

THE EFFECT OF *Aspergillus niger* INOCULUM LEVEL ON NUTRIENT CONTENT AND CYANIDE ACID OF RUBBER SEED

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ABSTRACT*

This research was investigate to knows effect of *Aspergillus niger* level of best fermented nutrient content and cyanide acid rubber seed. The research was conducted with a Completely Randomized Design (CRD) with 6 treatments *Aspergillus niger* level. They were P1 (0%), P2 (2%), P3 (4%), P4 (6%), P5 (8%), P6 (10%), each treatments 2 replications. Variable was perceived contain of water content, ash content, crude protein, extract ether content and *Carbohydrate by different* (CBD). Data analyzed with Analysis Of Variance (ANOVA) for each treatment. If there were significant difference it would be further tested with Duncan's New Multiple Range Test (DMRT). The result showed that average of water content were P1: 4,23%; P2: 4,21%; P3: 3,84%; P4: 3,79%; P5: 4,14% and P6: 3,60%, average of ash content were P1:0,50%; P2:0,51%; P3: 0,56%; P4: 0,36%; P5: 0,43% and P6: 0,44%, average of crude protein were P1: 15,00%; P2: 14,51%; P3: 14,40%; P4: 14,06%; P5: 14,42% and P6: 16,03%, average of extract ether content were P1: 14,02%; P2: 12,84%; P3: 12,58%; P4: 12,00%; P5: 5,44% and P6: 5,31%; HCN P1 : 2,70; P2 : 1,253; P3 : 0,536; P4 : 0,101; P5 : 0,034; P6: 0,0038. CBD P1:66,34; P2: 67,92; P3: 68,61; P4: 139,5; P5: 151,11; P6: 149,24. ANOVA test results obtained F_{tabel} : 4.39 whereas F_{hit} varies every variable: moisture content: 2.24; ash content: 4.01; crude protein: 14.88; coarse fat: 17,36; CBD: 22.59. That showed that all *Aspergillus niger* level for fermentation rubber seeds was significantly ($P < 0,05$). It was concluded that the best *Aspergillus niger* inoculum level in fermented rubber seed was 10% yielded the highest crude protein content and the lowest extract ether content and reduced the cyanide acid level.

Key words: Rubber seed, Fermentation, *Aspergillus niger*, Nutrien, Cyanide Acid.

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