

## Twin birth in a Jenny (*Martina franca*) with artificial insemination

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### ABSTRACT

Present report records a rare incidence of twin foaling in jenny

**Key words:** Artificial insemination, twin foaling, jenny

All the species except the equines are capable of carrying twins to full terms, and the offspring's are often born healthy and subsequently grow and develop normally. Unfortunately the twin conditions are quiet different in equines (Rossdale 1986). In the equine species the incidence of twin births is about 0.5 to 1.5% and double ovulation's occurred in 18 to 20% of the estrous periods of mares. 95% of mares with twin ovulation's one or both ova were lost during the early embryonic period (Roberts, 1971). While those that continue to develop are prone to abortion, mummification or if born alive, neonatal deaths. Fetal death among twins in utero is often attributed to placental insufficiency or inadequate uterine capacity. Since total placental surface area of twins is only slightly greater than that of a single fetus. The gestation period of Ass or Donkey were in the range of 365 to 375 days (Roberts, 1971).

Twinning in monotocus domestic species is most frequently of the dizygotic type in which more than one egg is ovulated and the eggs are fertilized by different sperms, resulting in offspring no more identical than other full siblings. Twinning rate in domestic animals is governed by breed, age and environment (Hafez, 2000).

An eight years old jenny (*Martina franca*) was bred by artificial insemination with frozen semen of Jack on last 31.03.2004. The animal pregnancy was confirmed at one month by per rectal palpation and the animal was

carefully observed throughout the pregnancy. Twin foaling was occurred on 14.04.2005 at 379 days of gestation (Fig.1). One each male and female foals were born at a time laps of 15 to 20 minutes. The birth weight of male and female foals were 14 kg each, which is 50% of the normal birth weight (average 30 kg/ Donkey foal) recorded at Equine Production Campus (EPC). For the first 20 days the growth rate in both the foals were 0.50 kg/day. The growth rate during next 20 days in both the foals were 0.25 kg/day. Earlier at EPC there was an incidence of twin births and they were born alive in normal range of gestation period and the next day they died. This is the first time at EPC observed a twin foaling successfully and the twins are growing well. In the present case a little longer gestation length (4 days) was observed than the average or range recorded at



Fig 1. Foals moving with dam

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EPC Bikaner and the earlier finding of Roberts, (1971). The difference in the duration of gestation length might be due to seasonal variation and agreed with the previous finding of Roberts, (1971) who has observed that the foals born from January through April have gestation periods about 10 days longer than foals born from May through September.

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