

ABSTRACT

**The Effect of Cow Urine and Plant Growth Promoting Rhizobacteria
(PGPR) on the Growth and Yield of Japanese Cucumbers (*Cucumis sativus*
L. Var. Roberto 92)**

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Japanese cucumbers (*Cucumis sativus* L. Var. Roberto 92) are one of the vegetable commodities that have high economic value. Besides fulfilling domestic consumption, this commodity also has considerable prospects for export. The main step to increase cucumber production in an attempt to fulfill consumer needs must be taken by using various strategies, including through fertilization. This research aimed to find out the concentration and interaction of cow urine and *Plant Growth Promoting Rhizobacteria* (PGPR) which gave the best Japanese cucumber yields. This research was conducted for three months, starting from May to July 2021 in Mekarsari Village, Cipaku District, Ciamis Regency. The method used in this research is a factorial Randomized Block Design (RBD) with two factors. The first factor was cow urine consists of 3 levels (25%, 50%, and 75%). The second factor was PGPR consists of 3 levels (0%, 1%, and 1,5%). Observational data were processed using analysis of variance and continued with Duncan's multiple range test at 5% level. The results showed that there was no interaction between cow urine and PGPR on the growth and yield of Japanese cucumbers. Cow urine treatment with a concentration of 50% gave the best effect on fruit length, fruit diameter, and fruit weight per plot. Meanwhile, PGPR treatment with a concentration of 1,5% gave the best effect on fruit length and fruit diameter.

Keywords: Japanese cucumbers, Cow urine, *Plant Growth Promoting Rhizobacteria* (PGPR)