EFFECT OF MANNANOLIGOSACCHARIDE (MOS) AND INULIN SUPPLEMENTATION ON THE PERFORMANCE OF CALVES REARED ON MILK REPLACER

SZANDRA TÓTH

Kaposvári University Faculty of Agricultural and Enviromental 7400 Kaposvár
tothszandra8@gmail.com

The objective of the current study was to examine the effects of mannan-oligosaccharides or inulin on HF dairy heifers' starter feed intake and daily weight gain in farm situations. We measured these parameters across two experiments. In Trial 1 (T1), next to the control group, 15-15 HF heifers received MOS or inulin supplementation from 1st day of age to weaning. The amount of the supplementations changed according the calves' age and the amount of milk replacer from 12 g to 24 g/calf/day. We measured the individual feed intake daily, the live weight at 0, 14, 21 and 60 days. In the second experiment (T2) we used 30 HF heifers also in three group (Control, MOS, Inulin) but we gave more from the experiment materials (28 g/calf/day MOS or Inulin). We started dosing the supplements with the colostrums feeding, and gave up on 14th day of age. We also measured the individual feed intake daily and the live weight at 0, 14, 28, 42 and 56 days. The treatments in T1 did not cause significant differences in average feed intake, body weight and average daily weight gain. When the calves got the supplementation with colostrum too, the ADWG was significant lower in the group fed inulin than control and group fed MOS ($P<0.01$). We calculate the ADWG all of the experimental periods. From 0 to 14 day, and from 0 to 56 day the ADWG in inulin group was lower than control group, but the datas of group MOS did not differ from the others. Due to the distribution of the birth weights, the lower ADWG did not manifest in differences in body weight in other points of the experiments. We did not find an interaction between the treatments and the daily feed intake of calves. According with our measurements, the colostrum supplemented with inulin can be able to reduce ADWG while not affecting to the appetite.