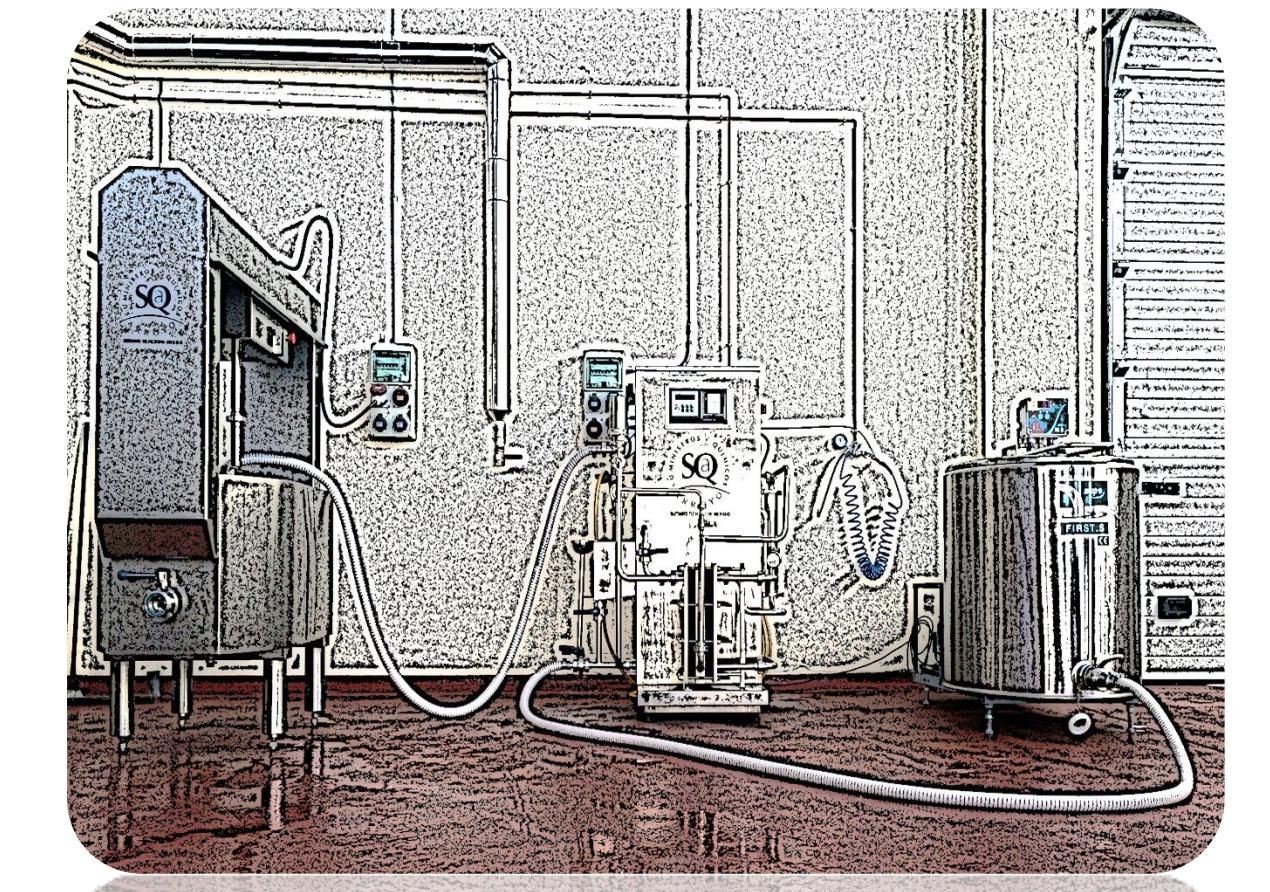
