2008. However, the quality of leaves was superior in November 2007 in terms of moisture content and in August and October 2011 for moisture retention capacity. Regression Analysis revealed that temperature did not affect the growth, yield and quality characters but rainfall and relative humidity affected the plant height, MC and MRC of the OPVs. A significant negative correlation could be established between leaf yield and number of branches. Highly significant positive correlations between plant height and length of shoots; plant height with moisture content and moisture retention capacity and moisture content and moisture retention capacity were also revealed. Considering the over-all evaluation on growth, yield and quality characters, the top three promising OPVs selected were Alf-004, S61-019 and S54-019.

Key words: Growth, leaf quality, leaf yield, open-pollinated mulberry varieties.