

PENGARUH TEPUNG KULIT BUAH NAGA MERAH (*Selenicereus monacanthus*) SEBAGAI SUMBER TANIN TERHADAP KECERNAAN PAKAN SECARA *IN VITRO*

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INTISARI

Kulit buah naga merah (*Selenicereus monacanthus*) memiliki kandungan senyawa metabolit sekunder, seperti flavonoid, saponin, dan tanin. Senyawa metabolit sekunder tersebut bermanfaat untuk proteksi protein sehingga degradasi protein di dalam rumen menurun. Penelitian ini bertujuan untuk mengetahui pengaruh kulit buah naga merah (*Selenicereus monacanthus*) sebagai bahan pakan sumber tanin terhadap pencernaan nutrisi di dalam rumen. Penelitian ini dilakukan dengan pemberian pakan hijauan rumput raja sebanyak 60%. Konsentrat sebesar 40% terdiri dari *wheat bran pollard* sebanyak 90% dan bungkil kedelai sebanyak 10%. Level pemberian tepung kulit buah naga merah yang berbeda yaitu 0%, 1%, 2%, 3%, dan 4%. Inkubasi pencernaan *in vitro* dilakukan selama 48 jam untuk pencernaan dalam rumen dan 96 jam untuk pencernaan total dengan enam kali pengulangan setiap perlakuan. Variabel yang diamati adalah pencernaan bahan kering (KcBK), pencernaan bahan organik (KcBO), pencernaan protein kasar (KcPK), dan pencernaan serat kasar (KcSK) di dalam rumen, pascarumen, dan total. Data hasil penelitian dilakukan analisis pola searah apabila hasil terdapat perbedaan nyata, dilakukan uji *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa pemberian tepung kulit buah naga merah tidak dapat mempengaruhi pencernaan rumen dan total namun mempengaruhi pencernaan pascarumen.

Kata kunci: Kecernaan *In Vitro*, Kulit Buah Naga merah, Tanin.

THE EFFECT OF RED DRAGON FRUIT PEEL FLOUR (*Selenicereus monacanthus*) AS A SOURCE OF TANNIN ON FEED DIGESTIBILITY IN VITRO

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ABSTRACT

The red dragon peel (*Selenicereus monacanthus*) contained secondary metabolite compounds such as flavonoids, saponins, and tannins. These secondary metabolite compounds protected proteins, reducing protein degradation in the rumen. The study aimed to investigate the effect of red dragon fruit peel (*Selenicereus monacanthus*) as a tannin source on nutrient digestibility in the rumen. The research was conducted by feeding 60% forage and 40% concentrate, consisting of 90% *wheat bran pollard* and 10% soybean meal. The addition of red dragon fruit peel powder is carried out at levels of 0%, 1%, 2%, 3%, and 4% with six repetitions. In vitro digestibility incubation was carried out for 48 hours for rumen digestibility and 96 hours for total digestibility, with six replications for each treatment. The observed variables were dry matter digestibility (DMD), organic matter digestibility (OMD), crude protein digestibility (CPD), and crude fiber digestibility (CFD) in the rumen, post-rumen, and total. Data were analyzed using a one-way design, and when significant differences were found, Duncan's New Multiple Range Test (DMRT) was performed. The research showed that the red dragon peel flour did not affect rumen and total digestibility. The addition of red dragon peel flour did affect post-rumen digestibility.

Keywords: *In Vitro* Digestibility, Dragon Fruit Peel, Tannin.