# New Dimensions of Animal Feeding to Sustain Development and Competitiveness

Proceedings of V[th] ANA Biennial Conference
held at National Institute of Animal Nutrition & Physiology, Bangalore


ABSTRACT PAPERS

*Editors*
K. Sharma, A.K. Pattanaik, Narayan Dutta and Asit Das
*CAS in Animal Nutrition*
*Indian Veterinary Research Institute, Izatnagar*

**Animal Nutrition Association**
Indian Veterinary Research Institute
Izatnagar - 243 122

**National Institute of Animal Nutrition & Physiology**
Bangalore - 560 030

# 188 Effects of cultivars-dependent groundnut haulms quality on live weight gains and nitrogen retention in sheep

**S. Vellaikumar, F. Walivar[1], S. N. Nigam[1], H. D. Upadhyaya[1], A. Khan and M. Blümmel**
International Livestock Research Institute, Patancheru - 502 324

Haulms from released groundnut cultivars (ICGV 89104, ICGV 91114, TMV 2, ICGV 92093, ICGV 92020, ICGV 86325, ICGS 76, ICGS 11, DRG 12, and ICGV 86590) were fed to growing male Deccani sheep as sole feed allowing for 5 to 10% of refusals. Feeding of 4 cultivars (DRG 12, ICGS 11, ICGS 44, ICGS 86325) was repeated with haulms harvested from a second cropping season. Sheep were adjusted to haulms for about three weeks followed by a 10-days fecal and urine collection period. Live weight before and after the collection period was taken on two consecutive days and mean values were used to calculate live weight changes. Daily weight gains varied ($P<0.05$) cultivars-dependent by a threefold from 51 to 151 gram (LSD=47 gram). Live weight gains from the haulms of the 4 cultivars grown at two consecutive seasons did not significantly ($P>0.05$) differ. Daily nitrogen retention in the sheep ranged cultivars-dependent ($P<0.05$) from 5 to 11 gram and agreed well ($R^2=0.92$) with the measured live weight gains. We conclude that choice of groundnut cultivars will have considerable impact on livestock productivity in areas where groundnut haulms significantly contribute to fodder resources.

[1]International Crop Research Institute for the Semi Arid Tropics, Patancheru - 502 324