

**THE EFFECT OF APPLICATION OF BOKASHI COW DUNG AND  
MULCH ON PLANT PRODUCTION COAT BEAN  
(*Vigna unguiculata*)**

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***ABSTRACT***

*Vigna unguiculata* production can grow to any kind of soil and withstand dryness so that can be widely cultivated as a source of alternative foodstuffs. An increase of coat bean production can be done through the application of cow dung bokashi and straw mulch. This research goal is to examine influence application of cow dung bokashi and mulch on coat bean production. This research was held for five months from April to August 2022 in agricultural land Kelurahan Bintoro, Kecamatan Patrang, Kabupaten Jember, Provinsi Jawa Timur. This experiment used factorial random group design or we can call it as RAK with two factors, those are cow dung bokashi and mulch with three repetition. Dose of cowshed fertilizer consisted of five levels, those are 0 ton.ha<sup>-1</sup>, 5 ton.ha<sup>-1</sup>, 10 ton.ha<sup>-1</sup>, 15 ton.ha<sup>-1</sup> and 20 ton.ha<sup>-1</sup>. Whereas, mulch consisted of without giving mulch and with giving mulch. The research result showed that application of cow dung bokashi dose 4 kg.plot<sup>-1</sup> gave the highest on the observation of peas per sample plant, wet weight of peas per sample plant, wet weight of peas per plot, dry weight of peas per sample plant, dry weight of peas per plot, dry bean weight of peas per sample plant, dry bean weight per plot, weight of dry stover plant. Mulch factor shows that the results didn't give a real effect on all variables observations. The application of cow dung bokashi and mulch didn't give a real effect on all variables observations.

**Keywords:** Cow dung, Bokashi Cow dung, Mulch