

## ABSTRACT

*The purpose of research were to determine the effect from different kind of nutrient and to determine the best nutrient composition for plant growth and yield of Tomatoes in the wick hydroponic system. The reseach caried out in the Green House, Faculty of Agriculture, Muhammadiyah of Yogyakarta University since Agust – November 2015.*

*This research used experiment method that arranged in Completely Randomized Design using single factor. There are nine compositions, such as (1) AB Mix, (2) Gandasil B 150 (0,7 gr) + ZA (1 gr) + SP-36 (0,6 gr) + KCL (0,2 gr), (3) Gandasil B 200 (0,9 gr) + ZA (0,9 gr) + SP-36 (0,5 gr) + KCL (0,1 gr), (4) Gandasil B 250 (1,2 gr) + ZA (0,8 gr) + SP36 (0,3 gr), (5) Gandasil B 150 (0,7 gr) + Cow Urine (11 ml), (6) Gandasil B 200 (0,9 gr) + Cow Urine (7 ml), (7) Gandasil B 250 (1,2 gr) + Cow Urine (5 ml), (8) Cow Urine (141 ml).*

*The result of this research showed that treatment A1 (AB-Mix) give the better result of plant growth, meanwhile on the other hand. Gandasil B and Cow Urine treatment showed the best result for Tomato yield.*

*Keywords : Nutrient, Wick hydrophonic, Tomatoes*