

**PENGARUH TEPUNG JANGKRIK (*Gryllus bimaculatus*)
SEBAGAI SUBSTITUSI BUNGKIL KEDELAI PADA
RANSUM *FINISHER* TERHADAP ANIMAL
WELFARE DAN BEHAVIOR
BROILER**

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INTISARI

Permasalahan ketersediaan bungkil kedelai dan pengadaannya yang masih impor di Indonesia membuat perlunya adanya bahan pakan sumber protein alternatif. Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung jangkrik sebagai pengganti bungkil kedelai pada ransum pakan fase *finisher* broiler terhadap *breast dirtiness*, *foot pad dermatitis* (FPD), *hock burn*, dan *behavior* pada broiler. Sebanyak 100 ekor broiler jantan strain *Indian River* dipelihara selama 5 minggu di kandang *closed house* dibagi menjadi 2 kelompok perlakuan dengan 5 ulangan, setiap ulangan terdiri dari 10 ekor ayam. Pemeliharaan dilakukan dengan kandang *pen* 1,5 m x 0,75 m. Perlakuan pakan diberikan mulai fase *finisher* (umur 21-35) yaitu dengan P0 (28,5% bungkil kedelai) dan P1 (18,5% bungkil kedelai + 10% tepung jangkrik). Data *breast dirtiness*, *foot pad dermatitis* (FPD), *hock burn*, dan *behavior* diambil pada hari ke-33 sampai 35, kemudian dilakukan *scoring*. Data *footpad dermatitis*, *hock burn*, dan *breast dirtiness* dianalisis statistik menggunakan Uji *Mann-Whitney*, sedangkan data *behavior* dianalisis statistik menggunakan *Independent sample t-test* dengan bantuan program *Statistical Package for Social Science* (SPSS). Hasil analisis statistik menunjukkan substitusi bungkil kedelai menggunakan tepung jangkrik sebanyak 10% dapat mengurangi *footpad dermatitis* ($P=0,02$), namun pada *hock burn* dan *breast dirtiness* tidak berbeda nyata ($P>0,05$). *Behavior foraging* meningkat pada perlakuan dengan penambahan tepung jangkrik ($P=0,020$). *Behavior* lainnya tidak menunjukkan perbedaan yang signifikan ($P>0,050$). Berdasarkan penelitian yang dilakukan, dapat disimpulkan bahwa substitusi bungkil kedelai dengan menggunakan tepung jangkrik tidak memberikan pengaruh buruk terhadap *animal welfare* dan *behavior* broiler.

Kata Kunci : Broiler, Tepung Jangkrik, Bungkil Kedelai, *Animal Welfare*, *Behavior*.

EFFECTS OF CRICKET MEAL (*Gryllus bimaculatus*) SUBSTITUTIONS OF SOYBEAN MEAL IN FINISHER DIETS ON BROILER ANIMAL WELFARE AND BEHAVIOR

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ABSTRACT

It is important to find alternative protein source ingredient soybean because of soybean meal supply problem in Indonesia that mostly imported from other country. This study was designed to determine the effect of cricket meal substitution of soybean meal in broiler finisher diets on breast dirtiness, foot pad dirtiness (FPD), hock burn, and behavior on broiler chicken. A total of 100 broiler of Indian River strain were raised for 5 weeks in closed house and randomly assigned into 2 treatment group with 5 replication from each treatment. Each replication consisting 10 chicken with pen area 1,5 m x 0,75 m. Diets treatments was given from finisher phase (Day 21-35). Treatment were: P0 (28,5% soybean meal) and P1 (18,5% soybean meal + 10% cricket meal). Behavior data was collected on day 33 and 34, while animal welfare (footpad dermatitis, hock burn, and breast dirtiness) data was collected on day 35. Animal welfare data was analyzed using One-Way Analysis of Variance, while behavior data was analyzed using Mann-Whitney test with Statistical Package for Social Science (SPSS) software help. The result showed that 10% substitution of soybean meal using cricket meal on broiler diets had significant effect of reducing footpad dermatitis ($P=0,02$), but did not had significant difference on hock burn and breast dirtiness ($P>0,05$). Foraging behavior increased on broiler with cricket meal treatment ($P=0,020$). However, difference was not spotted on other behavior ($P>0,050$). In conclusion, replacing soybean meal with cricket meal in broiler finisher ration does not have bad influence on animal welfare and behavior.

Keyword : Broiler, Cricket Meal, Soybean Meal, Animal Welfare, Behavior.