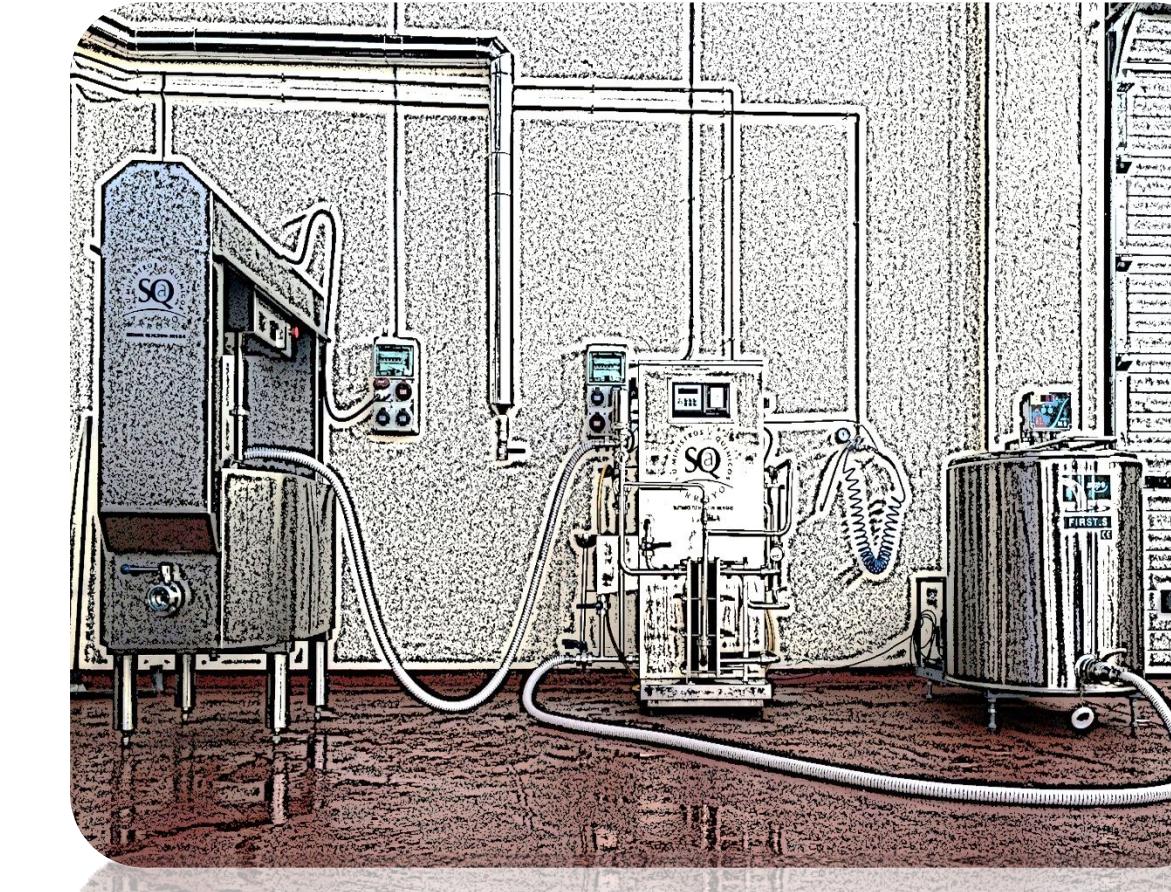
