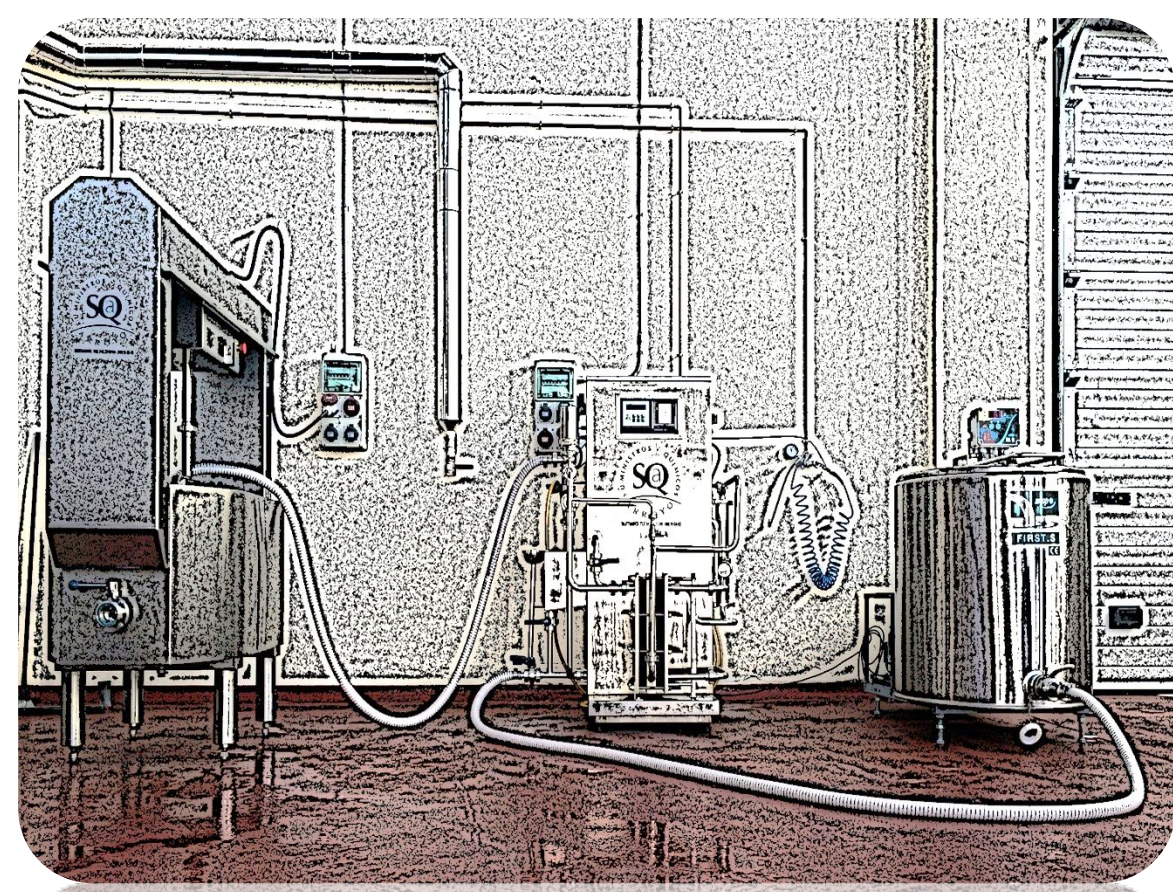
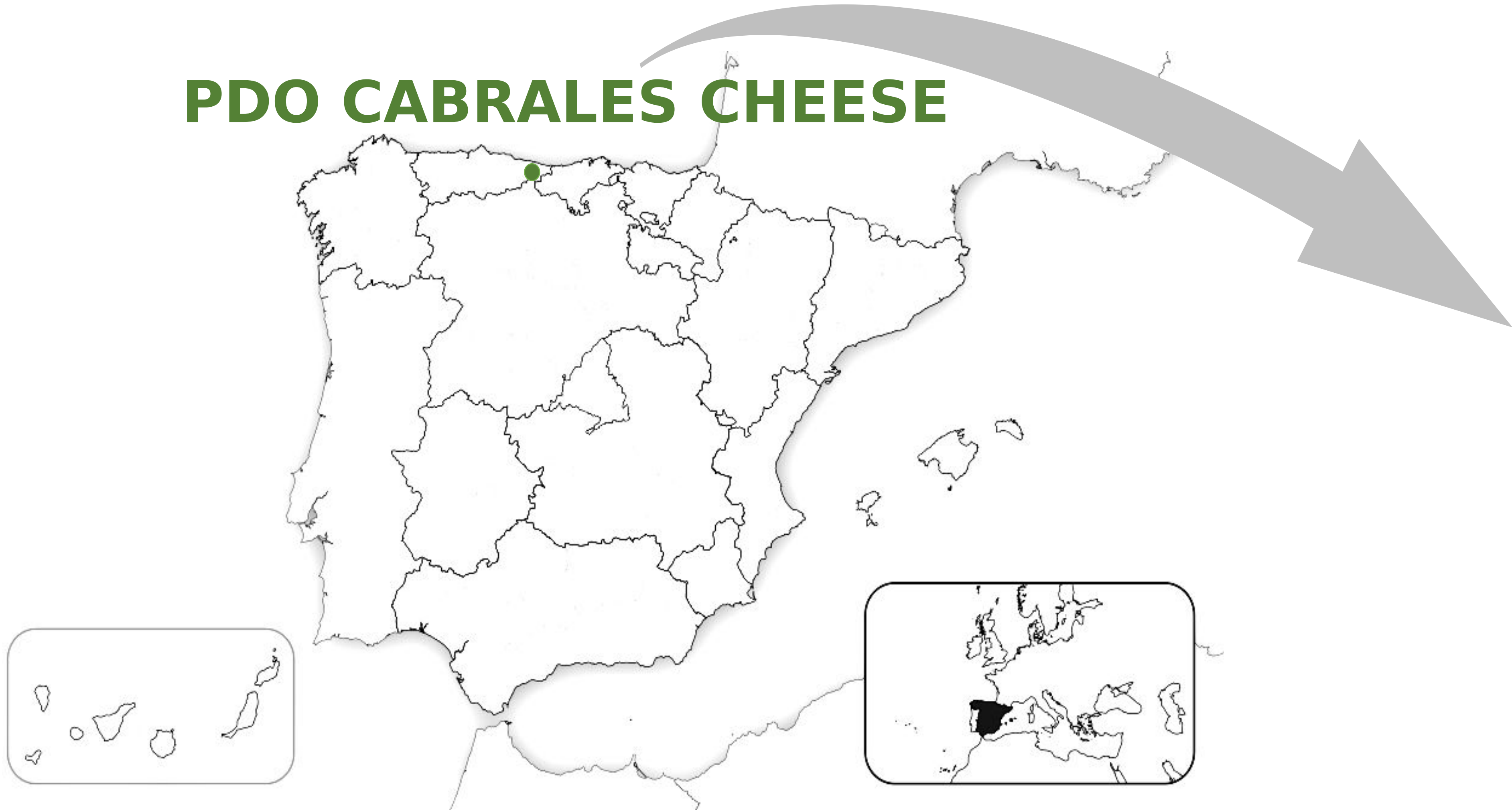
