

**Efektivitas Dosis Pupuk Kandang dan Konsentrasi Giberelin Terhadap Produksi dan Mutu Benih Bayam Hijau (*Amaranthus hybridus* L.).** *Effectiveness of manure doses and gibberellin concentrations on the production and quality of green spinach (*Amaranthus hybridus* L.).* Supervisor: Maria 'Azizah, SP., MSi

Ilfa Nur Laili Mufidatin  
**Study Program of Seed Production Technique**  
**Department of Agricultural Production**  
Program Studi Teknik Produksi Benih  
Jurusan Produksi Pertanian

**ABSTRACT**

*The high demand for spinach and the increasing number of people in the community are not supported by existing production. Efforts are needed to increase the production of spinach seeds to meet the needs. The purpose of this study was to determine the effect of manure doses and gibberellin concentrations on seed production and quality of *Amaranthus hybridus*. This research was conducted from August to November 2022 in Munder Village, Yosowilangun District, Lumajang Regency. This study was designed with a factorial randomized complete block design (RCBD) with 2 factors and 3 replications. The first factor was the treatment of the dose of manure with 3 levels of goat manure, (10 tons/ha, 20 tons/ha and 30 tons/ha). The second factor was the treatment of gibberellin concentrations with 3 gibberellin concentrations, (100 ml/l, 150 ml/l and 200 ml/l). Then the data obtained is tested using ANOVA, then followed with DMRT at error level 5%. The results showed that the dose of 30 tons/ha of manure had a very significant effect on the number of panicles: 14.00 strands, biomass 77.66 grams. The treatment of gibberellin concentrations had a very significant effect on the number of panicles (13.87 strands), stem diameter (0.8967 cm). The combination of the two treatments had a very significant effect on the weight of 1000 seeds (0.8929 gram).*

**Key words :** *Amaranthus hybridus, Manure dosage, Gibberellins concentration*