

ABSTRACT

The okra plant (*Abelmoschus esculentus* L.) is a type of vegetable originating from the African continent. Okra fruit has a high nutritional content, rich in fibre, antioxidants and vitamin C. One way to increase okra production is by conducting plant adaptation tests to find varieties that are most suitable for planting in Aceh District. The purpose of the study was to assess the growth adaptation test of green hybrid okra varieties, green Naila IPB, red hybrid okra varieties and Green Varieties. and find okra varieties suitable for cultivation in North Aceh District. This research was conducted at the Experimental Garden of the Faculty of Agriculture, Malikussaleh University, the research was conducted from March to June 2024. The materials used in this study were okra seeds of green hybrid varieties, green Naila IPB, red hybrids and green varieties. The research was conducted using a single factor Randomised Group Design (RGD) and 3 replications with 4 levels, namely (V1) Green Hybrid, (V2) Green IPB, (V3) Red hybrid and (V4) Green variety. Parameters observed were plant height, number of leaves, stem diameter, number of fruits in a plant, number of fruits per plot, fruit weight per plant and fruit weight per plot. The results showed that the adaptation test of okra plants in North Aceh Regency had a very significant effect on the variable stem diameter 30 DAP, the number of fruits per plot, the weight of fruit per plant, and the weight of fruit per plot, significantly influenced the variable plant height at 30 and 40 DAP, stem diameter 20 and 40 DAP, the number of leaves 50 DAP and the number of fruits per plant. The best okra plant adaptation test treatment is green hybrid.

Keywords: Acclimatisation, horticultural plants, variety and regions