



**EFFECT OF EXOGENOUS BOVINE SOMATOTROPIN (rbST)
ON GROWTH IN KUNDHI BUFFALO CALVES**

Attaur Rahman¹,
Maqbool Ahmed Memon²,
Toufique Ahmed Qureshi²,
Israr-ul-Haq³,
Sayed Mubashir Hassan¹,
and
Aneela Perveen Khuhro³

¹Gomal College of Veterinary Sciences, Gomal University D.I. Khan-Pakistan.

²Faculty of Animal Husbandry & Veterinary Sciences, Sindh Agriculture
University Tandojam-Pakistan

³Baqai College of Veterinary Sciences, Baqai Medical University Karachi-Pakistan.

ABSTRACT

Recombinant Bovine somatotropin (rbST) is one of the hormones potentially used as a growth promoter in feedlot animals. Present study was conducted on twelve male Kundhi buffalo calves maintained at Livestock experiment station, Faculty of Animal Husbandry and Veterinary Sciences, Sindh Agriculture University Tandojam to evaluate rbST effect on growth. The Calves were randomly divided into three groups i.e. A, B and C, each having four calves (n=4). Group A was kept as control, while group B and C were treated with rbST @ 0.5 mg and 1.0 mg/kg BW fortnightly respectively. The calves were given fattening ration ad libitum for two weeks as adaptation period and eleven weeks for treatment period. The parameters studied were body weight, feed intake, average daily gain (ADG), dry matter intake (DMI) and feed efficiency (FCR). Body weight increased significantly ($P<0.05$) in group C, followed by group B and A. Feed intake recorded showed significant difference ($P<0.05$) between rbST treated groups and control group. ADG was significantly increased ($P<0.05$) in group C and B compared to control group. DMI was recorded also showed significant difference ($P<0.05$) between rbST treated groups and control group. FCR was significantly improved ($P<0.05$) in group C and B compared to control group but the difference was non-significant between group B and C. The calves in group C and B were economically better as compared to control group. So, it has been concluded that rbST treatment is better and remarkably effective for increasing the performance of young calves in terms of body weight gain, feed intake and FCR. A dose of 1.0 mg/kg BW is more effective and better in promoting the performance of calves as compared to a dose of 0.5 mg/kg BW.

Keywords: Fattening ration, Feed conversion ratio, Hormone, Somatotropin.