

## **ABSTRAK**

### **THE EFFECT OF THE LEVEL OF TEMPEH YEAST ON THE MANUFACTURE OF CORNCOB TEMPE ON THE NUTRITIONAL CONTENT FOR ANIMAL FEED**

**By**

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This study aims to determine the effect of the level of tempeh yeast on the nutrient content of corncob tempe (crude fiber, crude protein and crude fat). This research was conducted in March–April 2022, at the Laboratory of Animal Nutrition and Feed, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. This study used a completely randomized design consisting of 7 treatments and 4 replications. The treatments were P0: corn cobs without tempe yeast (control), P1: corn cobs + 1.5% tempe yeast, P2: corn cobs + 2% tempe yeast, P3: corn cobs + 2.5% tempe yeast, P4: corn cobs + 3% tempe yeast, P5: corn cobs + 3.5% tempe yeast, and P6: corn cobs + 4% tempe yeast. Variables to be observed include crude fiber, crude protein and crude fat. The data obtained will be analyzed using Analysis of Variance and followed by Duncan's Multiple Comparison Test (DMRT). The results showed that the addition of tempeh yeast with different levels had no significant effect ( $P > 0.05$ ) on crude fiber (P0: 12.37%, P1: 11.78%, P2: 10.63%, P3: 16.39% , P4: 9.43%, P5: 12.78%, P6: 12.44%), but significant effect ( $P < 0.05$ ) on crude protein (P0: 4.01%, P1: 5.46% , P2: 5.44%, P3: 7.31%, P4: 7.40%, P5: 7.10%, P6: 8.49%) and crude fat (P0: 11.03%, P1: 2 0.01%, P2: 1.14%, P3: 3.35%, P4: 3.46%, P5: 5.40%, P6: 4.63%) with the best treatment at a level of 4% for protein and 2 % for fat.

**Keywords:** Crude fat, Crude protein, Crude fiber, Corn cobs, Tempe yeast

## ABSTRAK

### **PENGARUH LEVEL PEMAKAIAN RAGI TEMPE PADA PEMBUATAN TEMPE TONGKOL JAGUNG TERHADAP KANDUNGAN NUTRISI UNTUK PAKAN TERNAK**

Oleh

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Penelitian ini bertujuan untuk mengetahui pengaruh level pemakaian ragi tempe terhadap kandungan nutrisi tempe tongkol jagung (serat kasar, protein kasar dan lemak kasar). Penelitian ini dilaksanakan pada Maret–April 2022, di Laboratorium Nutrisi dan Makanan Ternak, Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 7 perlakuan dan 4 ulangan. Perlakuan yang diberikan yaitu P0 : tongkol jagung tanpa ragi tempe (kontrol), P1 : tongkol jagung + ragi tempe 1,5%, P2 : tongkol jagung + ragi tempe 2%, P3 : tongkol jagung + ragi tempe 2,5%, P4 : tongkol jagung + ragi tempe 3%, P5 : tongkol jagung + ragi tempe 3,5%, dan P6 : tongkol jagung + ragi tempe 4%. Variabel yang akan diamati meliputi serat kasar, protein kasar dan lemak kasar. Data yang diperoleh akan dianalisis menggunakan Analisis Ragam dan dilanjutkan dengan Uji Jarak Berganda Duncan (DMRT). Hasil penelitian menunjukkan bahwa penambahan ragi tempe dengan level yang berbeda tidak berpengaruh nyata ( $P > 0,05$ ) terhadap serat kasar (P0: 12,37%, P1: 11,78%, P2: 10,63%, P3: 16,39%, P4: 9,43%, P5: 12,78%, P6: 12,44%), namun berpengaruh nyata ( $P < 0,05$ ) pada protein kasar (P0: 4,01%, P1: 5,46%, P2: 5,44%, P3: 7,31%, P4: 7,40%, P5: 7,10%, P6: 8,49%) dan lemak kasar (P0: 11,03%, P1: 2,01%, P2: 1,14%, P3: 3,35%, P4: 3,46%, P5: 5,40%, P6: 4,63%) dengan perlakuan terbaik pada level 4% untuk protein dan 2% untuk lemak.

**Kata kunci:** Lemak kasar, Protein kasar, Ragi tempe, Serat kasar, Tongkol jagung