

Assessment of the effect of bovine appeasing pheromone on veal calves

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Stress may lead to a loss of yield or/and various infections. Veal calves are subjected to stressors resulting in losses in quantity/quality of the meat. Arrival at the fattener's and the last weeks before slaughter are both crucial points. To assess the effect of Bovine Appeasing Pheromone (BAP) on veal calves, we studied animals fattened on two separate farms. Calves were transported to the sorting center where they were weighed, graded, purchased and sorted. After a fattening period, calves were transported to where they wait before stunning. Two groups were created on both farms, A (treated with BAP) and B (placebo treatment), using 662 veal calves (90% males and 95% calves of mixed breeds). Treatments were reversed for the following batch of animals (crossover test). Administering BAP during the first 8 weeks and the last two weeks of a 21-week fattening period gave interesting results. Veterinary expenses were lower (in US\$) in group A versus B, 2.62 vs 2.76 and 4.91 vs 6.40 respectively on the two farms, with a mean of 3.52 vs 4.78 US\$/head (t-test: $t=2.75$; $DF=660$; $p=0.006$). There was a difference (t-test: $t=1.858$; $DF=636$; $p=0.06$) in fatness using a grade based on a 1 to 5 scale (A and B respectively for the two studied farms: 2.79 vs 2.93 and 3.09 vs 3.15). Finally, total food consumption was lower for the BAP treated group (respectively for the two studied farms, in kg: 259.6 vs 263.5 and 253.9 vs 263.4): 257kg vs 263kg (Mann-Whitney: $U=37433$; $N1=407$, $N2=255$; $p<0.0001$). This trial demonstrated the positive effects of BAP on both sanitary and zootechnical (including meat quality) data, and consequently on economic parameters. BAP and other appeasing pheromones should be considered non-toxic and as improving animal welfare.

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