

**EFFECT OF CUTTLEFISH (*Sepia* spp.) SHELL POWDER AS
AMELIORANT ON GROWTH AND YIELD OF UPLAND RICE**

(*Oryza sativa* L. cv. 'Unsoed 01')

UNDERGRADUATE THESIS

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**UNDERGRADUATE THESIS PRESENTED IN PARTICIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF BACHELOR OF
SCIENCE**

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ABSTRACT

The research about the effect of cuttlefish (*Sepia* spp.) shell powder as ameliorant on growth and yield of upland rice (*Oryza Sativa* L. cv. 'Unsoed 01') was conducted from July to October 2020, in Sulit Air, Solok Regency, West Sumatra. The aim of this research were to determine the effect of supplementation of *Sepia* spp. shell powder as an ameliorant on soil pH, growth and yield of upland rice. The research used a Completely Randomized Design (CRD) with four treatments. Each treatment was laid out with six replications. Cuttlefish powder was applied to the soil at different doses (control, 3.12, 6.25 and 9.37 g/polybag). The result showed that the supplementation of cuttlefish shell powder at the doses of 6.74 g and 9.37 g seems to increased significantly on Ultisol soil pH. The supplementation of cuttlefish shell powder also gave a significant effect on chlorophyll a and chlorophyll b content where the supplementation of cuttlefish shell powder at the dose of 3.12 g showed the best effect on chlorophyll a and chlorophyll b content. However the supplementation of cuttlefish shell powder did not give a significant effect on vegetative growth included plant height, number of tillers, fresh and dry weight of roots, fresh and dry weight of shoots of upland rice, and total chlorophyll content. This result also did not give a significant effect on yield parameter included flowering time, number of productive tillers, fresh weight of seeds, dry weight of seeds, and weight of 100 seeds of upland rice.

Keywords: ameliorant, cuttlefish, Ultisol, upland rice.

