

News & Comments

Utilization of Artificial Insemination in Organic Churra Ewes at Natural Estrus

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Artificial insemination (AI) is a genetic improvement technique utilized in purebred selection programs in Spain with sheep. A breed's selection process can be used to the advantage of livestock farms that are included in the breed's herd book. If done vaginally, insemination takes place 56 hours after sponge removal; if done laparoscopically, it takes place between 58 and 72 hours. Although that approach makes it possible to inseminate many ewes at once, hormonal therapies can result in several physiological issues, including the formation of antibodies against eCG, alterations to vaginal flora, and modifications to follicular dynamics. Although artificial insemination (AI) is permitted under current organic farming standards, the use of hormones for animal growth stimulation and estrus synchronization is forbidden. As a result, this method is deemed impractical in organic sheep and goats.

The major goal of this study was to evaluate the effectiveness of AI in Churra sheep during natural estrus under the European Organic certification. The need for alternative treatments requiring the administration of hormones for estrus synchronization would be eliminated if AI approaches based on sheep natural estrus could generate high fertility without raising economic costs. The study was carried out on a Churra breed selection program affiliated organic Churra sheep farm in northwest Spain. The Los Arribes del Duero Natural Park encircled the farm, which was located close to Portugal (41°24'23" N-6°15'38" W). The inseminator must travel daily for at least a week from the semen production and collection centre to the farm to perform artificial insemination (AI) during natural estrus. Savings on the cost of hormonal therapy, however, more than offset this expense. According to Palacios 2010 [39], the AI protocol at spontaneous estrus is more economical than protocols that call for the use of hormones for estrus synchronization within a 70 km radius surrounding the farm and the semen production and collection facility. Artificial insemination (AI) during natural estrus requires the inseminator to travel daily for at least a week from the semen production and collection facilities to the farm. However, savings on the price of hormone therapy more than make up for this expenditure. Within a 70 km radius of the farm and the semen production and collecting facility, the AI protocol at spontaneous estrus is more cost-effective than protocols that call for the use of hormones for estrus synchronization, according to Palacios 2010.

Source: [Veterinary Sciences](#)

KEYWORDS

Artificial insemination, sheep, natural estrus, fertility, organic farming

