

EFFECTS OF EXTRUDED PEAS (*PISUM SATIVUM*) ON DAIRY COWS' PERFORMANCE, MILK COMPOSITION AND SENSORY PROPERTIES

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Abstract. The aim of our research was to determine the influence of extruded peas on dairy cows' performance, milk composition and sensory properties. Lithuanian Black-and-White cows with analogous characteristics were selected and randomly allocated into 2 groups (control and experimental), 10 animals each. The control group was fed a conventional diet consisting mainly of grass silage, ground barley grain, enriched extruded full fat soybean, and mineral premix. The experimental groups were fed a similar diet, but instead of 1.5 kg of soybean meal, the cows were given the same amount of extruded peas and 700 g of extruded soybean. The results of this study showed that a part of extruded soybeans replacement with peas (*Pisum sativum*) in dairy cows' rations had a negative effect on milk yield, but increased milk fat and protein content. During the experimental period, the amount of urea and lactose in milk, both in control and experimental group, differed non-significantly.

The results of milk sensory properties showed that a part of extruded soybeans replacement with peas (*Pisum sativum*) in dairy cows' rations did not have a negative influence on milk sensory parameters. Milk samples of both groups (control and experimental) did not differ by odour intensity, and every sample had an apparent milk's specific odour. After 2 and 3 months of feeding, milk samples of experimental cows fed extruded peas and soybeans had a light, non-specific bitter and dry alike milk savour.

Keywords: extrusion, peas, dairy cows, milk, milk composition