***Evaluation of the Chemical Composition and Antinutritional Compounds of Fermented Rubber Seeds (Hevea brasiliensis) as Feed for Free-Range Chickens***

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## *ABSTRACT*

*Rubber seeds are plantation waste that can be utilized as feed for free-range chickens because they contain good nutrients. However, rubber seeds also have limitations due to the presence of antinutritional substances such as cyanide acid (HCN). This study was conducted with the aim of determining whether rubber seeds fermented using Rhizopus oligosporus and Neurospora sitophila, along with the use of different yeast doses, can increase their nutritional content and reduce their cyanide content. This research was carried out from June to August at the Feed Technology Laboratory, Department of Animal Husbandry, Jember State Polytechnic. Data were analyzed using a Completely Randomized Design with a 2x5 factorial pattern. Factor I is the type of microbe used (Rhizopus oligosporus and Neurospora sitophila). Factor II is the yeast dose (0%, 0.4%, 0.8%, 1.6%, and 3.2%). Each treatment was repeated 2 times. The parameters observed were ash content, water content, fat content, protein content, crude fiber content, and cyanide acid content. The results showed that fermentation using Rhizopus oligosporus and Neurospora sitophila did not or had not influenced each other (P>0.05) in increasing nutrient content and reducing cyanide acid (HCN) levels in rubber seeds. However, the type of fungus used in the fermentation process had a significant effect on crude protein and crude fat content, while the dose factor affected the crude fiber, water, and cyanide acid (HCN) content.*

***Keywords:*** *Rubber seeds, fermentation, chemical composition and cyanide acid (HCN).*