weight and growth performance, milking frequency diseases and the maintenance system. Nutrition is the one that has the most influence.

For the production of milk to be cost-effective, the milk produced has to be of highest possible quality. The current classification allows to quality the milk to the Extra classes and well as Ex-class. To quality the milk as Extra class certain requirements have to be fulfilled, e.g. the somatic cell count (SCC) cannot exceed 400 000/ml and the total bacteria count (TBC) cannot exceed 100 000/ml. The analysed farm has a high production of milk while preserving proper milk composition and high hygienic quality of milk. This allows to achieve good purchase results.

PERFORMANCE ANALYSIS OF COWS IN DIFFERENT STAGES OF LACTATION FED IN TMR SYSTEM

Pysera B., Knapik N.

Department of Animal Nutrition and Feed Science University of Warmia and Mazury Olsztyn, Poland

The aim of this study was to assess productivity and the basic parameters of milk and feed efficiency in cows at different stages of lactation, fed in TMR system. The study included 227 cows of HF race. Having regard to the days of milking animals divided into 4 groups: up to 30 days after calving (TMR-1), from 31-100, and from 101- 200 day of lactation (TMR-2) and a cow more than 200 day of milking (TMR-3). Characterized by a complete dose varied participation components and nutritional quality. The relation of concentrate dry matter to the bulky feed dry matter was succinct 51:49,58:42 and 75:25 respectively in the TMR-1, 2 and 3.

The study showed that the efficiency and content of basic parameters of milk was in line with the course of a typical lactation curve. Efficiency of cows between 31 and 100 the day was the highest and amounted to 29.71kg ECM milk, also protein and fat content of milk in this phase was the lowest. Since the cows from 31-100 and 101-200 of lactation were fed one dose of a complete (TMR-2) and the efficiency and protein content and milk fat between these phases differ materially as it seems indicate a need for setting up two different TMR in term s of nutritional value. Demonstrated that the highest efficiency characterized by the use of dry matter cows to 31 and 31-100 of lactation, which produced respectively 1.25 and 1.30 kg of milk ECM/1kg D.M. dose.