

Silent heat and its management

Synonyms:

Sub estrus

Silent heat

Quiet ovulation

Introduction:

Ovulations occur without behavioural manifestation of estrus. The first and second ovulation postpartum are often not preceded by behavioural signs of estrus and are thus truly 'Silent heats'.

In heifers, the estrus associated with first ovulation is usually silent.

In this condition animal will not show behavioral signs of estrus although the physiological symptoms of heat will be present.

Although the general pattern of sexual behavior is almost similar in cattle and buffaloes but the intensity of expression of behavioral signs of estrus in buffaloes is markedly less pronounced especially during summer months as the buffaloes are relatively inefficient to maintain their thermoregulation under increased environmental temperature and at high relative humidity

So due to this reason buffaloes are in constant heat stress during summers which causes the suppression of behavioral signs of estrus.

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Causes:

A sub threshold of hormone production or an imbalance between hormones

Nutritional deficiencies such as deficiency of β Carotene, Phosphorous, Copper, Cobalt etc

Diagnosis:

Diagnosis is based on

clinical history

rectal palpation of the genital system.

Management:

This problem can be overcome by removing different constraints such as allowing animals for grazing or left them loose for few hours where the animals have been tied.

There should be provision of non-slippery or kuccha floors to facilitate the mounting activity of the cows that are in estrus

In summer season water should be sprinkled over the body of the animals for 5-10 minutes twice or thrice daily or allow them to wallow for two hours daily in the morning and in the evening to alleviate the impact of heat stress

At large organized dairy farm mist cooling system installed inside the shed is found to be very effective in maintaining normal estrus behavior of buffaloes and cross-bred cows.

If the roof are made up of asbestos or iron sheet then spread some paddy straw over it make wet by sprinkling of water.

Animal should be fed green fodder and the feeding must be done during cool hours of the day.

During summer the feed intake of the animal is reduce so the quality of the ration should be improved in order to fulfill their physiological needs.

In addition to this there should be improved or efficient methods of heat detection.

A combination of methods is better than relying on a single method of heat detection.

Treatment:

If a mature CI is present, PGF₂ α or an analogue followed by Timed Artificial Insemination (TAI) can be carried out.

If a CL is at refractory stage, double injection PG regimen at 11 days interval could be used.

Alternatively PRID or other progesterone implants could be used followed by fixed time insemination.

Visual observation should be performed by trained persons during cooler hours of the day especially during early morning and late evening as the behavioral signs of estrus are more pronounced during this period.

Parading of teasure /vasectomized bull during early morning and late evening.