

## Nutritive value, palatability and selectivity of 10 different legume herbage by rabbits

### ABSTRACT

This experiment was conducted to determine the nutritive value, palatability and selectivity of 10 legume herbage by rabbits. Chemical analyses and legume intake by rabbits were evaluated for the suitability to fully or partially replace commercial rabbit diet. Ten species of legumes: *Desmodium triflorum*, *Clitoria ternatea*, *Stylosanthes guianensis*, *Calopogonium mucunoides*, *Albizia falcate*, *Albizia saman*, *Centrosema pubescens*, *Leucaena leucocephala*, *Indigofera zollingeriana* and *Arachis pintoi* were analysed for nutrient content. The legumes were analysed for proximate analysis which included dry matter (DM), crude protein (CP), crude fiber (CF), ether extract (EE) and ash (OM). Two methods of feed preference testing were carried out to evaluate the acceptability and preference of the 10 legume species by the rabbits. Five New Zealand White female adult rabbits aged more than 1 year old were allocated to individual cages. The first trial was a single bowl test in which one legume species was offered to each rabbit daily and evaluated for acceptability. The second trial was a double bowl test in which two species of legumes were presented to each rabbit at the same time and evaluated for preference. The testing period for each method lasted for 9 to 10 d, preceded by one week of adaptation. The proximate analysis results showed that all legume herbage had high nutrient, such as CP content. *Indigofera zollingeriana* had the highest CP content and *Calopogonium mucunoides* had the highest CF content compared to other legumes and commercial pellet feed. Meanwhile from the feed preference trials, *Arachis pintoi*, *Indigofera zollingeriana* and *Centrosema pubescens* were the most preferred legumes while *Albizia saman* was the least preferred by the rabbits. It can be concluded that not all legumes are suitable to fully replace commercial diet in rabbits, thus suggesting that legumes can be combined with other forages, and both forages and commercial feed can be included in diets for a successful rabbit production.

**Keyword:** Feed preference; Palatability; Nutritive value; Legumes; Rabbits