

## INTISARI

Penelitian ini bertujuan untuk memperbanyak berbagai sumber inokulum Mikoriza dan menguji komabilitasnya pada tiga varietas lokal Singkong di Gunungkidul serta mengkaji eektivitas Mikoriza pada bibit singkong. Penelitian ini terdiri dari dua tahap. Tahap 1 *trapping* atau perbanyak mikoriza dari berbagai sumber dilakukan dengan penelitian eksperimen dalam susunan RAL (Rancangan Acak Lengkap) dengan rancangan percobaan faktor tunggal terdiri dari 3 perlakuan berbagai sumber Mikoriza yaitu, A: *indigenous* Tanah Mediteran Gunungkidul, B: *Rhizosfer* tanaman pandan pantai Bugel, C: inokulum Mikoriza komersial. Parameter yang diamati yaitu persentase infeksi, jumlah spora pada tanah, serta proliferasi akar jagung. Tahap 2 uji komabilitas mikoriza berbagai sumber pada tiga varietas singkong yaitu Penelitian eksperimen disusun dalam RAL (Rancangan Acak Lengkap) dengan rancangan percobaan faktorial (3x3). Faktor 1 adalah terdiri dari 3 aras yaitu Mikoriza dari berbagai sumber sebagai berikut : A = *Indigenous* Tanah Mediteran Gunungkidul; B = *Rhizosfer* tanaman pandan pantai Bugel; C = inokulum Mikoriza komersial. Faktor 2 adalah varietas singkong terdiri dari 3 aras yaitu : P= Mentega; Q= Kirik; R= Ketan. Hasil penelitian menunjukkan perbanyak mikoriza berbagai sumber terbukti menginfeksi akar jagung dan terdapat jumlah spora di berbagai sumber mikoriza. Hal ini membuktikan bahwa ada asosiasi anatar mikoriza dan akar singkong serta terdapatnya spora media tanam serta berdasarkan hasil pengamatan identifikasi spora. Jenis spora yang terdapat yaitu *Glomus* sp., *Gigaspora* sp., dan *Acaulospora* sp. Varietas singkong yang memiliki respon terbaik atau efektif terhadap mikoriza adalah singkong varietas Kirik. Hal tersebut dilihat dari beberapa parameter tanaman yang memiliki hasil beda nyata seperti jumlah daun dan berat segar tanaman.

Kata Kunci : Mikoriza, Sumber Mikoriza, Varietas Singkong.

## **ABSTRACT**

*The purposes of this research are to multiply various sources of mycorrhizal inoculum and test its compatibility in three local varieties of Cassava in Gunungkidul and to examine the evolution of mycorrhiza on cassava seeds. This research consists of two stages. Stage 1 trapping or multiplication of mycorrhiza from various sources with experimental research in CRD arrangement (Completely Random Design) with single factor experiment design consisting of 3 treatments of various sources of mycorrhizae which are; A: indigenous of Gunungkidul Mediteran soil, B: Rhizosphere of Bugel beach pandanus plants, C: Mycorrhizae Commercial inoculum.. The observed parameters were percentage of infection, number of spores on soil, and corn root proliferation. Stage 2 test of mycorrhizal compatibility of various sources on three varieties of cassava. The experimental study was prepared in RAL (Completely Randomized Design) with a factorial design (3x3). Factor 1 is composed of 3 levels of mycorrhizae from various sources as follows: A: indigenous of Gunungkidul Mediteran soil; B: Rhizosphere of Bugel beach pandanus plants; C: commercial mycorrhizal inoculum. Factor 2 is cassava varieties consist of 3 levels, which are; P: Mentega; Q: Kirik; R: Ketan. The observed parameters were percentage of mycorrhiza infection on cassava root, number of spores on soil, root length, plant height, fresh weight of canopy, and number of leaves. The result indicated that the multiplication of mycorrhizal sources proven to infect the roots of corn and there were the spores in various sources of mycorrhiza. This proves that there is an association between mycorrhizae and cassava root and the presence of planting media spores and based on the observation of spore identification. Spore types are Glomus sp., Gigaspora sp., And Acaulospora sp. Cassava varieties that have the best or effective response to mycorrhiza is Kirik varieties. This is seen from several plant parameters which have significantly different results such as the number of leaves and the fresh weight of the canopy.*

*Keywords: Mycorrhizae, Mycorrhizal Sources, Cassava Varieties.*