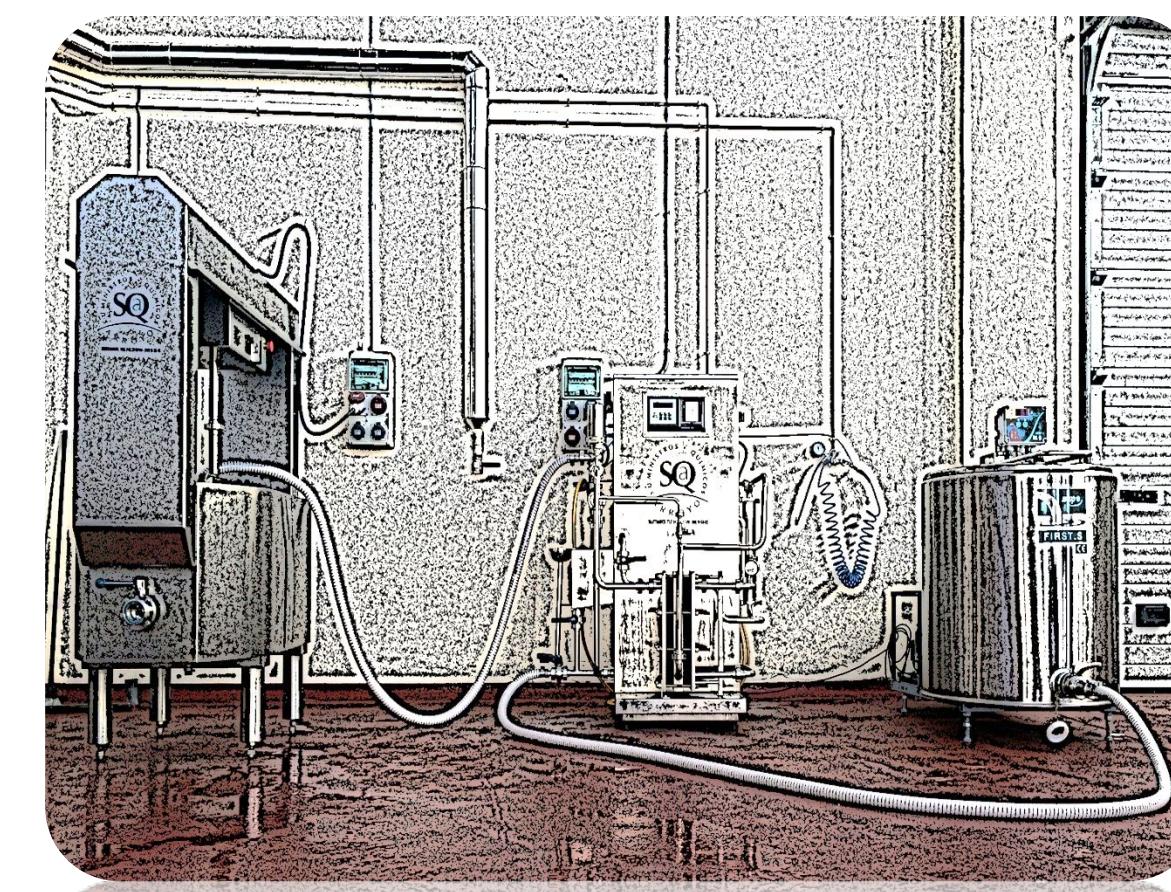
