

**EFFECTS OF ORIENTAL HERBAL NUTRIENTS (OHN) ON
Capsicum frutescens GROWTH PERFORMANCE**

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DECLARATION

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ABSTRACT

EFFECTS OF ORIENTAL HERBAL NUTRIENTS (OHN) ON *Capsicum frutescens* GROWTH PERFORMANCE

The environmentally friendly methods without unwanted side effects of harmful chemicals are becoming very important in the modern era as customers are more likely to choose high-quality and nutritious foods free from chemical residues. Thus, natural products using plant extracts are some of the alternative approaches in natural farming. In the present study, the effect of Oriental Herbal Nutrient (OHN) that prepared from natural sources including cinnamon bark (*Cinnamomum zeylanicum*), ginger (*Zingiber officinale*), and garlic (*Allium sativum*) were evaluated on *Capsicum frutescens* growth performance. The objectives of this study are to determine the effect of OHN as an organic fertilizer on the growth performance of *C. frutescens* sp., and to determine the best stimulant that promoting growth performance of *C. frutescens* sp. OHN were prepared from the extracts of the *C. zeylanicum*, *Z. officinale*, and *A. sativum* that further fermented with coconut vinegar. The fermented OHN was applied to *C. frutescens* as foliar fertilizer two weeks after transplanting and eventually applied once in a week. The fertilizer was applied for three months until the harvesting period. The experimental design layout was a complete randomized design (CRD) with three replications. The results showed that OHN as organic fertilizer can be practiced substituting the chemical fertilizer since it gave out a positive response on the growth performance. The plants treated with T2 (OHN prepared from cinnamon bark) showed significantly higher ($p \leq 0.05$) of plant height, number of leaves, and number of fruits set as compared to chemical fertilizer. In conclusion, OHN prepared with cinnamon bark shows promising results on the growth performance of *C. frutescens*.

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