



Prevalence and determinants of false pregnancy diagnosis in buffaloes: Field evidence from Andhra Pradesh, India

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Supplementary Table 1. Indicators and sub-indicators of awareness index

Indicator	Sub indicator
Physiological changes	Vulva lips appear moist, red swollen and turgid when animal is in heat Clear, shiny, stringy odourless mucus discharges during heat Animals become restless, inappetent and nervous during heat Wrinkles on the vulva disappear when the animal return to heat Gradual decrease of milk yield occurs in non– pregnant animals The size of abdomen increases in non–pregnant animals
Behavioural changes	Riding on other bull or allowing others as sign of non–pregnancy Non– pregnant animals urinate frequently Bellowing is a sign when animals return to heat Standing alone with raised tail and crutching the back and lumbar region is a sign of heat Animals in heat migrate towards bull
Pregnancy diagnosis method and its features	Animals must be monitored 21–24 days after AI for heat symptoms Rectal palpation is a pregnancy diagnosis method The right time to perform rectal palpation is after 40–45 days of AI Ultrasonography is a pregnancy diagnosis method The right time to perform ultrasonography is 28 days after AI Pregnancy detection kit is a new innovation to diagnose the animal for pregnancy Pregnancy detection kits can be used 25–30 days after AI
Merits and demerits of pregnancy diagnosis methods	Rectal palpation before 45 days after AI may cause embryonic death Twin fetus can be identified through ultrasonography Fetal viability, age and sex can be determined through ultrasonography Some pregnancy detection kit can be handled by farmers
Source and price of pregnancy diagnosis method/kit	Awareness of source to contact veterinarian/ paravet for carrying out rectal palpation Veterinarian/paravet is required for performing rectal palpation and ultrasonography Ultrasonography may be available in some veterinary clinics Awareness on veterinarian/paravet service charges to diagnose the animal for pregnancy Veterinarian/paravet may be required to handle pregnancy detection kit The price of pregnancy detection kit in near markets Source of buying the pregnancy detection kit
Diseases and environmental effect	Chronic uterine infection or ovarine cysts, may prevent estrus results in animals being erroneously diagnosed as pregnant In summer season pregnancy diagnosis may result in false positive
Monitoring and maintenance of breeding record	Painting of tail can help to identify whether animal has undergone mounting Animals must be checked once a day for 3 months after AI Maintenance of breeding record helps to diagnose the animals for pregnancy on right time