

## Efficiency of Microbial Metabolites on Quality Milk Production in Nili Ravi Breed of Buffalos

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

**Abstract :** The efficiency of natural metabolites obtained from partially fermented soya hulls and wheat bran using *Saccharomyces cerevisiae* (DL-22 S/N) ensures a potential impact on the total milk yield and quality of milk production. On attaining a moderate number of *Saccharomyces cerevisiae* cells around  $1 \times 10^9$  CFU/ml, the concentrate was further elevated under in-vivo conditions to study the quality of milk production in lactating buffalo. Ten lactating buffalos of the Nili Ravi breed having the same physical factors were given 12 gm of microbial metabolites daily, along with the palleted feed having 22 % proteins. Another group of 10 lactating animals with the same characteristics was maintained without metabolites. The body score, overall health, incidence of mastitis, milk fat, milk proteins, ash and solid not fat (SNF) were elevated on a weekly basis up to thirty days of trial. It was recorded that the average total increase in quality milk production was 0.9 liter/h/d, whereas SNF in the milk was enhanced to 0.71, and fats were decreased to 0.09 %. Moreover, during all periods of the trial, the overall non-specific immunity of buffalo was increased, as indicated by less than 0.2 % of mastitis incidence compared to 1.8% in the untreated buffalos.

**Keywords :** natural metabolites, quality milk, milk yield, microorganisms, fermentation, nonspecific immunity, better performing animals

**Conference Title :** ICANC 2023 : International Conference on Animal Nutrition and Care

**Conference Location :** Istanbul, Türkiye

**Conference Dates :** May 04-05, 2023