

Practical Embryo Transfer in Dairy and Meat Goats

Kim, Kabsu, J*, Klocke, P**, von Fehrn, S.**

* Capro Biotech Co. ** College of Veterinary Medicine, Free University Berlin

Goats have long history in Korea. But because of small holding, there is no systematic development for breeding and reproduction. The most of goats in Korea have some typical problems, which gradually appeared through inbreeding. The purpose of this study was to evaluate effects of hormonal treatment on estrus synchronisation in non-breeding seasons and to estimate economical aspects of caprine embryo transfer. Otherwise we would like to develop a suitable practical method of field embryo transfer, in order to obtain the more basic breeding materials for high-performance goat.

White milking goats and Korean native black goats were used as donors and recipients for obtaining the embryos surgically.

- Flushing Solution: PBS and 2% Caprine Estrus Serum
- Culture Medium: PBS and 10% Caprine Estrus Serum
- Freezing Medium: Culture Medium and 1,5 M Ethylene Glycol

All animals were treated with 4.5ml of 10% Ketamin and 0.2ml of 2% Xylazine for surgically collecting and transferring the embryos.

The balloon Foley catheters for small ruminant were used for collecting embryos from the bilateral uterine horn of the prepared donor animals. Embryos were nonsurgically transferred into the apical part of the uterine horn of the prepared recipient animals. The study was fully performed in non-breeding seasons, but very successfully we synchronized the 6 donor-does for collecting the embryos and recipients for the embryo transfer. We collected the average 6.4 embryos per donor and transferred 3 embryos per recipient.

As results, we have produced average 1.75 kids per recipient

Key words) *goat, embryotransfer*