ABSTRACT

The purpose of this research is to know the effect of phytoremediation of batik liquid waste on growth and red lettuce product. This research was conducted from July to September 2017 at Green House Faculty of Agriculture University of Muhammadiyah Yogyakarta.The experiment used experimental method in polybag with single factor treatment design arranged in Complete Randomized Environment (RAL).

This study used experimental methods, a single factor arranged in a complete randomized design. The experiments consist of : watering with dilution of 1: 1 batik liquid waste (P1), batik liquid waste with phytoremediation result of water hyacinth (P2), batik liquid waste with phoemediation kangkung (P3), regular watering (P4). The parameters observed included EC measurements, pH measurements, plant height, leaf number, leaf area, root length, fresh crown weight, canopy dry weight, fresh root weight, root dry weight, fresh weight of the plant and dry weight of the plant.

The results showed the effluent of batik liquid waste that has been pharmaceutical has significant effect on growth and yield of lettuce crop. The treatment of batik wastewater with phytemediation kangkung gives the highest growth and yield.

***Keywords**: Batik waste, phytoremediation, lettuce.*