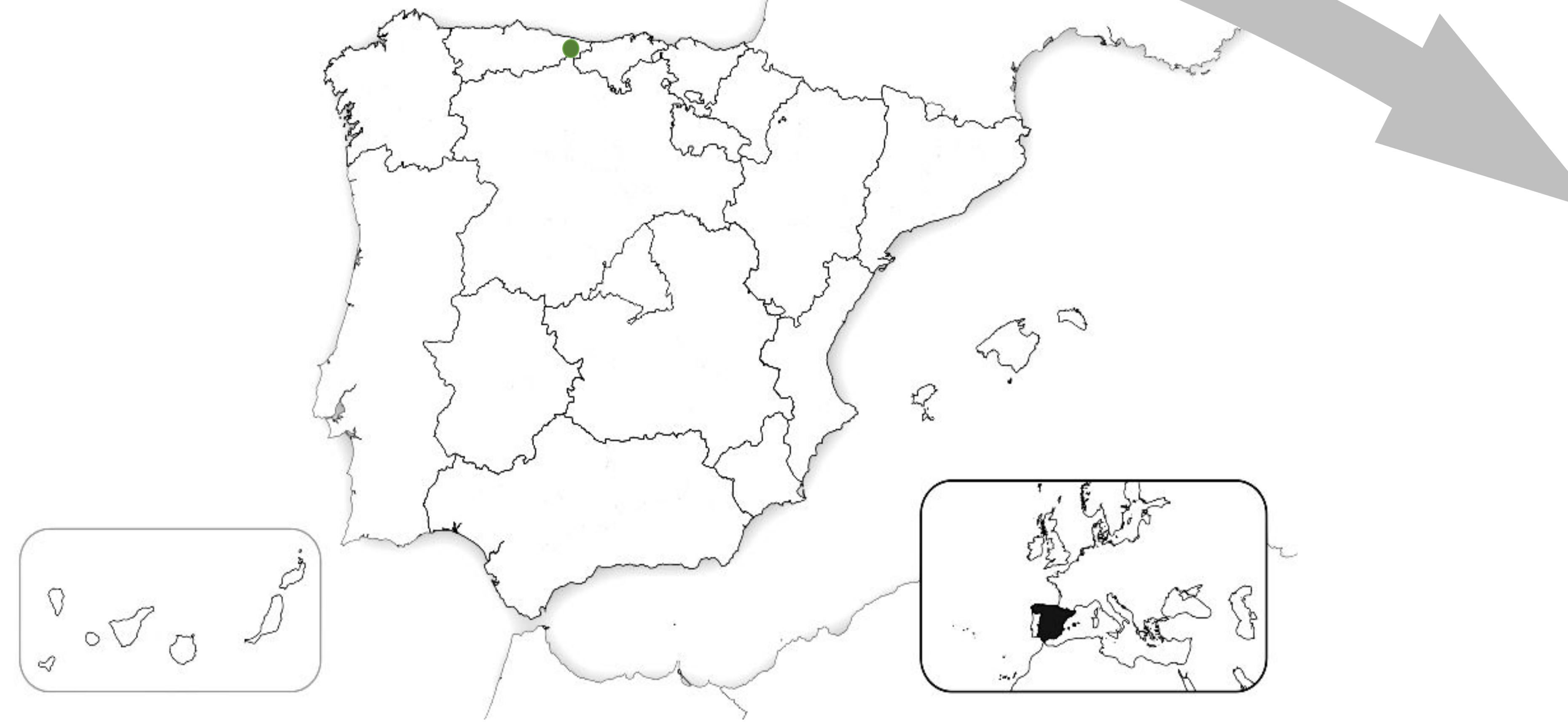


