

**The Effect Of Organic Fertilizer And Dose Of Potassium Fertilizer On Fruit Quality Of
Tomato Marta F1 (*Solanum Lycopersicum*)**

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ABSTRACT

The purpose of this study were to assess the effect of the type of organic fertilizer on yield and fruit quality of tomato plants Marta F1 (*Solanum lycopersicum*) to determine the effect of the dose of potassium fertilizer on yield and fruit quality of tomato plants Marta F1 (*Solanum lycopersicum*) as well to determine interaction with the type of organic fertilizer dose of potassium fertilizer on yield and fruit quality of tomato plants Marta F1 (*Solanum lycopersicum*). This research was conducted in the greenhouse of Faculty of Agriculture pyramid UPN "Veteran" Yogyakarta. This research was a field experiment using a completely randomized design (CRD) with factorial pattern of two factors. The first factor was the type of organic fertilizer composed consisted 3 kinds; chicken manure 150 g / polybag, cow manure 150 g / polybag, organic compost fertilizer 150 gl / polybag. The second factor was the dose of potassium fertilizer in the form of KCl consisted of 4 levels; KCl 2.5 g / polybag, KCl 3.0 g / polybag, KCl 3.5 g / polybag, KCl 4.0 g / polybag and repeated twice. The results of this study concluded that chicken manure was most excellent organic fertilizer to yield and fruit quality of tomato plants. Marta F1 (*Solanum lycopersicum*), KCl 3.0 gram / polybag dose of potassium fertilizer was best to plant fruit yield and quality of Marta F1 tomato (*Solanum lycopersicum*), and there was interaction between types of organic fertilizer and dose of potassium to the plant, fruit weight per plant, vitamin C, color (red-green), the number of fruits per plant, and antioxidant activity.

Key words: Tomato Marta F1, Organic Fertilizer, Potash Fertilizer