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The objective of the present study was to evaluate the effects of different doses of polyclonal antibody preparation (PAP) against specific ruminal bacteria *Streptococcus bovis*, *Fusobacterium necrophorum*, *Clostridium aminophilum*, *Peptostreptococcus anacrobius* and *Clostridium sticklandii* on rumen fermentation parameters (pH, total concentration of volatile fatty acids (tVFA) which included acetate, propionate and butyrate, ammonia nitrogen (NH3-N) and lactate) in cattle fed high concentrate diets. Eight rumen cannulated cows were used in a latin square 4x4, twice replicated. The treatments were T1: 0.0 g/anim/d, (control); T2: 1.5 g/anim/d; T3: 3.0 g/anim/d; T4: 4.5 g/d with 4 experimental periods with 21 d each. Sample collection was carried out at the last day of each period with 2 h of interval between each collection. Data were analyzed by MIXED procedure, which separated the effects of treatments, period, animal nested in square and square. The effect of treatments was evaluated by polynomial regression. Differences were declared at $P < 0.05$. There was no interaction between time and treatment ($P > 0.05$) for any of the rumen variables studied. Independently from time of sampling, there was no linear or quadratic effect on rumen pH, tVFA, molar proportion of acetate, propionate and butyrate and NH3-N. Thus, it can be concluded that different levels of PAP were not sufficient to alter rumen environment with the necessity of more studies to validate or not this observation.

Key words: feed additive, passive immunization, ruminal fermentation

M312   Corn grain processing methods and forage levels in finishing diets for Nellore bulls. R. Carareto[1], F. A. P. Santos*[1], G. Mourão[1], A. M. Pedroso[2], C. Sitta[1], M. P. Soares[1], M. R. Paula[1], R. S. Marques[1], and M. C. Soares[1], *University of Sao Paulo, Piracicaba, São Paulo, Brazil, [2]Embrapa Cattle Southeast, Sao Carlos, São Paulo, Brazil.*

The trial was conducted at the Animal Sciences Department of the University of São Paulo in Piracicaba, SP. One hundred and 90 2 (192) finishing Nellore bulls (403 kg) BW in 32 pens were fed for 99 d to compare diets containing fine ground (FG), dry rolled (DR), high moisture (HM) or steam flaked flint corn (SF) and 2 levels (12 or 20% on DM) of sugar cane bagasse. Data were analyzed as a randomized complete block using the Mixed procedure of SAS, with pens serving as the experimental units. There was no interaction between corn processing methods and diet forage levels ($P > 0.05$). DMI was greater ($P < 0.05$) for dry rolled corn compared with the other 3 processing methods (Table 1). ADG was greater ($P < 0.05$) for steam flaked and high moisture corn than for ground or rolled corn (Table 1). Feed efficiency (ADG/DMI) was greater ($P < 0.05$) for steam flaked corn than for fine ground or dry rolled corn, and greater ($P < 0.05$) for high moisture and ground corn than for dry rolled corn. The greatest ($P < 0.05$) diet net energy values were observed for steam flaked and high moisture corn. DMI was less and ADG, feed efficiency, dressing and diet energy values were greater for cattle fed 12% than 20% forage diets ($P < 0.05$). Forage level had no effect on diet starch digestibility ($P > 0.05$). In conclusion, steam flaked corn and high moisture corn are the greatest, ground corn is intermediate and dry rolled corn is the least in net energy for finishing Nellore bulls. Performance of finishing Nellore bulls is improved with 12% sugar cane bagasse forage diets compared with 20% forage diets.

Table 1. Influence of corn processing on growth performance of feedlot Nellore bulls and dietary net energy values

Variable	FG	DR	HMC	SF	SE	Pr>F
ADG, kg/d	1.12[b]	1.09[b]	1.21[a]	1.25[a]	0.031	0.0057
DMI, kg	9.37[b]	10.18[a]	9.41[b]	9.26[b]	0.168	0.0034
ADG/DMI	0.121[b]	0.108[c]	0.129[ab]	0.136[a]	0.004	<0.001
NEm (mcal/kg/DM)	1.73[b]	1.58[c]	1.821[ab]	1.93[a]	0.0386	<0.001
NEg (mcal/kg/DM)	1.11[b]	0.97[c]	1.18[ab]	1.28[a]	0.0339	<0.001

Key words: corn grain processing, fiber lever, Nellore