THE INCIDENCE OF INDIVIDUALS FREEMARTIN IN THE RIPOLLESA SHEEP BREED

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INTRODUCTION

- The Ripollesa sheep breed is a Catalonia’s autochthone breed that is in process of recuperation (2.35% of all Catalan sheep census).
- There are measures to increase its census.
- Prolificacy: 1.1 – 1.6 lamp/gestation.
- The freemartinism is the most frequent form of intersexuality found, at ewes are associated to the discovery of high fecundity gns (more than 2 fetus).
- Incidence variable 1 – 3.58%.

OBJECTIVES

- Detection individuals freemartin, by the study of different techniques commonly used.
- Evaluation of new PCR real time technique for detection individuals freemartin.

MATERIALS AND METHODS

- 1140 blood samples from 1040 females and 100 males from 14 flocks.
- Jugular vein extraction using Vacutainer® tubes with EDTA and freeze the samples.
- DNA extraction:
  - PCR real time (TagMan®):
  - PCR for amplification of DNA sequences marked for Y chromosome specific segments (DNA extraction previously and electrophoresis after).

RESULTS

- 3 individuals freemartin.
- The incidence is variable because each flock has different census.
- The incidence real evaluate only ewes been born co-twin to a males.

DISCUSSION

- Incidence of freemartinism is low in the Ripollesa sheep breed because only observed twin gestations and the incidence in sheep increased with multiple gestation.
- The stockbreeders know better recognize the freemartin syndrome.
- PCRrt vs. other techniques.

CONCLUSIONS

- Incidence of individuals freemartin is similar than other studies in sheep, and this is low than cattle’s incidence (90%).
- PCRrt is better than others techniques commonly used, more exactly and faster.