Title: Comparison of ratio of effluent from dairy processing plant Buriram Agriculture and Technology College together with A + B soil nutrient to improve the quality of basil (*Ocimum basilicum* Linn) in hydrobox system. Using renewable water system.

Another: Mr. Teerasak Srisoda
Mr. Autsdawoot Juoengram

Committee: Lecturer Lertpoom Chanpenkun

Office: Program in Agriculture Faculty of Agricultural Technology
Buriram Rajabhat University

Published year: 2017

**Abstract**

Comparison of ratio of effluent from dairy processing plant Buriram Agriculture and Technology College together with A + B soil nutrient to improve the quality of basil (*Ocimum basilicum* Linn) in hydrobox system. Using renewable water system. The purpose of this study was to investigate the use of wastewater from dairy processing plants. The ratio of effluent from dairy processing plant to the appropriate plant nutrient solution was determined. Using a solution of nutrients A and B together with the effluent from the dairy processing plant at Buriram Agriculture and Technology College in various ratios, the experiment was completed in a completely randomized design (CRD) with 4 sets of experiments, namely 30: 0 (water supply 30 liters: 0:30 (30 liters of milk from a dairy plant, no fertilizer A + B), 15:15 (30 liters of milk from a dairy plant, no fertilizer A + B) and 10: 20 (10 liters of water, no fertilizer A + B: 20 liters of milk HMS) was performed 2 to 8 replications of the plants used in the trial. Basil The plant growth data were collected every 14 days for 6 weeks and control of Ec value ranged from 1.0 to 1.5 and the pH ranged from 6.0 to 6.5.

The results showed that the wastewater from the Buriram Agriculture and Technology College could be utilized to grow plants in a soilless system. Based on the growth of basil, it was found that basil leaves affected leaf and leaf growth, and
when the wastewater from the dairy processing plant, Buriram Agricultural and Technology College, was mixed with nutrient solutions A and B at a ratio of 15:15. It is best to plant basil in a soilless system. Because of the appropriate amount of nutrients that plants can use. It also reduces the amount of fertilizer A + B. At least half of normal fertilizer consumption.

**Keywords:** basil, wastewater milk processing, hydroponics, hydrobox