

**PENGARUH PENAMBAHAN BAWANG PUTIH (*Allium sativum*) DAN JAHE (*Zingiber officinale*) TERHADAP
KECERNAAN BAHAN KERING DAN BAHAN
ORGANIK SAMPEL PAKAN SAPI
SECARA *IN VITRO***

Indri Aditya Saputri
11/313534/PT/06007

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bawang putih dan jahe terhadap pencernaan bahan kering dan bahan organik secara *in vitro*. Penelitian dilaksanakan di Laboratorium Teknologi Makanan Ternak, Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta. Rancangan percobaan yang digunakan adalah rancangan acak lengkap pola faktorial 3 x 3 dengan 5 ulangan. Faktor penambahan bawang putih terdiri atas penambahan 0, 8, dan 16 mg dan faktor pemberian jahe terdiri atas penambahan jahe 0, 30, dan 60 mg. Data yang diamati adalah nilai pencernaan bahan kering *in vitro* (KcBKIV) dan pencernaan bahan organik *in vitro* (KcBOIV). Data yang diperoleh dianalisis statistik dengan analisis variansi dan bila terdapat perbedaan yang nyata dilanjutkan dengan uji *Duncan's new multiple range test*. Hasil penelitian menunjukkan bahwa faktor penambahan bawang putih dan penambahan jahe berpengaruh terhadap KcBKIV dan KcBOIV. Hasil rerata KcBKIV tertinggi penambahan bawang putih 8 mg (60,26%) dan penambahan jahe 60 mg (59,70%). Hasil rerata KcBOIV tertinggi penambahan bawang putih 8 mg (64,77%) dan penambahan jahe 60 mg (63,97%). Tidak terdapat interaksi yang nyata antara penambahan bawang putih dan jahe terhadap KcBKIV dan KcBOIV. Berdasarkan hasil penelitian ini dapat disimpulkan bahwa interaksi pada bawang putih level 8 mg dan jahe 60 mg akan menghasilkan nilai KcBKIV dan KcBOIV yang terbaik.

(Kata kunci: Pencernaan *in vitro*, Bawang putih, Jahe)

**EFFECT SUPPLEMENTATION OF GARLIC (*Allium sativum*)
AND GINGER (*Zingiber officinale*) ON IN VITRO DRY
MATTER AND IN VITRO ORGANIC MATTER
DIGESTIBILITIES SAMPLE OF
CATTLE FEED**

Indri Aditya Saputri
11/313534/PT/06007

ABSTRACT

This study aimed to determine the effect of supplementing garlic and ginger on in vitro dry matter and organic matter digestibilities. The experiment was carried out at Laboratory of Animal Feed Technology, Faculty of Animal Science, Universitas Gadjah Mada, Yogyakarta. The experimental design used was 3 x 3 factorial completely randomized design with 5 replications. Garlic was supplemented at 0, 8, or 16 mg while ginger was at 0, 30, or 60 mg. Data collected were: in vitro dry matter digestibilities (IVDMD) and in vitro organic matter digestibilities (IVOMD). Data were analyzed using analysis of variance (anova) and then continued with Duncan's new multiple range test if significant results among treatments were found. The results showed that supplementation of garlic and ginger affected ($P < 0.05$) IVDMD and IVOMD. The greatest IVDMD was at 8 mg garlic (60.26%) and 60 mg ginger supplementations (59.70%). The greatest IVOMD was at 8 mg garlic (64.77%) and 60 mg ginger supplementations (63.97%). Garlic and ginger supplementations did not showed any interaction effects on IVDMD and IVOMD. The greatest IVDMD and IVOMD were found at 8 mg garlic and 60 mg ginger supplementations. It can be concluded that supplementation with 8 mg garlic and 60 mg ginger have a positive effect on IVDMD and IVOMD.

(Keywords: *In vitro* digestibilities, Garlic, Ginger)