



#### **KEY WORDS**

- ✓ Dairy Cow
- ✓ Repeat Breeder
- ✓ Fertility
- ✓ PRP
- ✓ Dairy Farm

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# EFFECTS OF PLATELET-RICH PLASMA (PRP) TREATMENT ON FERTILITY IN REPEAT BREEDER (INFERTILE) COWS

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#### THESIS ABSTRACT

In this study; it was aimed to increase fertility in repeat breeder cows by using platelet rich plasma (PRP). With this aim, a total of 360 Holstein cows, which did not become pregnant even though they were inseminated 3 or more times were included in the study. A single dose of autologous PRP (15 ml) was administered by intrauterine 24 hours after artificial insemination to cows (n= 180) in the PRP group. No treatment was administered to the cows in the Control group (n=180) after artificial insemination. Pregnancy examination was performed on the 30th and 60th days after insemination with ultrasonography. There were no statistical differences between the groups in terms of 30th and 60th day pregnancy and embryonic death rates.

Thus, a single dose of intrauterine autologous PRP administration after artificial insemination did not have any effect on fertility in repeat breeder cows in this study. However, it was concluded that more studies are needed to evaluate the administration time, frequency and dosage in order to standardize the use of intrauterine PRP for increasing fertility in repeat breeder cows.

#### **APPLICATION AREAS OF THE THESIS RESULTS**

In order to the use of intrauterine PRP to become a treatment option for increase the fertility rates in repeat breeder cows, which reduces the profitability of the herds; it is thought that it will contribute to the studies needed to establish a standard protocol for PRP preparation, administration time, frequency and dosage.

## ACADEMIC ACTIVITIES