

**ABSTRAK****PENGARUH PEMBERIAN MSG (*Monosodium Glutamate*) DALAM PEMBUATAN PUPUK CAIR URIN SAPI TERHADAP PERTUMBUHAN TANAMAN SELEDRI (*Apium graveolens*. L)****Lamria Hutasoit****151434086****Universitas Sanata Dharma**

Setiap tanaman termasuk tanaman seledri membutuhkan unsur hara esensial dan non esensial yang cukup untuk pertumbuhan tanaman. Unsur hara non esensial salah satu contohnya yaitu Na yang dibutuhkan tanaman untuk pertumbuhan vegetatif yaitu tinggi tanaman, jumlah daun dan berat basah. Untuk melengkapi kekurangan unsur hara dalam tanah dapat menambahkan pupuk cair urin sapi. Pupuk cair urin sapi belum mengandung unsur hara Na yang cukup, maka ditambahkan MSG dalam pupuk tersebut. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh pemberian MSG serta komposisi MSG paling baik dalam pembuatan pupuk cair urin sapi terhadap pertumbuhan tanaman seledri.

Penelitian menggunakan Rancangan Acak Lengkap dengan menggunakan 3 perlakuan dan 1 kontrol. Untuk 3 perlakuan komposisi MSG dan pupuk cair urin sapi selama 28 hari yaitu 1 gr/l, 2 gr/l dan 3 gr/l. Kontrol negatif (-) tidak menggunakan pupuk cair urin sapi maupun penambahan MSG. Untuk mengetahui pengaruh pemberian MSG dalam pupuk cair urin sapi terhadap pertumbuhan tanaman seledri selama 28 hari dilakukan uji *Anova One Way Factor Between*.

Berdasarkan hasil analisis data, maka dapat disimpulkan bahwa perbedaan komposisi MSG dalam pupuk cair urin sapi tidak berpengaruh nyata terhadap pertumbuhan tinggi tanaman dan berat basah tanaman seledri namun berpengaruh nyata terhadap jumlah daun tanaman seledri. Komposisi MSG yang paling baik digunakan untuk tambahan pupuk cair urin sapi adalah MSG dengan komposisi 2 gr / L pupuk cair urin sapi.

**Kata Kunci : MSG, Pupuk Cair Urin Sapi, Pertumbuhan, Seledri (*Apium graveolens* L).**

**ABSTRACT****THE EFFECT OF MSG (MONOSODIUM GLUTAMATE) ADMINISTRATION IN  
MAKING COW URINE LIQUID FERTILIZER  
ON CELERY PLANT GROWTH  
(*Apium graveolens* L.)**

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*Every plant including celery plants need essential and non-essential nutrients sufficient for plant growth. One of non-essential nutrient is Na which is needed by plants for vegetative growth that are plant height, number of leaves and wet weight. To supplement deficiencies nutrients in the soil, addition of cow urine liquid fertilizer can be done. The cow urine liquid fertilizer does not contain enough Na nutrients, then MSG is added in the fertilizer. The purpose of this study was to know the effect and the best composition of MSG in making cow urine liquid fertilizer on celery plant growth.*

*This research used a completely randomized design using 3 treatments and 1 control. For 3 treatments, the composition of MSG and cow urine liquid fertilizer for 28 days was 1 gr/l, 2 gr/l and 3 gr/l. Negative control (-) did not use cow urine liquid fertilizer or the addition of MSG. To find out the effect of MSG in cow urine liquid fertilizer on the growth of celery plants for 28 days, Anova One Way Factor Between was carried out.*

*Based on the results of data analysis, could be concluded that the differences composition of MSG in cow urine liquid fertilizer did not significantly influence the growth of plant height and wet weight but had an effect on the number of leaves celery plants. The best MSG composition used for additional cow urine liquid fertilizer is MSG with a composition of 2 gr/l cow urine liquid fertilizer.*

**Keywords: MSG, Cow Urine Liquid Fertilizer, Growth, Celery (*Apium graveolens* L).**