

THE EFFECT OF ADDING VITAMIN E LEVELS AS AN ANTIOXIDANT TO THE RANCIDITY OF COPRA MEAL

ABSTRACT

Iga Wahyuning Sedya. 192410014. The Effect of Adding Vitamin E Levels as an Antioxidant to the Rancidity of Copra Meal. Thesis. Animal Science Study Program, Faculty of Agriculture, Muhammadiyah University, Purworejo. 2023. Advisor: Rinawidiastuti, S.Pt., M. Si. and Faruq Iskandar, S.Pt., M.Si.

This study aims to determine the effect of adding Vitamin E levels as an antioxidant on copra meal rancidity. The method used in this study was a completely randomized design (CRD) with 5 treatments using Vitamin E with different percentages namely treatment (0; 0.05; 0.1; 0.15; 0.2 g) and 5 replications. Parameters observed were water content, peroxide value and free fatty acid content. The data obtained was analyzed using the Analysis of Variance (ANOVA) test, if there is a difference then the Duncan New Range Test (DMRT) is performed.

The results showed that the addition of Vitamin E levels as an antioxidant to the rancidity of copra meal had no significant effect ($P > 0,05$) on the water content, peroxide value and free fatty acid levels. The water content value of 8,92-9,36 has no significant effect. Peroxide number values of 1,36-5,26 have no significant effect. Free fatty acid values of 0,36-0,56 have no significant effect. The conclusion shows that all research parameters have no significant effect because the addition of Vitamin E in fact cannot prevent copra meal rancidity in storage for 30 days.

Keywords: Copra meal, Vitamin E, Rancidity