

**APPLICATION OF AUXIN CONCENTRATION AND LIQUID ORGANIC
FERTILIZER OF COW URINE ON GROWTH AND QUALITY OF
SUNFLOWER PLANTS (*Helianthus annuus L.*)**

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ABSTRACT

This research aims to obtain the correct concentration of auxin and POC of cow urine on the growth and yield of sunflower plants. The research was carried out November 2023 - February 2024 at the Practice Garden of the Faculty of Agriculture, UPN "Veteran" Yogyakarta, Wedomartani, Subdistrict. Ngemplak, regency. Sleman, D.I Yogyakarta. The research method used was a field experiment with a Complete Randomized Block Design (CRBD) with two factors + 1 control. The first factor was soaking seeds with auxin concentrations of 12.5, 25 and 37.5 ppm. The second factor was the liquid organic fertilizer concentration of cow urine, namely 7.5, 15 and 22.5 ml/L and control (without auxin and liquid organic fertilizer of cow urine). Data were analyzed by ANOVA and test *Contras Orthogonal*, with a follow-up test of 5% DMRT. The results of the study showed that the control and the combination of auxin and cow urine liquid organic fertilizer of cow urine had a real effect on plant growth at 4, 5 and 6 WAP leaf numbers. There was an interaction between auxin treatment and cow urine liquid organic fertilizer of cow urine on the number of leaves at 4 and 6 WAP, stem diameter at 3, 4 and 5 WAP and flowering age. Providing auxin 25 and 37.5 ppm showed the best results at plant height 3 and 5 WAP, number of leaves 3 and 5 WAP, flower diameter and *vase life*. Giving liquid organic fertilizer concentration of cow urine of 15 and 22.5 ml/L showed the best results at plant heights of 3, 4 and 6 WAP, number of leaves 3 and 5 WAP, stem diameter 6 WAP and flower diameter.

Keywords: Auxin, Sunflower, Cow urine Liquid Organic Fertilizer.

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