

## **HORMONAL PROFILE AND SOME MINERALS IN RELATION TO INFERTILITY IN BUFFALO-COWS**

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### **Abstract**

A total numbers of 80 buffalo-Cows were equally grouped, according to their reproductive disorder, into two main groups (animals having inactive ovary and others with palpable ovarian corpora lutea). Each main group was then subdivided into four subgroups, according to the hormonal treatment applied. Animals of the first group were intramuscularly injected with 2 ml. PG F<sub>2</sub>-α repeated once after 10-12 days in case that the animals did not come in estrus. Those of the second group were injected with PG F<sub>2</sub>-α plus 5 mg. Oestradiol 17 B. Intramuscularly injection of 2ml. PG F<sub>2</sub>-α plus 2.5 ml. Gn-RH was applied to animals of the third group. While those of the fourth group were intramuscularly injected with 2ml. Gn-RH.

Serum progesterone, 17B-Oestradiol, calcium, inorganic phosphorus and magnesium levels were estimated in all experimental animals before treatment and at the appearance of heat thereafter.

Buffaloes having inactive ovary showed a significant increase in serum progesterone level after PG F<sub>2</sub>-α injection ( $P < 0.01$ ), whereas, serum oestradiol level showed a significant decrease ( $P < 0.05$ ). A significant decrease in serum calcium level ( $P < 0.05$ ) was detected after treating ani-