Effects of two CIDR-based oestrus synchronization protocols on oestrus response in boer goats.

ABSTRACT

Sixty fertile and healthy female Boer goats were divided equally and randomly into two groups (n=30). The first group received CIDR treatment for 14 days (T14) with 400 IU PMSG and 0.05 mg cloprostenol injection (i.m.) prior to CIDR removal and the second group received CIDR treatment for 9 days (T9) with 0.05 mg cloprostenol injection (i.m.) 24 hours before CIDR removal. The number of does with oestrus and the time of oestrus sign were recorded every 6-hour interval and the observation was conducted from 24 hours after CIDR removal and terminated 66 hours after CIDR removal. Blood samples were taken from all of the does before CIDR insertion and 48 hours after CIDR removal. The results showed all 30 does (100%) in T14 and 28 does (93.3%) in T9 came to oestrus. The mean time of does showing signs of oestrus for both treatments were significantly different in tail flagging and standing to be mounted (P<0.05). However, the progesterone concentrations between T14 and T9 after 48 h CIDR removal were not significantly different (P>0.05). The current study suggests that CIDR treatment for 14 days with 400 IU PMSG and 0.05 mg cloprostenol prior to CIDR removal gave better result in oestrus synchronisation compared to CIDR treatment for 9 days with 0.05 mg cloprostenol given 24 hours before CIDR removal.

Keyword: Oestrus synchronisation; CIDR; Oestrus signs; Progesterone; Goats.