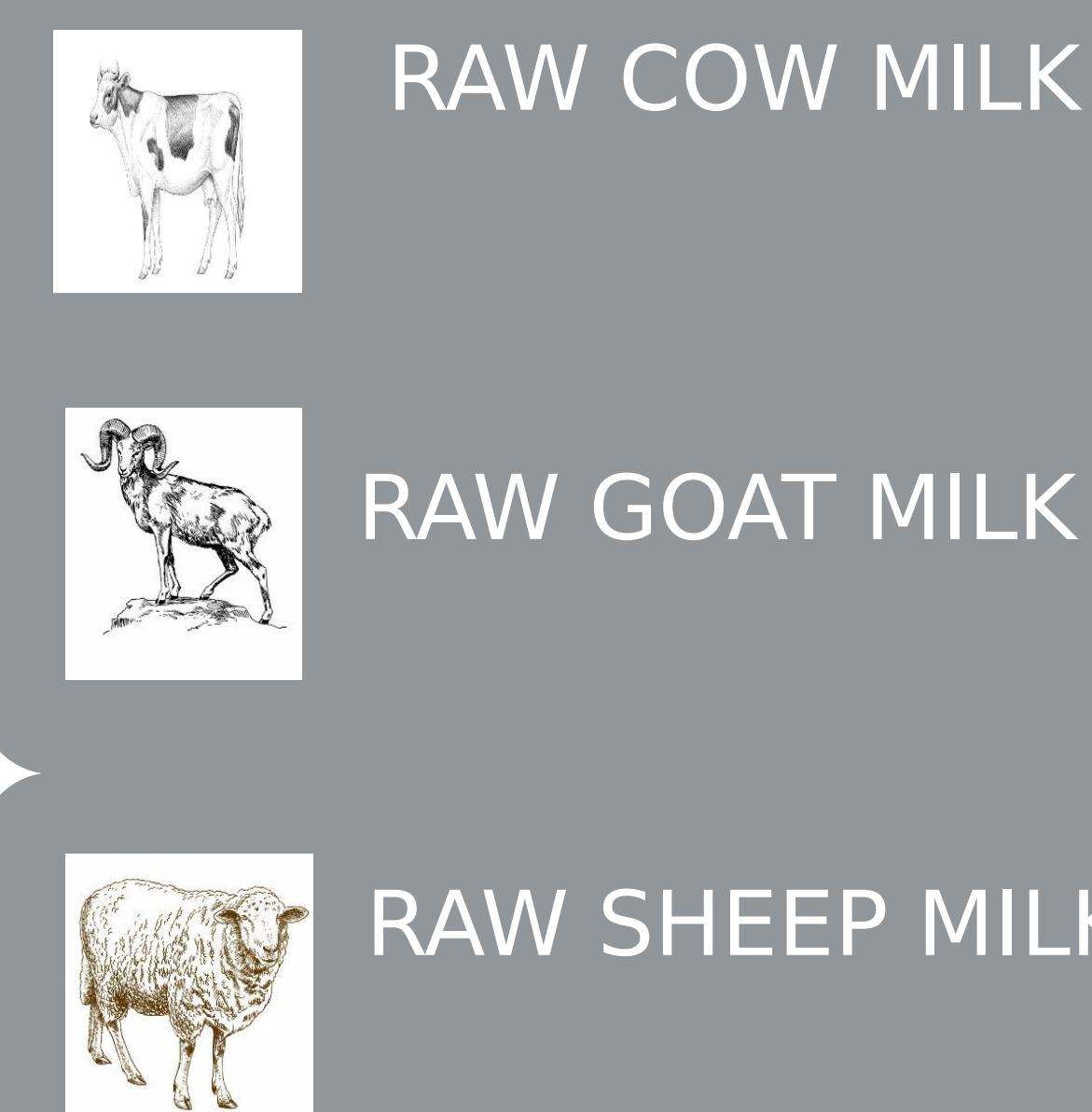
## PDO CABRALES CHEESE



### PRODUCER 