NUTRITIONAL VALUE OF ENSILING POULTRY LITTER AND PIG EXCRETA IN DIETS FOR LAMBS

Daniel Trujillo Gutierrez, Jose Luis Borquez Gastelum, Ignacio Arturo Dominguez Vara, Juan Manuel Pinos Rodriguez

1Facultad de Medicina Veterinaria y Zootecnia, Universidad Autónoma del Estado de México, Toluca, 2Instituto de Investigacion de Zonas Deserticas, Universidad Autonoma de San Luis Potosi, San Luis Potosi, Mexico

Ensiling poultry litter and pig excreta and adding the silages to diets for lambs could reduce feeding cost and environmental impact. The objective of this study was to evaluate the feeding value of total mixed ration with poultry litter (PL), pig excreta (PE) and urea (U) silages in six lambs (56.0 ± 5.7 kg body weight) fitted ruminal canula. Silages were elaborated with corn stover, water, and PL, PE, or U (as N source), and cane molasses (MOC) or bakery by-product (BBP) as energy source. Six diets with concentrate (60%) and silage (40%) were formulated with similar N and energy content. Data were analyzed as a Latin Square design within a factorial arrangement of treatments (6 x 6), defined as (PL, PE, U x MOC, BBP). In vitro gas production and degradation of diets were evaluated. In lambs, intake, total tract digestion, in sacco degradation and N balance were evaluated. Intake was higher for diets with PL and MOC than others. There were no differences on in vitro gas production, in sacco disappearance and total tract digestion of diets. However, in vitro degradation of diets with PL and MOC was higher than others. Nitrogen intake and retention was higher in lambs fed diets with PL and MOC than others. It is concluded that NUTRITIONAL value of diet with poultry litter and cane molasses silages was higher than diets with pig excreta or urea with cane molasses or bakery by-products.