**INTRODUCTION**

The bacteria genera most frequently isolated are:
- Lactic acid microbiota
- *Bifidobacterium*, *Lactobacillus*, *Lactococcus* and *Leuconostoc*

**OBJECTIVES**

Determination of lactic acid bacteria in cow’s colostrum and milk, and the faeces of their calves. 
Comparison of the isolated microbiota

**MATERIALS AND METHODS**

- **Agar Man Rogosa Sharpe (MRS)**
- **Identify conditions**
  - **Aerobic conditions**
  - **Microaerophile conditions**
  - **Anaerobic conditions**
- **Incubation conditions** 37ºC 24 - 48 h

**RESULTS**

- **Bifidobacterium spp.** – **Lactobacillus spp. and Lactococcus spp.**
  - **Lactobacillus plantarum**
  - **Lactococcus lactis**

- **Colostrum = Milk**
- **Faeces** → **Probiotics’ features**
- **Meconium** → **Possible maternal origin**

- **Graphic 1.** Lactic acid bacteria genera isolated in colostrum, milk and faeces samples

**CONCLUSIONS**

- The genera isolated are *Bifidobacterium* spp., *Lactobacillus* spp. and *Lactococcus* spp. No many differences between samples and farms.
- The counts of the genera *Bifidobacterium* are higher in colostrum while the counts of *Lactobacillus* and *Lactococcus* are higher in milk.
- The presence of the same genera between meconium and faeces supports the hypothesis of a non sterile gastrointestinal tract of the neonate.
- Exists a marked variability between individuals and cow’s quarters. For a representative sample of the individual, should be sampled each of the quarters.

**Graphic 2.** Representative box plot of cows’ quarters count of each individual, sorted by farms.

Bifidobacterium spp. is more frequently isolated in milk samples, but its counts are higher in colostrum.

**Colostrum and milk samples:** High variability between cow’s quarters and between individuals.

No many differences between farms.

**Faeces samples:** High variability between individuals.