

# Summary

The nutritive quality of a 2-year-old pasture of star grass (*Cynodon nlemfuensis*) was measured at the Animal Nutrition Laboratory of the Brazilian Agricultural Research Enterprise (Embrapa)-Amazônia Oriental, located in Belém, Pará, during May-July 1999. The study aimed to improve pasture management for increased production potential and enhanced nutritive value of star grass. The following parameters were measured at three cutting intervals (at 21, 42, and 63 days): forage production, leaf/stem ratio, crude protein (CP), crude fiber (CF), ether extract (EE), fixed mineral residue (FMR), ash (A), nitrogen-free extract (NFE), intake by sheep, digestibility, and total digestible

nutrients (TDN). A completely randomized block design was used. Fifteen sheep were used, with an average age of 1 year and with 25 kg liveweight. Dry matter (DM) production and levels of CF in aerial parts and leaves increased with age of cutting. However, the percentage of leaves, the leaf/stem ratio, the CP levels in aerial parts, EE, FMR, intake and digestibility of DM, CP, EE, and digestible energy (DE) decreased with increased age of cutting. The effect of age on DM production, CP, and DM intake was best represented by lineal regressions, whereas the digestibility of DM, CP, EE, TDN, and DE adjusted better to quadratic regressions. The leaf/stem ratio and the percentage of leaves presented correlation coefficients above 0.81 regarding other variables of nutritive value, indicating that these parameters can be used to evaluate the nutritive value of forages. Results indicated that cutting at 42-day intervals improved the balance between DM production and quality of *C. nlemfuensis*.