

Anchalee Kositkajorndet 2007: Study on the Ensiling of Palm Press Fibre as a Roughage of Sheep. Master of Science (Agriculture), Major Field: Animal Science, Department of Animal Science. Thesis Advisor: Associate Professor Duangsmorn Sinchermsiri, M.S. 88 pages.

Study on the ensiling of palm press fibre (PPF) as a roughage of sheep. There are two experiments. The first experimental was conducted to determined variability of nutrients content in PPF and nutritional change when ensilaged. The result showed, the variability of PPFs did not significantly influence to organic matter, crude protein, crude fat, ash, NDF, ADF, lignin, pH and potential degradability ($p>0.05$). However, there were significantly difference between dry matter, crude fiber and nitrogen free extract ($p<0.05$) and ensiling of PPF with variation ratio of molasses, cassava chip and urea caused to decrease NDF and ADF ($p<0.05$). Additionally, potential degradability was increased when ensilaged ($p<0.05$). The second experiment was conducted to study of voluntary intake, digestibility and utilization of ensilaged PPF in sheep. There were four of ensilaged PPFs those selected from the first experiment, which highest potential degradability, were compared with Pangola hay. The experiment showed, ensilaged PPFs caused to decrease body weight when fed to sheep ($p<0.05$), while those sheep which fed Pangola hay caused to increase body weight and acetic acid concentration in ruminal fluid was increased ($p<0.05$) and dietary treatment did not effect to propionic acid concentration ($p>0.05$). Moreover, Pangola hay caused to increase butyric acid concentration in ruminal fluid than those ($p<0.05$). It can be concluded, PPF be able to use as ruminant roughage with contained utilizable nutrients. However, using of PPF be required to ensilage therefore increased digestibility and should be used with other forage to reduce the risk to production performance of animals.

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