

## **Short Communication**

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# **Effect of polyherbal supplementation on milk production and postpartum reproduction in Murrah buffaloes fed forage based rations**

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## **Abstract**

The present study was conducted at farmer's field in Muzaffarnagar district of Uttar Pradesh to assess the response of polyherbal mixture supplementation on milk production and postpartum reproduction in buffaloes. The polyherbal mixture was prepared by mixing 25 g each of *Foeniculum vulgare* (Saunf), *Trachyspermum ajwain* (Ajwain), *Trigonella foenum-graecum* (Methi), *Zingiber officinale* (Sundh), *Anethum graveolens* (Sowa) and *Elettaria cardamomum* (Cardamom). Sixteen buffaloes were divided into two groups of eight each as T<sub>0</sub>: control and T<sub>1</sub>: treatment, and the animals of T<sub>1</sub> were supplemented with polyherbal mixture from the day of calving to till the day 10 of postpartum. The data was recorded for 2 months duration. The animals were managed as per the standard feeding practices followed by the farmers. Significant increase in milk yield ( $P < 0.05$ ) was recorded due to supplementation of polyherbal mixture as compared to control group. An average increase of 20.81% in milk yield was recorded over a period of 60 days. No case of foetal membrane retention was recorded in treatment group, whereas in control group, one case was observed. Time required for expulsion of foetal membranes was reduced significantly ( $P < 0.05$ ) in supplemented animals as compared to control animals (5.44 vs 6.94 hours). Supplementation also reduced number of insemination per conception in buffaloes (1.86) when compared to un-supplemented group (2.88). Considering the present cost of feed supplement and the market price of milk, polyherbal mixture supplementation was found both economical and cost effective, and had a positive effect on milk production and postpartum reproduction in buffaloes maintained on forage based rations under small holder conditions.

**Keywords:** Milk production, Murrah buffalo, Polyherbal mixture, Postpartum reproduction