Experiment of Leymus Chinensis in Raising Diary Cows

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Introduction Paspalum distichum is a widespread weed in South China , with low-nutritive qualityand poor palatability when it dries in autumn and winter . Leymus Chinensis is a good quality grass with high nutrition and good palatability in the autumn , but the price of hayand the transportation cost are both high . So the authors have done a feeding trial with dairy cows to examine the value of Leymus Chinensis .

Materials and Methodology In Guangzhou Zhujiang Cattle Farm , using the cow's age , parity , weight , birth date and milk performance , we chose 14 similar Holstein lactating cows and randomly divided them into an experimental group and a control . The experimental groupwas fed with Leymus Chinensis hay ,7kg/per cow per day , and the control group was fed with the same amount of dry weeds ; The nutritient composition of Leymus Chinensis and weed hay was as following respectively : DM 88.0% ‚84.0% ;CP 5 .1 ‚3 .4 ;EE 3 .1 ‚0 .8 ;CF 30 .6 ‚21 .1 ;NFE 45 .3 ‚54 .0 ;ASH 3 .9 ‚4 .6 ;Ca 0 .32 ‚0 .19 ;P 0 .06 ‚0 .10 ;NDF 63 .5 ‚58 .9 ;ADF 35 .4 ‚31 .9 ;NEL(MJ/kg)4 .31 ‚3 .48 . While the other ingredients of feedstuff were the same for both groups , including refined stuff‚beery residue‚and dry cassava . The experimental period was 27 days , including 7 days of pretest and 20 days of formal test . The daily average milk performance of both groups was recorded . Non Paired Samples T Test was useded to analyze experimental data , Thefat/milk ratio was transformed via ArcSin change before statistical analysis .

Results and Analysis During the test period , the average milk production of cows in the control group was 19 .88 kg/per cow per day and 21 .99kg/per cow per day for theexperimental group . fThis difference was highly significant (F=90 .09) ‚(P<0 .01) . And nutrient analysis of milk composition indicated no significant difference of the fat/milk ratio between the two groups(P> 0.05) .

Discussion In a later stage of the experiment , the experimental group ate 6 .5kg/per cow per day and controls ate 5 .5kg/per cow per day . Judging from above data , it appears the proportion of coarse fibre in the daily feedstuff was lower for the control group and not adequate to stimulate rumen fermentation . This can easily cause hyperirritability and low disease resistance . This experiment found that Leymus Chinensis had a peculiar aroma and good palatability , it not only increases the milk performance and keep cows healthy , but it also improves milk quality . Thus it is worthwhile to popularize in South China .

References
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