PENGARUH TINGKAT PEMBERIAN ONGGOK TERHADAP KUALITAS DAN KECERNAAN *IN VITRO* SILASE ISI RUMEN SAPI

Irma Fitri Astuti
04/176282/PT/04803

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh tingkat pemberian onggok terhadap kualitas dan kecernaan *in vitro* silase isi rumen sapi pada berbagai level sebagai perlakuan. Ada tiga perlakuan penambahan onggok, yaitu 0% (kontrol), 15%, dan 30% dari total bahan kering kemudian diperam selama 14, 21 dan 28 hari. Sampel dimasukkan ke dalam stoples sebagai silo dalam kondisi anaerob. Setiap perlakuan dibuat 5 (lima) ulangan. Setiap akhir lama peram dilakukan uji kualitas fisik meliputi warna, bau, tekstur, ada tidaknya jamur dan pH. Silase dikeringkan pada suhu 55^0 C, kemudian sampel hari ke 21 digunakan untuk menganalisis komposisi kimia. Data yang diperoleh dianalisis variansi dengan metode rancangan acak lengkap pola searah untuk uji serat kasat (SK), lemak kasar (LK), protein kasar (PK), dan kecernaan secara *in vitro* pada inkubasi 48 jam I dan 48 jam II, apabila ada perbedaan yang nyata sebagai efek perlakuan dilanjutkan dengan uji *Duncan's new multiple range test* (DMRT). Data pH, bahan kering (BK) dan bahan organik (BO) dianalisis dengan menggunakan *Randomized completed block design* (RCBD) dan apabila ada perbedaan yang nyata sebagai efek lama peram maka dilanjutkan uji DMRT. Uji kualitas fisik menunjukkan warna coklat kehijauan, bau asam, tekstur kasar dan pertumbuhan jamur tidak ada. Penambahan onggok pada level yang berbeda meningkatkan ($P<0,05$) nilai komposisi kimia silase isi rumen sapi, yaitu bahan kering (BK) dan bahan organik (BO) dan mengalami penurunan ($P<0,05$) pada serat kasar (SK), lemak kasar (LK) dan protein kasar (PK). Silase isi rumen sapi dengan penambahan onggok pada kadar yang berbeda berpengaruh nyata ($P<0,05$) meningkatkan kecernaan *in vitro* pada 48 jam I dan 48 jam II. Penambahan onggok terbaik didapatkan pada level 15% pada hari ke 14 dengan pH 3,99 ± 0,03.

Kata kunci : Isi rumen sapi, Onggok, Lama peram, Silase, Kecernaan *in vitro*

THE EFFECT OF CASSAVA POMACE LEVEL IN RUMEN CONTENT SILAGE ON ITS QUALITY AND *IN VITRO* DIGESTIBILITY

Irma Fitri Astuti
04/176282/PT/04803

ABSTRACT

This study aims were to determine the effect of cassava pomace level in rumen content silage on its quality and *in vitro* digestbility. There were three levels of cassava pomace e.g, 0% (control), 15%, and 30% of total dry matter then fermented for 14, 21, and 28 days. Samples were put in a jar as a silo in anaerobic condition. Each treatment was conducted on five replications. At the end of fermentation some physical quality tests, e.g color, odor, texture, fungi, and pH measurement were observed. Samples of silage were dried at 55^0C. Samples on day 21, were used for chemical analysis. The data obtained were analyzed by analysis of variance following *One-way experimental design* and continued by *Duncan's new multiple range test* (DMRT). Data of pH, dry matter (DM), and organic matter (OM) were analyzed by analysis of variance following *Completely randomized block design* (RCBD)and continued by *Duncan's new multiple range test* (DMRT). The result showed that the silage had that greeny-brown color, the silage had rough texture, acidic odor, and no fungus was shown. Different level of cassava pomace addition increased (P<0,05) chemical composition values of rumen content silage, dry matter (DM), organic matter (OM) and decreased (P<0,05) of crude protein (CP), crude fiber (CF), and crude fat (CFt). The rumen content silage with different levels of cassava pomace addition had significant effect (P<0,05) increased *in vitro* digestibility for first 48 hour and second 48 hour. The best quality silage produced by the addition of 15% cassava pomace on day 14 with 3,99 ± 0,03 of pH.

Key words: Rumen content silage, Cassava pomace, Duration of fermentation, Silage, *In vitro* digestibility