

## Summary

The effect of oven-drying temperature (60 °C and 100 °C) and freeze-drying was evaluated in CIAT's Pasture Quality and Nutrition Laboratory. The effect on IVDMD of grasses and legumes by the addition of a nitrogen and/or energetic supplement (urea, glucose, and urea + glucose) in the fermentation media was also evaluated. The levels of urea, glucose, and urea + glucose were 0.03%, 0.05%, 0.07%, and 0.09% of the buffer medium. The results on drying method were analyzed by linear regression and a 't' test was used to determine if the intercept was different from 0 or the slope different from 1.

The drying method affected the IVDMD of legumes but not grasses. Oven-drying, regardless of the in vitro method utilized, in comparison with freeze-drying, resulted in lower values of IVDMD of legumes. This implies that for IVDMD determination in tropical legumes, samples should be freeze-dried or that some correction factor should be applied. The addition

of urea or glucose did not affect the IVDMD of grasses and legumes, with a wide range of CP content. High levels of urea resulted in a depression of IVDMD of those grasses and legumes. On the other hand, the use of urea plus glucose resulted only in small increases in IVDMD, possibly due to the use of ruminal liquor of animals with an adequate supplementation of nitrogen.