

ABSTRACT

**THE PROGENY TEST OF MIMBA
AND ITS GROWTH EVALUATION
TILL 6 MONTHS AGE IN WANAGAMA I**

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The aims of the progeny half-sib Mimba test research were as follows : 1). To know the adaptability of Mimba till six months age in Wanagama I; 2). To study the genetical variation in height and stem diameter of Mimba examined; 3). To know in the narrow sense, the heritability of Mimba families for height and stem diameter characteristics; 4). To identify which the best growing family of Mimba in Wanagama I; 5). To study genetical correlation between plant height and stem diameter.

The research design applied in this test was Randomized Complete Block Design (RCBD) with 101 families as treatment, four treeplot, five blocks as replications, and with spacing of 3 X 3 metres. The parameters measured in this study was the percentage of plant survival, plant height, and stem diameter.

The result of the research showed that there were highly significant differences among blocks within classes, and there was no significant among classes.

The adaptability achieved through this research was 96,49%. In the first measurement, genetical factor have the same effort with the environmental factor, was shown by 0,501 of heritability, and in the last measurement this percentage was decreased to 0,284 for height and 0,222 for height increment in six months of age. Meanwhile for stem diameter genetical factor more dominant than environmental factor, in the first measurement diameter was 0,66. Later on these percentage tend to decrease caused by aging, that was 0,33 for the last diameter and 0,23 for diameter growth.

The genetical correlation between height and stem diameter of Mimba was positive that was 0,55 in the first observation, and 0,95 in the last observation.

