# PENGARUH PENAMBAHAN SERASAH SEREH (*Cymbopogon citratus*) SEBAGAI SUMBER MINYAK ASIRI PADA RANSUM TERHADAP KECERNAAN NUTRIEN DALAM RUMEN SECARA *IN VITRO*

Ratih Laksitorini
08/269871/PT/05500

## INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan serasah sereh (*Cymbopogon citratus*) sebagai sumber minyak asiri (MA) dalam ransum terhadap kecernaan nutrien di dalam rumen secara *in vitro*. Serasah sereh yang ditambahkan dalam ransum setara dengan level kadar MA 0, 45, 90, 135 dan 180 mg/L medium. Masing-masing perlakuan terdiri dari tiga kali ulangan. Variabel yang diamati antara lain nilai pH, kadar amonia, kecernaan bahan kering (KcBK), kecernaan bahan organik (KcBO), kecernaan protein kasar (KcPK) dan kecernaan serat kasar (KcSK). Data yang diperoleh dianalisis dengan analisis rancangan acak lengkap pola searah, kemudian untuk mengetahui perbedaan antar nilai rerata dilakukan uji Duncan's *new Multiple Range Test* (DMRT). Hasil penelitian menunjukkan penambahan serasah sereh yang setara dengan level kadar MA 45, 90, 135, dan 180 mg/L tidak mempengaruhi nilai pH, konsentrasi amonia, KcBK dan KcBO. Penambahan serasah sereh yang setara dengan level kadar MA 45, 90, 135, dan 180 mg/L menurunkan KcPK sebesar 11,9%, 17,7%, 15,5% dan 20,0%. Penambahan serasah sereh yang setara dengan level kadar MA 90, 135, dan 180 mg/L menurunkan KcSK sebesar 14,6%, 15,2% dan 26,4%, sedangkan penambahan serasah sereh yang setara dengan level kadar MA 45 mg/L tidak mempengaruhi KcSK. Berdasarkan hasil penelitian, disimpulkan bahwa penambahan serasah sereh yang setara dengan level kadar MA sebesar 45 mg/L pada ransum dapat dilakukan karena tidak mempengaruhi nilai KcBO dan KcSK pakan dalam rumen.

Kata kunci: Serasah sereh, Minyak asiri, Kecernaan *in vitro*

# THE EFFECT OF LEMONGRASS (*Cymbopogon citratus*) LITTER ADDITION AS ESSENTIAL OIL SOURCE IN THE DIET ON RUMINAL NUTRIENT DIGESTIBILITY IN VITRO

Ratih Laksitorini
08/269871/PT/05500

## ABSTRACT

This study was conducted to examine the effect of lemongrass (*Cymbopogon citratus*) litter addition as essential oil (EO) source in the diet on ruminal nutrient digestibility in vitro gas. Lemongrass litter were added equal to EO level as much as 0, 45, 90, 135 and 180 mg/L. Each treatment consists of three replicates. Data collected were include pH, ammonia, dry matter digestibility (DMD), organic matter digestibility (OMD), crude protein digestibility (CPD), and crude fiber digestibility (CFD). The data obtained were analyzed using a completely randomized design one-way ANOVA and continued by Duncan's *Multiple Range Test* (DMRT) to examine the differences between mean values. The result showed that the addition of lemongrass litter equal to EO level as much as 45, 90, 135, and 180 mg/L did not affect pH value, ammonia concentration, DMD and OMD. The supplementation of lemongrass litter at EO level as much as 45, 90, 135, and 180 mg/L decreased CPD i.e. 11.9%, 17.7%, 15.5% and 20.0% respectively. The supplementation of lemongrass litter at EO level as much as 90, 135, and 180 mg/L decrease CFD i.e. 14.6%, 15.2% and 26.4% respectively, while supplementation of lemongrass litter at EO level as much as 45 mg/L did not affect CFD. Based on the results, it could be concluded that the addition of lemongrass litter as source of EO in diet at level 45 mg/L can be done because it did not affect the OMD and CFD in the rumen.

Key words: Lemongrass litter, Essential oil, In vitro digestibility