1



### PRODUCER 2



### PRODUCER 3

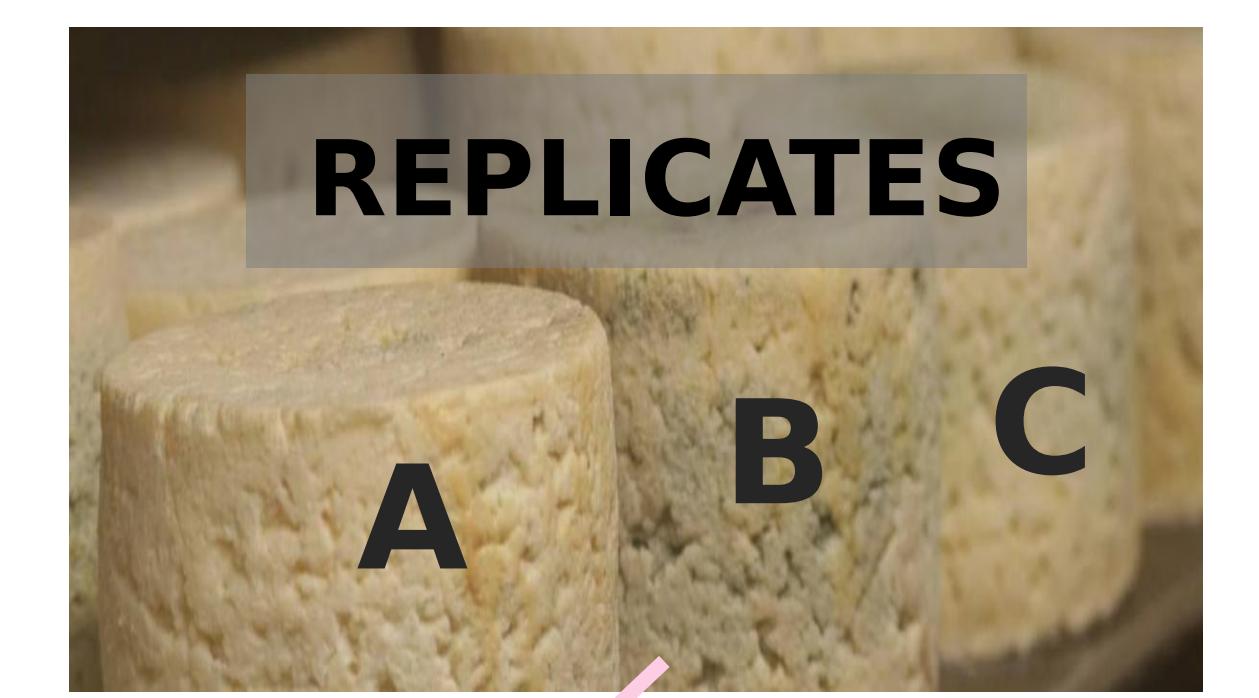
