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THE EFFECT OF A COMBINATION OF ARBUSKULAR MYCORRHIZAL FUNGI (AMF) INOCULATION AND NPK FERTILIZER DOSAGE ON GROWTH AND YIELD OF MUNG BEAN PLANTS (*Vigna radiata* L.)

**By :
Solihah
NPM 165001065**

**Supervisor :
Fitri Kurniati
Yaya Sunarya**

Arbuscular Mycorrhizal Fungi (AMF) are fungi that can be used as biofertilizers which can help facilitate the supply of nutrients so that they can increase growth and yield. This study was intended to determine (1) the effect of a combination of AMF inoculation and NPK fertilizer dosages on the growth and yield of mung beans; (2) The combination of AMF inoculation and NPK fertilizer dosage determines the best growth and yield of mung beans. The experiment was conducted in Sumber Kidul Village, Babakan District, Cirebon Regency from January to March 2020. This study used a Randomized Block Design (RCBD) with 6 settings, AMF was given as much as 15 g/planting hole. The treatments consisted of A (without AMF+without NPK), B (300 kg/ha NPK), C (AMF+75 kg/ha NPK), D (AMF+150 kg/ha NPK), E (AMF+225 kg/ha NPK) and F (AMF+300 kg/ha NPK). The results showed the combination of AMF inoculation and the dose of NPK fertilizer affected the number of nodules, the number of effective nodules, weight of pods per plant, number of seeds per pod and dry weight of seeds per plant, did not oppose plant growth, number of leaves, number of pods per plant, and weight 100 dried seeds. The combination of AMF inoculation+150 kg/ha NPK treatment determines the best on the number of nodules. The combination of AMF+75 kg/ha NPK inoculation, the combination of AMF+150 kg/ha NPK inoculation and the combination of AMF+225 kg/ha NPK inoculation gives the same combination of the number of effective nodules, pod weight per plant, number of seeds per pod, and weight dry seeds per plant.

Key Words: Mung Bean (*Vigna radiata* L.), Mycorrhizae, NPK Fertilizer