

## ABSTRACT

**MULYONO.** H4A 005 007. The used of *Saccharomyces cereviceae* as an Antibiotic Alternative on the Nutrient Utilization and Broiler Performance. (Advisor : **RETNO MURWANI and FAJAR WAHYONO**)

Antibiotic have been used as additive in poultry feed to improve performance by reducing the pathogen. Recently, increasing pressure to reduce or eliminate the use of antibiotics in feed is due to negative effect to human. A number a strategies to reduce the antibiotics use in feed have been explored. The use probiotic as one of the strategy for preventing intestinal disease due to the effective inhibition of phatogenic bacteria. An experiment was conducted to examine the effect of *S. cereviceae* and *S. cereviceae* containing zinc as alternative to antibiotic growth promoter on nutrient utilization and broiler performances. A total of 180 birds of chick were randomly assigned into four treatment with 5 replication each. The four treatment evaluated were : 1) positive control ( $T_{oksy}$ ) : basal diet + *S. cereviceae* (1%) ;4)  $T_{Sc+Zn}$  : basal diet + *S. cereviceae* containing Zinc 1%. The experiment was erranged in a completely randomized design. Nutrient utilization comprises of dry matter digestibility, protein digestibility, protein retention, protein efficiency ratio (PER) and metabolism energy retention. Performance of broiler were body weight, feed intake, body weight gain and feed conversion ratio (FCR). The data were analized using anova and continued by the duncan's multiple range test. The result showed that feed consumption was not significantly different but the dry matter digestibility, protein digestibility, protein retention, protein efficiency ratio, body weight, body experiment demonstrated the feed additive of *S. cereviceae* had positive impact on broiler performances comparing to using an antibiotic and comparable to antibiotic.

**Keyword : broiler, probiotic, protein, *S. cereviceae*, zinc**