IGA 2008

9th International Conference on Goats

Querétaro México

IGA

International Goat Association

Proceedings of the 9th International Conference on Goats

Memorias de la 9ª Conferencia Internacional sobre Caprinos

Querétaro, México

XXIII Reunión Nacional sobre Caprinocultura

August 31st to September 5th 2008

COMECAPRI

"The IGA promotes goat research and development for the benefit of humankind, to alleviate poverty, to promote prosperity and to improve the quality of life"

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GEN 007/08

Proceedings of the 9th International Conference on Goats

"Sustainable Goat Production: Challenges and Opportunities of Small and Large Enterprises"

Querétaro, México
August 31st - September 4th / 2008

270. Use of cactus pad (*Opuntia ficus indica*) as a supplement of lactating does grassing on semiarid grassland.

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The present study was conducted in order to determine the effect of prickly pear cactus supplementation (*Opuntia ficus indica*) on milk production of goats grassing in a semiarid grassland, with a high proportion of *Atriplex canescens*, during dry season. Fourteen four years old (lactating, non-pregnant) Nubian does, were used at the San Luis Experimental Station of INIFAP, for a seven weeks experiment, beginning in May, 21 and ended in July, 15. Does were randomly assigned to one out of three treatments: 1) grassing on a native semiarid grassland with a high proportion of *Atriplex canescens*, as a unique available green forage (2 Ha) (G), and 2 and 3) similar to G group plus 1.0% (GLS) or 1.5% (GHS) of prickly pear cactus (live body weight dry matter basis). The *Atriplex* available forage, assuming a 70% intake, was 2.71 Kg/doe/day, containing 17.8±2.44% CP, 20.2±1.91% ADF and 67.1±3.65% DMD. Differences in milk production were detected due weeks (P<0.001), but not due to treatment or interaction (P>0.05). The initial milk production was 330.2±75, 292.1.2±205 and 276.5±66 ml/d for G, GLS and GHS, respectively. By the time, production tended to reduce gradually, being the final production of 82.0±66, 136.9±68 and 175.7±55 ml/d for G, GLS and GHS, respectively. However, that reduction was higher (P<0.005) in G does (75.0%), than in the GLS (55.4%) or GHS (36.5%), indicating that prickly pear cactus supplementation improved milk production, reducing the wide lost of milk production, originated by drought. Key words: Opuntia, Goats, milk production.

271. Whole sugar cane silages enriched with *Pleurotus sapidus* solid culture as an alternative to the feeding of goats

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The objective of the study was to evaluate whole of integral sugar cane (CAI-0) and you mix with 10 and 20 % (CAI-10 and CAI-20) respectively, of a solid culture obtained after 15 days (d) of fermentation with the mushroom *Pleurotus sapidus* (FMS-15). Nutrients contents and variables of fermentation and of 96 h *in vitro* gas production were analyzed, the experimental design was completely randomized, an analysis of variance was performed and means were compared using the Tukey test (P≤0.05). Addition of solid culture increased CP content by 1.9% which may be due to *P. sapidus* activity on the substrate, the variables fermentative him during silage showed that mixtures of CAI-20-24d had regard to other treatments a lower content of MS (3.20%), The highest value of ammonia N was for CAI-0-24d with MS 9.26% and the lowest for CAI-20-0d 3.54% MS, the highest value for lactic acid was CAI-0-24d with values of 19.44% DM , for the pH value was as high treatment CAI-0-0d with 5.36 and the lowest was for the treatment CAI-20-24d with 3.90, both suitable for the process of silage. The CP was similar for all treatments at the beginning of fermentation, day 24 was the highest value for CAI-0-24d with 13.72% DM; whereas DIVMS of the CAI-0-0d was 63.71% DM and CAI-20-24d 70.13% DM improving in this aspect 6.42 units. The study of the kinetics of gas production *in vitro* indicated that the treatment CAI-0-0d he was better (260.63 g ml^{-1} DM); treatments per day 24 with FMS-15 showed no significant differences near to 233.76 mL g^{-1}MS. The highest rate of fractional gas production *in vitro* was for CAI-0-0d and FMS-15 in the first 10 hours of incubation; treatments with FMS-15 at day 24 showed a second peak of activity after 12 hours of incubation, so which leads to improved DIVMS this effect. The study offers as an alternative the use of solid crop of sugarcane with the fungus *Pleurotus sapidus*, improves the availability of compounds found in the walls of the fiber, and stabilizes production ammonia nitrogen preventing losses of nitrogen.