ABSTRACT

Ahmadi, Deni Hidayat. 2014. Effect of planting media and local micro-organisms concentration giving (MOL) jackfruit banana hump on jatropha seedling (Jatropha curcas L.). Thesis. Department of Biology, Faculty of science and technology. State Islamic University of Maulana Malik Ibrahim Malang. Supervisor: Ruri Siti Resmisari, M.Si and Andik Wijayanto, M.Si

keywords: Planting Media, Local Microorganisms (MOL), Banana Jackfruit, Jatropha (Jatropha curcas L.)

Jatropha (Jatropha curcas Linn.) was one source of vegetable oil which was protective to be used as raw material of biodiesel. Planting Media and fertilizer application quality was an important factor of success of jatropha cultivation. Therefore it was necessary to use an alternative fertilizer of Local Mikro-organisms derived from (MOL) hump banana jackfruit. The purpose of this study was the effect of planting media and local microorganism’s concentration giving (MOL) of jackfruit banana hump on jatropha seedling.

The design used in the study was a completely randomized design (RAL) with 2 factors. The first factor was the planting media consisting of 3 levels (sand, sand : soil 1:1, sand : soil 1:3. While the second factor was the concentration giving of MOL of jackfruit banana hump consisting of 5 level (0%, 15%, 20%, 25% and 30%). Data were analyzed using variance analysis (ANAVA) and if there were any influences then followed the test of DMRT 5%.

The result show there was no effect of planting media on Jatropha seedling (Jatropha curcas L.) and there was concentration effect of MOL of the jackfruit banana hump Jatropha seedlings (Jatropha curcas L.) on all parameters seedling of the addition of root length, increasing of seedling diameter, the addition of high seedling and the increasing of leaves number. The most significant concentration was a concentration of 25% (M3). There was interaction effect of planting media and concentration of 25% (M3). There was interaction effect of planting media (Jatropha curcas L.) on the addition parameters of root length and increasing of the leaves number. But there was no interaction effect of planting media and concentration giving MOL of jackfruit banana hump of Jatropha seedlings (Jatropha curcas L.) on seedling parameters addition diameter and increasing of high seedling.