

Efficiency of Natural Metabolites on Quality Milk Production in Mixed Breed Cows.

Authors : Mariam Azam, Sajjad Ur Rahman, Mukarram Bashir, Muhammad Tahir, Seemal Javaid, Jawad, Aoun Muhammad, Muhammad Zohaib, Hannan Khan

Abstract : Products of microbial origin are of great importance as they have proved their value in healthcare and nutrition, use of these microbial metabolites acquired from partially fermented soya hulls and wheat bran along with *Saccharomyces cerevisiae* (DL-22 S/N) substantiates to be a great source for an increase in the total milk production and quality yield. 1×10^9 CFU/ml cells of *Saccharomyces cerevisiae* (DL-22 S/N) were further grown under in-vivo conditions for the assessment of quality milk production. Two groups with twelve cows, each having the same physical characteristics (Group A and Group B), were under study, Group A was daily fed with 12gm of biological metabolites and 22% protein-pelleted feed. On the other hand, the animals of Group B were provided with no metabolites in their feed. In thirty days of trial, improvement in the overall health, body score, milk protein, milk fat, yield, incidence rate of mastitis, ash, and solid not fat (SNF) was observed. The collected data showed that the average quality milk production was elevated up to 0.45 liter/h/d. However, a reduction in the milk fats up to 0.45% and uplift in the SNF value up to 0.53% of cow milk was also observed. At the same time, the incidence rate of mastitis recorded for the animals under trial was reduced to half, and improved non specific immunity was reported.

Keywords : microbial metabolites, post-biotics, animal supplements, animal nutrition, proteins, animal production, fermentation

Conference Title : ICANS 2023 : International Conference on Animal Nutrition and Science

Conference Location : Barcelona, Spain

Conference Dates : May 22-23, 2023