

**ALLOMETRIC MODEL FOR LEAF AREA
ESTIMATION IN LINSEED**

(Linum usitatissimum L.)

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ABSTRACT

This study was undertaken to develop a method of estimating the individual leaf area (LA) of linseed directly without time-consuming area measurements. Ten linseed varieties were used in the study. Two hundred mature leaves were collected from each variety and an allometric relationship was derived between actual leaf area (ALA) measured using the Placom Digital Planimeter, leaf length (LL) and leaf width (LW). Leaf area estimation model was found to be $LA (cm^2) = (0.57846 + 0.26123 \times LL + 1.51435 \times LW + 0.14395 \times LL \times LW^2)$. This allometric model was used to calculate LA, which was then compared with the actual LA, and the correlation coefficient (R^2) between actual and predicted leaf area was found to be 0.962 ($P < 0.01$).

Key words: Allometric model, linseed, flax, leaf area estimation