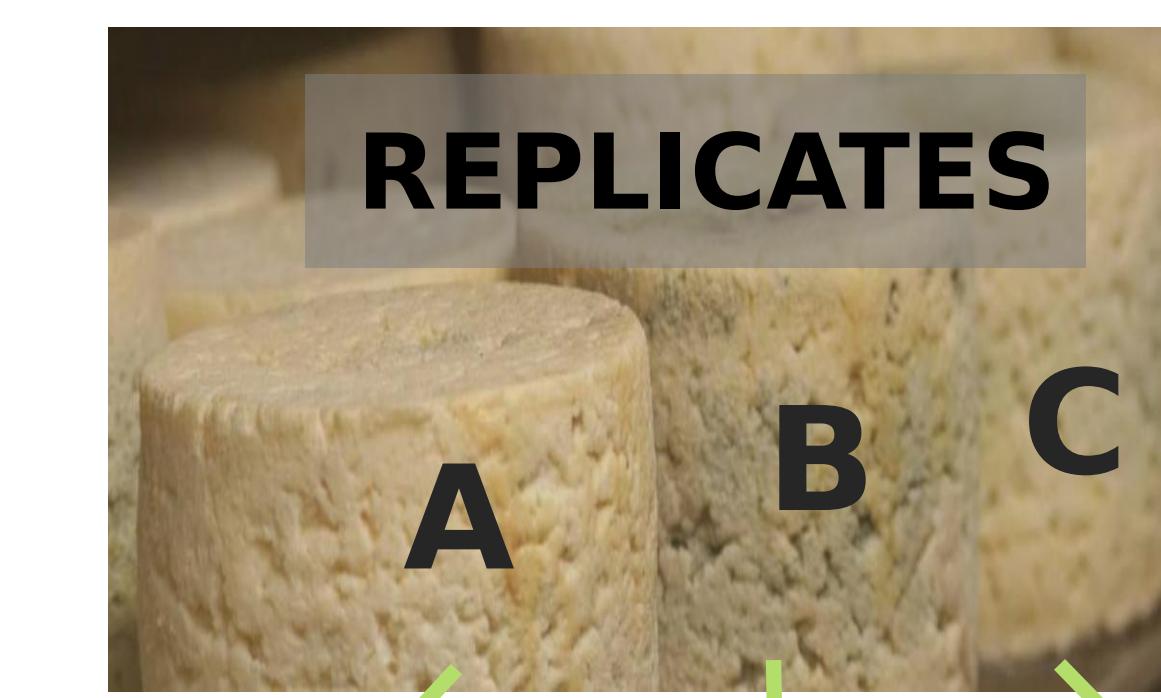
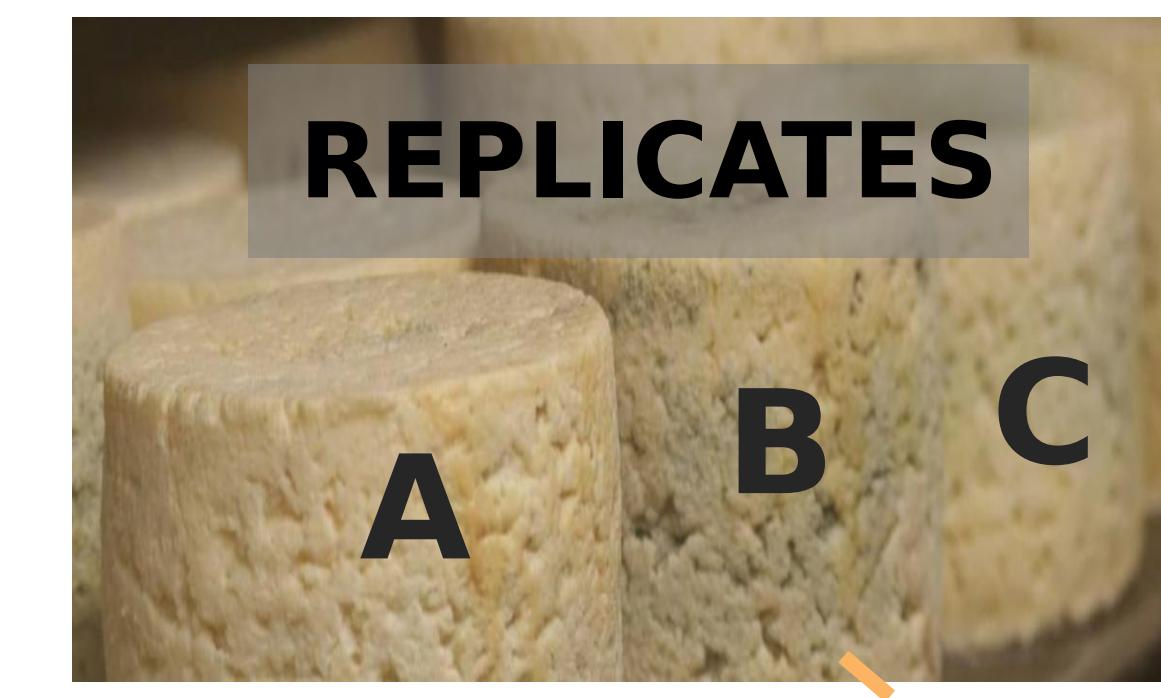


