

MODERN TECHNOLOGIES IN DAIRY FARMING AND MILK PRODUCTION

Karolina Grzymała¹, Daniel Radzikowski², Aleksandra Kalińska², Brygida Kruzińska²,
Urszula Ostaszewska³

¹ Faculty of Production Engineering, Warsaw University of Life Sciences, Poland

² Department of Animal Breeding and Production, Warsaw University of Life Sciences, Poland

³ Department of Cattle Breeding and Milk Evaluation, Siedlce University of Natural Sciences and Humanities, Poland
grzymkarolina@gmail.com

In recent years, in our country we have to deal with the rapid development of technology related to the breeding of dairy cattle. The main objectives of the improvement of production methods to improve animal performance and the creation of the cows comfortable residence conditions to housing.

In his speech, I would like to introduce modern technologies, which for several years, are introduced into the breeding and dairy cows. One of the key elements of the culture is adequate genetic value of the herd. Thanks to modern breeding programs, we can choose the suitable breeding individuals, thus improving their herd. Over the years, the production of milk are introduced newer technical solutions to improve animal welfare and, above all, the increase in production economics.

The use of modern barns milking robots, robots for feeding and devices that detect estrus in cows, contribute significantly to reducing the demand for labor-intensive at the farm, thereby increasing their profitability. Recently, especially on farms with high concentration of herds, advanced electronic systems have been introduced to help producers oversee technological milking, feeding and other processes. The herd management system is a tool enabling to take everyday decisions important for production results, among which the analysis of animal behavior in the herd and their current productivity is mentioned, which facilitates the planning of long-term activities related to animal service. This allows you to increase milk yield while reducing the cost of feeding and handling the flock. In addition to the increase in milk yield, there are additional benefits associated with frequent infestation of small portions of concentrate feed, which helps maintain optimal rumen pH. As a consequence, the occurrence of potential metabolic problems in cows is reduced. It also has a positive effect on the condition of cows and reproduction rates, as well as reduces the risk of health problems associated with excessive fatness of cows before calving.

Analyzing the changes that are taking place for several years in the Polish dairy industry, only decisive changes in herd management and investments, to improve production efficiency, they can have a significant bearing on the future profitability of milk production.