

ABSTRACT

Upland rice is a rice plant cultivated in dry land and is an annual crop. The problems experienced by farmers are scarcity and dependence on synthetic chemical fertilizers. This study aims to determine the growth and yield responses of several upland rice varieties due to the application of LOF Jakaba. This study was conducted at the Experimental Garden of the Faculty of Agriculture and the Plant Physiology Laboratory of the Faculty of Agriculture, Malikussaleh University. This study was conducted from February to June 2025. This study was conducted using a Randomized Block Design (RBD) with 2 factors and 3 replications. The treatment of upland rice varieties affected the observations of plant height, number of leaves, leaf area, flowering age, number of panicles, panicle length, number of productive tillers, harvest age, dry grain weight, full grain weight, 1000 grain weight and production/ha. LOF Jakaba treatment affected the observation of plant height, number of leaves, flowering age, number of panicles, panicle length, number of productive tillers, harvest age, dry grain weight, full grain weight, 1000 grain weight, production/ha. The best treatment of upland rice varieties was obtained at V3 (Inpago 13 Fortiz). The best treatment of LOF Jakaba was obtained at J3 (150 ml/liter of water). There was an interaction between the treatment of upland rice varieties and LOF Jakaba in the observation of panicle length, dry grain weight, and production/ha. The best treatment was obtained at V3J3 (Inpago 13 Fortiz + Jakaba POC 150 ml/liter of water).

Keywords : Inpago 12 Agritan, Inpago 13 Fortiz, Microorganisms, Situ Bagendit, Stapel Food.