EFFECT OF SHATAVARI (ASPARAGUS RECEMOSUS) ON MILK PRODUCTION IN DAIRY ANIMALS

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ABSTRACT

An On Farm trial was conducted to evaluate the effect of shatavari (Asparagus recemosus) on milk production in lactating dairy animals which were parturated 1 to 4 months before commencement of trial. Total 20 animals (10 buffaloes and 10 cross breed cows) were selected and fed 50 gm powder of shatavari roots in concentrates once in a day for a period of 60 days. The overall milk production were increased 1.06 \pm 0.17 kg (11.47\%) daily and average milk production in buffaloes and cows were increased 0.8 \pm 0.34 kg (9.0\%), 1.32 \pm 0.15 kg (12.72\%) respectively as compared to their previous production. Increase in the income by feeding shatavari came to Rs. 7.49/day/animal and B:C ratio were found 1:3.30. From the above results it was concluded that shatavari is effective for increase in milk production and beneficial for economic milk production.

India has witnessed rapid development in milk production during last two decades and has emerged as the world’s top dairy nation, but it is still not sufficient to meet-out the requirement of increasing population. The low milk production of dairy animals due to various factors like under feeding, mal-nutrition, various diseases, stress, seasons etc. which hamper the economy of dairy industry. The use of herbal feed additives in livestock production, is as old as the ancient history. Now a days, herbal plants are widely used as animal feed additives, having galactogogue properties viz; Shatavari, Jiwanthi (Leptadenia reticulata), Bhringraj (Eclipta alba), Acacia catechu, Carica papaya (Papaya) and Methi (Trigonella foenum) as reported by Chopra et al. (1952), Bakshi et al. (2004).

Shatavari act as antiseptic, astringent, diuretic and galactogogue properties. Roots contains saccharine and mucilagenous substances in large proportion. It helps in improving digestibility, increase milk after calving, help for mammary gland development, hastens letting down time, stimulate lactiferous tissues and keeps udder and treats in smooth condition (Somkuwar et al. 2005). However, very few attempts have been made to test the effect of shatavari on milk production in field conditions. An attempt was therefore, made to investigate the effect of shatavari feeding on the productivity of buffaloes and cows in field condition.

The present study were conducted to evaluate the effect of shatavari feeding on milk production in dairy animals. Therefore, 20 lactating animals (10 buffaloes and 10 cross bred cows) were selected from two village Bheelpura and Gudasurjan from Panchayat Samiti Amber in Jaipur Distrcit of Rajasthan. The animals were in there different stages of lactation (1 to 4 months after parturation). The body weight of the animals were calculated using shaeffer’s formula (Sastry et. al. 1982) in which the body measurement were used to calculate the body weight. The formula is, body weight (lb) = \((G^2 \times L)/300\), where “G” is heart girth and “L” is length of body in inches. The average body weight and average milk production were recorded for 20 days before feeding the shatavari (Thereafter 50 gm powder of shatavri roots mixed with the concentrates and provided once in a day for a period of 60 days). The milk yield was recorded for individual animals with fair degree of precision during the visit at weekly interval to the farms.

Results of shatavari feeding on milk production in buffaloes and cows (cross bred) presented in Table 1. Perusal of the data revealed that during pre shatavari supplementation period the average milk production was 8.10 \pm 0.30
kg/day in buffaloes and 10.38 ± 0.49 kg in cows. Following the supplementation of shatavari, the milk production in buffaloes and cows increased by 9.90 per cent (0.8 ± 0.34 kg/day), and 12.72 per cent (1.32 ± 0.15 kg/day) respectively. Over all average milk production was increase by 11.47 per cent (1.06 ± 0.17 kg/day) during treatment period. Similar findings were reported by Samkuwar et al. (2005) who found that shatavari induced significant increase (10.43%) in daily milk production in buffaloes in treatment group.

Expenditure on feeding of shatavari and income from extra milk were taken into consideration for economic evaluation of shatavari feeding. Table 2 revealed that supplementation of shatavari in buffalo returned net income by Rs. 6.35/day/animal and cow returned net income 8.63/day/animal. The overall average net income were Rs. 7.49/day/animal by shatavari feeding. Cost benefit ratio (B:C ratio) were 1:2.95 and 1:3.65 for buffalo and cow respectively and over-all B:C ratio was found 1:3.30.

Thus, it may be concluded that shatavari has lactogenic properties to improve the milk production and economic for feeding to dairy animals.

### REFERENCES


