

**APPLICATION OF TYPES AND CONCENTRATIONS OF LIQUID
ORGANIC FERTILIZER AS NITROGEN SOURCES ON THE GROWTH
AND YIELD OF SPRING ONION (*Allium fistulosum* L.)**

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ABSTRACT

Spring onion is a vegetable crop with potential for intensive and commercial cultivation. Spring onion farming with high inputs of chemical fertilizers can lead to decreased land productivity and groundwater pollution. Liquid Organic Fertilizer (LOF) which is environmentally friendly and contains essential nutrients, can be used as an alternative to fertilizer. This research aims to determine the best type of liquid organic fertilizer for the growth and yield of spring onion plants. This research was conducted in Pakem District, Sleman, Yogyakarta in February to May 2023, using a non-factorial Completely Randomized Design (CRD) method consisting of 10 treatments of Azolla LOF 50 mL/L; 100 mL/L; 150 mL/L, Moringa leaves LOF 50 mL/L; 100 mL/L; 150 mL/L, lamtoro LOF 50 mL/L; 100 mL/L; 150 mL/L. The data obtained were analyzed using analysis of variance 5% significance level and DMRT at a 5% significance level. The results indicated that applying 50 mL/L moringa leaf LOF produced favorable outcomes in crop height and number of seedlings of spring onion.

Keywords : Spring onion, Liquid Organic Fertilizer, Growth and yield