



## RESEARCH PAPER

# Effect of drinking water frequency on yield and chemical composition of milk in lactating Deoni cows

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**Abstract :** A trial was conducted to study the effect of drinking water frequency on production performance of lactating Deoni cows with the objectives to assess the effect of different drinking water frequency on water intake, dry matter intake, yield and chemical composition of milk. Nine lactating Deoni cows were selected on the basis of age, body weight, parity, stage of lactation and milk yield and divided into three groups comprising of 3 animals in each group. The experiment was conducted in three periods in Switch over design in order to expose each group to all the three treatments. The control treatment (T<sub>1</sub>) received *ad libitum* drinking water whereas, treatment T<sub>2</sub> and T<sub>3</sub> received drinking water twice and thrice daily, respectively. Significantly higher water intake was noticed in thrice daily watering than rest of the treatments, while intake of water was decreased in twice daily watering compared to other treatments. Dry matter intake was positively correlated with water intake. Significant increase in dry matter intake was observed in *ad libitum* and thrice daily watering whereas, dry matter intake was decreased when frequency of watering adjusted to twice daily. Significantly higher milk yield was noticed in thrice daily watering followed by *ad libitum* and twice daily watering. Milk production was significantly decreased in twice daily watering whereas, *ad libitum* supply of water did not found beneficial over thrice daily watering considering milk production. Twice daily watering significantly increased the fat and total solids content in the milk. Effect of drinking water frequency on solids not fat content was non-significant.

**Key Words :** Drinking water frequency, Deoni cow, water intake, DMI, milk yield, fat, SNF, TS

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