Use of Oyster Mushroom Waste Compost and Inorganic Fertilizer Dose on Green Bean Production (*Vigna radiata* L.) Varieties of Vima - 1

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ABSTRACT

*Research on the **Use of Oyster Mushroom Waste Compost and Inorganic Fertilizer Dose on Green Bean Production (Vigna radiata* **L.***) Vima - 1 variety to find out the influence of composting of baglog waste of oyster mushroom and inorganic fertilizer dose on production of green beans varieatas Vima-1. This research was conducted for 3.5 months, starting from November 2016 until February 2017 at State Polytechnic of Jember, District of Sumbersari, Jember Regency, East Java. This research uses Factorial Random Block Design (RAK) with two factors and 3 replications. The first factor is the addition of baglog compost of oyster mushroom waste consisting of 3 levels ie 0 tons / ha (K0), 20 tons / ha (K1), and 30 tons / ha (K2). The second factor is the fertilizer dosage consisting of 4 levels ie without using inorganic fertilizer (A0), 25 kg / ha Urea; 30 kg / ha SP-36; 25 kg / ha KCl (A1), 50 kg / ha Urea; 60 kg / ha SP-36; 50 kg / ha KCl (A2), and 75 kg / ha of Urea; 90 kg / ha SP-36; 75 kg / ha KCl (A3). Observations were made on plant height variables, number of pods, dry weight of pods and dry weight of seeds. The results showed significantly different results (ns) to parameter of dry weight of pod per plot, dry weight of seed per plot, and weight of 100 seeds. Addition factor of baglog waste composition significantly different on vegetative early height parameters, sample dry weight, dry weight of sample seeds and number of pods. The inorganic fertilizer dose factor gave significantly different result at vegetative end of plant height. So it can be concluded that there is no interaction between the two treatments on the production of green bean plants.*

Keywords: *Compost waste baglog oyster mushroom, Green beans varieties Vima 1, Inorganic fertilizer*