



## Effect of PGF<sub>2</sub> treatment on conception rate and blood biochemical profile of post-partum suboestrous surti buffaloes

■ C.T. KHASATIYA, A.S. REDE<sup>1</sup>, D.K. SONI<sup>1</sup>, M.D. PATEL<sup>2</sup> AND S.P. KATKAR<sup>1</sup>

### Members of the Research Forum

#### Associate Author :

<sup>1</sup>Department of Veterinary Gynaecology and Obstetrics, Navsari Agricultural University, Navsari Campus, NAVSARI (GUJARAT) INDIA

<sup>2</sup>Livestock Research Station, (NAU) NAVSARI (GUJARAT) INDIA

#### AUTHOR FOR CORRESPONDENCE :

#### C.T. KHASATIYA

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and A.H. Navsari Agricultural University, Navsari Campus, NAVSARI (GUJARAT) INDIA

**Abstract :** Postpartum suboestrous surti buffaloes of an organized farm confirmed by twice per-rectal palpation 11 days apart from 45 days post-partum were treated with 2 ml (500 µg) of inj. cloprostenol sodium I/M route in first group (n=6) and 2 ml (500 µg) of inj. cloprostenol sodium I/M route along with 5 ml inj. Vit. AD<sub>3</sub>E preparation and 15 ml inj. Toldimphos sodium preparation I/M route in second group (n=6) on 55 days postpartum after confirmation of ovarian cyclicity. Six animals of same status were kept as control to see the oestrus induction response and conception rate including weekly evaluation of blood biochemical profile just before (0 day) treatment and 24 hr, 48 hr and 72 hr after treatment. The service period and oestrus induction interval in days was found significantly lower in PGF<sub>2</sub> treated (T<sub>1</sub> and T<sub>3</sub>) groups as compared to T<sub>2</sub> and control (T<sub>4</sub>) group clearly showed the luteolytic effect of PGF<sub>2</sub>α on ovaries and earlier resumption of ovarian activities as compared to treatment (T<sub>2</sub>) and control groups. The mean serum glucose, total protein, cholesterol, calcium and phosphorus levels of suboestrous surti buffaloes did not differ significantly within all the treatment and control groups and also between all the treatment and control groups at 0 hr, 24 hr, 48 hr and 72 hr interval including overall mean values in all the groups.

**Key words :** Biochemical profile, Conception rate, Suboestrus, Surti buffaloes, Hormone therapy

**How to cite this paper :** Khasatiya, C.T., Rede, A.S., Soni, D.K., Patel, M.D. and Katkar, S.P. (2016). Effect of PGF<sub>2</sub>α treatment on conception rate and blood biochemical profile of post-partum suboestrous surti buffaloes. *Vet. Sci. Res. J.*, 7(1) : 25-30.

**Paper History :** Received : 15.12.2015; Revised : 23.02.2016; Accepted : 14.03.2016