SUMMARY

1. Title: Test of Compatibility Some Superior Strain Cellulolytic Microorganism to Enhance Soil Fertilizers, Growth And Product of Red Pepper (Capsicum annum) on Histosol Soil

2. Name of Team Leader: Ir. Gusmawartati MP

3. Location: Histosol soil of experimental station of Agriculture Faculty of UNRI.

4. Object: Selecting some compatible superior cellulolytic microorganism and capable enhance histosol soil fertilizers

5. Methodology: Completely Randomized Design wich consist of 5 using levels cellulolytic mikroorganism they are; without using cellulolytic microorganism, using selected isolates I (JS34B; 15 ml/plant), using selected isolates II (BS28E; 15 ml/plant), using selected isolates III (AS36A, 15ml/plant) and using mixed isolates I, II and III respectively 5ml/plant.

6. Results: The result of this research showed that all of tested cellulolytic microorganism have potency to enhance soil fertilizers, growth and product of red pepper, by using cellulolytic microorganism can decreas C/N of soil till 30,87 % and enhance pH of soil such as 1,14 – 1,78 and enhance weight of fresh fruit per plant on average 25,02 % and increase till 52,71 % or reach out 3,5 ton/hectare of product.