### Ambient and equipment surface samples

**Sampling:**  
Rinds and cores  
were separated

### INITIAL RIPENING STAGE

BEFORE BEING INTRODUCED IN CAVE



I

3 producers x 3 replicates = 9 cheeses

M

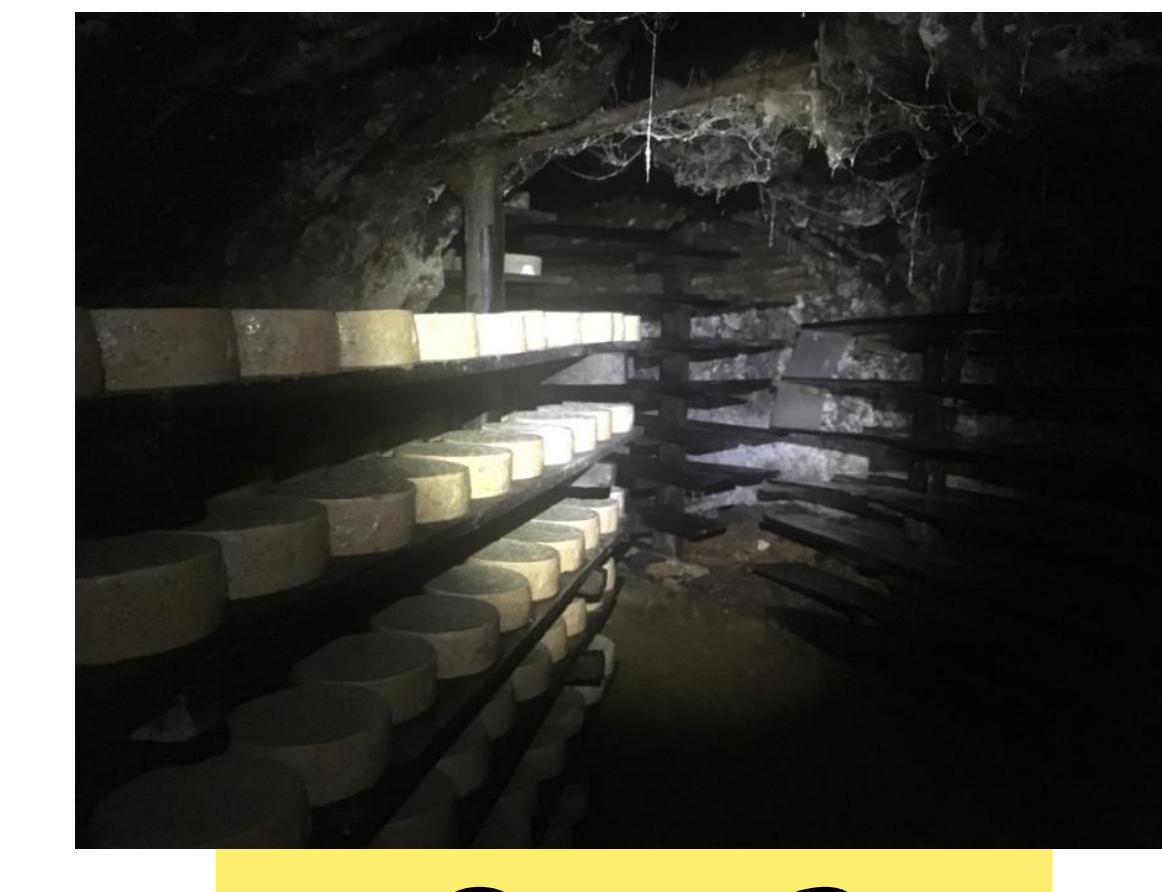
**Cave 1:**  
1 producer x 3 replicates = 3 cheeses

**Cave 2:**  
3 producers x 3 replicates = 9 cheeses

**Cave 3:**  
1 producer x 3 replicates = 3 cheeses

**TOTAL=15 cheeses**

### Cave ambient samples



### ALTITUDE

LOW

HIGH

F

**Cave 1:**  
1 producer x 3 replicates = 3 cheeses

**Cave 2:**  
3 producers x 3 replicates = 9 cheeses

**Cave 3:**  
1 producer x 3 replicates = 3 cheeses

**TOTAL=15 cheeses**



PRODUCER 1  
PRODUCER 2  
PRODUCER 3

**MICROBIOLOGICAL ANALYSIS**  
(Total viable, lactic acid bacteria,  
Enterobacteriaceae, yeasts  
and molds counts)

**VOLATILE COMPOUNDS  
AND BIOGENIC AMINES**

**BIOINFORMATIC  
ANALYSIS**

**PROXIMATE ANALYSIS**  
(pH, titratable acidity,  $a_w$ , total  
solids, NaCl, fat and protein)

**TOTAL DNA EXTRACTION  
WHOLE-METAGENOME  
SHOTGUN SEQUENCING**