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PENGARUH DOSIS INOKULUM CENDAWAN MIKORIZA ARBUSKULA (*GIGASPORA ROSEA*) DAN PUPUK NITROGEN TERHADAP PERTUMBUHAN BIBIT KOPI ROBUSTA (*Coffea canephora* Pierre ex Foehner)

(*The Effect of Arbuskula Micorrhizal (Gigaspora rosea) Inoculant Dosages and Nitrogen Fertilization on Growth Robusta Coffee Seedling (Coffea canephora* Pierre ex Foehner)

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ABSTRACT

The experiment was aimed to study the effect of Gigaspora rosea inoculant and nitrogen fertilizer on the growth of coffee Robusta seedling. Coffee seedling which were used came from seedling of hybrid variety from BP 42 and BP 358 crossing, age 1 month. Micorrhizal fungi inoculations which were used came from Gigaspora rosea species.

The experiment was conducted at Sukamantri Experiment Station Bogor Agriculture University, from December 1996 to August 1997. The experiment was arranged in Randomized Block Design with three replication. The first factor was dosage of micorhizal inoculation, consisted of 0, 5, 10 and 15 g/seedling. The second factor was dosage of nitrogen consisted of 0, 1.5, 3.0 and 4.5 g/seedling.

Fungi inoculation treatment in the dosage 15 g/seedling showed the highest infection persentage but con't increase the growth of coffee seedling. Fungi inoculant in the dosage 5 g/seedling gave the best growth level, showed by variety height of seedling, trunk diameter, leaves total and leaves area, shoot and root biomass, compare to the other fungi inoculation dosages. The highest level of nitrogen in leaf was found in the dosage 4.5 g/seedling. Fungi inoculation in the dosage 5 g/seedling and nitrogen fertilizer in the dosage 3 g/seedling gave the highest level of leaves area and shoot biomass, compare to the other treatment combinations.

RINGKASAN

Percobaan ini bertujuan untuk mengetahui pengaruh dosis inokulum *Gigaspora rosea* dan dosis pupuk nitrogen terhadap pertumbuhan bibit kopi Robusta. Bahan tanaman yang digunakan bibit kopi berasal dari semaian benih kopi varietas BP 24 x BP 358 berumur satu bulan. Inokulum cendawan mikoriza yang digunakan yaitu spora spesies *Gigaspora rosea.*

Percobaan ini menggunakan Rancangan Acak Kelompok dengan pengaturan perlakuan secara faktorial tiga ulangan. Faktor pertama, dosis inokulum cendawan mikoriza yang terdiri atas 0, 5, 10 dan

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