CRUDE PROTEIN AND CRUDE FIBER DIGESTIBILITY OF LAYING HENS SUPPLEMENTED SPIRULINA AND BRAN FERMENTATED *Acidothrmus cellulolyticus* AND *Aspergillus terreus*

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ABSTRACT

This study was conducted to know the influence of *Spirulina* supplementation and bran fermented *Acidothrmus cellulolyticus* and *Aspergillus terreus* on the crude protein and crude fiber digestibility. Twenty-four *Isa Brown’s* strain laying hens which age of fifteen week were randomly devided into eight dietary treatment groups (n=3), namely P₀, P₁, P₂, P₃, P₄, P₅, P₆ and P₇ respectively. The treatment of P₀, P₁, P₂, P₃ was bran without fermentation by giving *Spirulina* 0%, 0.5%, 1%, 1.5% and P₄, P₅, P₆, P₇ was bran fermented by giving *Spirulina* 0%, 0.5%, 1%, 1.5%. The treatment was giving for four month period. Fecal sample were collected to determine the crude protein and crude fiber digestibility.

The result of the experiment showed that the crude protein of diet suplemented with bran fermented *Acidothrmus cellulolyticus* and *Aspergillus terreus* were significantly different (p<0.01) better than the basal diet. The bran fermented *Acidothrmus cellulolyticus* and *Aspergillus terreus* suplementation of the diet showed were significantly different (p<0.05) increased crude fiber digestibility between each of group.

*Key words*: *Spirulina*, digestibility, crude protein, crude fiber, layer.