

## THE INVESTIGATION OF PRESERVATION TECHNOLOGIES OF SUGAR BEET ROUND SLICES

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**Summary.** Aim of the work – to analyse various preservation technologies of sugar beet round slices, to determine the quality of fodder and the influence of the fodder on cow productivity and milk quality.

Preservation of sugar beet round slices in trenches (Laučius farm in Kedainiai region), in plastic heaps (Paplauskas farm in Kaunas region) and in casings (AB “Sukoniai” in Pakruojis region) have been analysed. Fodder nutritiousness and quality have been determined in the analytical laboratory of the Lithuanian Institute of Agriculture according to ADAS methodics, milk quality indices have been analyzed in PE “Milk Analysis” (“Pieno tyrimai”).

The biggest amount of nutrients has been established in the round slices of sugar beets that have been preserved in plastic casings. The amount of dry matter (DM) reaches 22.5%, metabolism energy – 11.9 MJ/kg, raw proteins – 11.8% DM, acidity – 4.2 pH, sum of ferment acids (TFA) – 84 g/kg SM.

The greatest losses of dry matter (26%) are suffered in the round slices of sugar beets that have been preserved in plastic heap. The losses in round slices preserved in trenches reach 21%, and there is no dry matter losses observed in round slices preserved in plastic casing (sack). Physical fodder losses in the heap of 400 t are 4200 kg, in trench – 3900 kg, in casing – only 250 kg.

Being fed with fodder prepared in plastic casings (15 kg of perennial grasses haylage, 15 kg of maize silage, 12 kg of sugar beets round slices and 2.4 kg of concentrated fodder) in the period of 151 days the experimental group of 15 cows gives the income that is by 1209.07 Lt higher than that received from the control group.

**Keywords:** sugar beets bagasse, preservation, technology, silo, pile, bag, quality, productivity.