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**The comparison of reproductive efficiency of Holstein- Simmental
with Holstein cattle in Golestan province**

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Abstract

The aim of this study were carried out to compare reproduction performance of pure Holstein and crossbreds of Holstein- Simmental (50H:50S and 25H:75S) that kept in one farm located in Golstan Province. Reproductive parameters including age of first insemination, age of first calving, gestation length, open days, calving interval and calf birth weight were studied. The Pure Holstein and Holstein- Simmental (50H:50S and 25H:75S) were not different for age at first insemination and age at first calving. The open days had significant influence on Pure breed Holstein and Holstein- Simmental (50H:50S) during the first and third lactation but had not significant influence on Holstein- Simmental (50H:50S) during the second lactation and Holstein- Simmental (25H:75S). the most amount of calving interval were in the pure breed Holstein (452 days) and less in Holstein- Simmental (50H:50S) during the second lactation (374.68). Calf birth weight in pure Holstein breed (41.228 and 43.787 Kg) were more than Holstein- Simmental crossbred (50H:50S), (40.32 and 41.107 Kg) during the first and second lactation and that was in Holstein- Simmental crossbred (50H:50S), (40.32 Kg) more than Holstein- Simmental crossbred (25H:75S), (36.6 Kg) but there was no significant difference between them.

The results of this study indicate that the reproductive performance of Holstein- Simmental crossbred for open days and calving interval were better than pure Holstein. But calf birth weight was better in pure Holstein.

Keywords: Golstan Province, Reproductive performance, Simmental, Holstein- Simmental crossbred