

ABSTRAC

This study aims to determine the effect of administering liquid organic fertilizer (POC) Ferinsa Plus and goat manure on the growth and production of red chili plants of the Tampar variety (*Capsicum annum L.*). The study was conducted in Temuwulan Village, Perak District, Jombang Regency, using the Randomized Block Design (RAK) method consisting of two treatment factors, namely the dose of goat manure (0 kg, 25 kg, 50 kg, and 75 kg per bed) and the concentration of POC Ferinsa Plus (0 ml/L, 15 ml/L, 30 ml/L, and 45 ml/L). The results showed that the administration of goat manure had a significant effect on plant growth, such as plant height, number of leaves, and stem diameter at several growth phases. The administration of POC Ferinsa Plus also showed an effect on several growth parameters, but not all treatments gave significant differences. The best combination in increasing red chili fruit production was found in the treatment of goat manure at a dose of 50-75 kg/bed with Ferinsa Plus POC at a concentration of 30-45 ml/L, which gave a significant increase in the number and weight of fruit compared to the control treatment.

This study provides important information for farmers regarding the benefits of using organic fertilizers in increasing red chili productivity with environmentally friendly methods. By optimally utilizing goat manure and Ferinsa Plus POC, red chili cultivation can be more sustainable and efficient.

Keywords: Red chili, goat manure, Ferinsa Plus POC, plant growth, plant production

