

ANALYSIS OF EFFICIENCY OF YEAST *SACCHAROMYCES CEREVISIAE*¹⁰²⁶ IN DAIRY COWS

¹Virmantas Pikelis, ²Jurgis Kulpys, ¹Edmundas Paulauskas, ²Rolandas Stankevičius

¹Lithuanian Agricultural Advisory Service, LT-58343 Dotnuva-Akademija, Stoties 5, tel. +370 347 37068

²Lithuanian Veterinary Academy, LT-47181 Kaunas, Tilžės 18, tel. +370 37 363408

Abstract. In 2005 a 120 day long study of feeding dairy cows was carried out on a commercial farm. The influence of live yeast „*Saccharomyces cerevisiae*¹⁰²⁶” on cows’ health, milk yield and the amounts of butterfat, protein, lactose, somatic cells and urea in milk was analysed. In addition, during the research cows’ appetite, overall condition, condition of limbs, shine of hair, intensity of heat and improved fertility were observed. The economic efficiency of the preparation was evaluated as well. Two similar groups of Lithuanian black and white cows of average lactation were formed for the trial (60 d. after calving). The trial period was divided into two half-periods – a preparatory period (duration – 20 d.) and the main study period (duration – 100 d.). The animals were fed with rations that were practically equal in terms of nutritiousness, only the cows of the 2nd (trial) group were given 50 g of live yeast preparation „*Saccharomyces cerevisiae*¹⁰²⁶” additionally. Control milkings were carried out during throughout the study, in which milk yield was measured. In addition the analysis of milk quality indicators were performed in SL „Pieno tyrimai”. It was established that the treated group cows was more productive: in the course of 100 trial days the yield in this group was 200 kg on average, which was a 9% increase in milk yield compared to the control group. In addition, milk protein content in the treated group increased by 0,23% during the period compared to a 0,13% increase in the control cows. The heat of the trial group cows was more intense and they were inseminated better. Besides, their appetite and condition were better and their hides were shinier than those of the control cows. The hooves of the cows in the trial group were in good condition, shiny as if covered with wax film. The hooves of the cows in the control group were rough and decayed.

The milk of the trial group cows was sold for 139 Lt on average, equalling a 9% increase in income compared with the control cows. The costs of the yeast preparation used per cow during the trial period was 27,6 Lt or 0,23 Lt per day. Thus, using live yeast in cow rations proved economically beneficial.

Key words: cow feeding, feed rations, live yeast, milk quality.