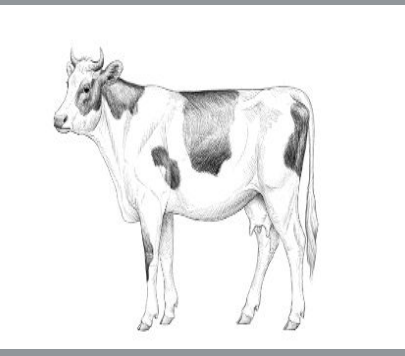


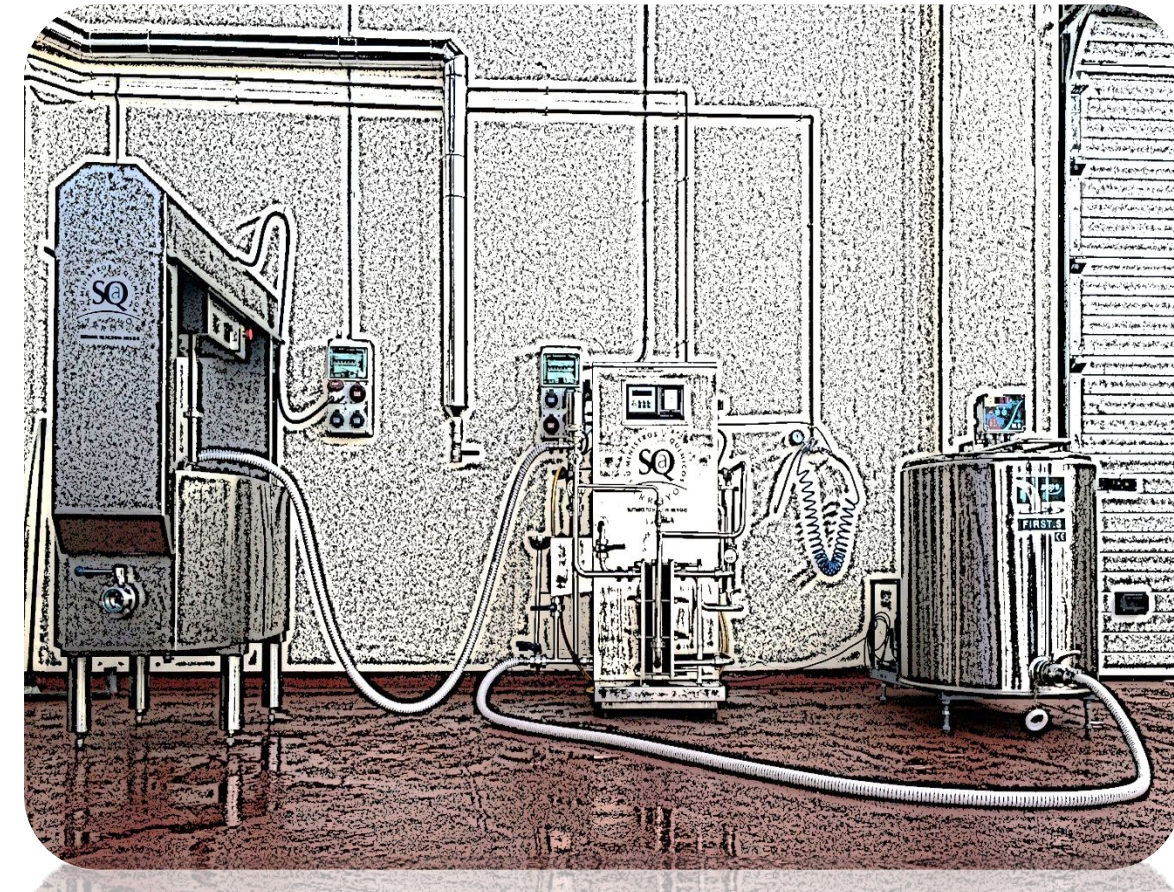
PDO CABRALES CHEESE



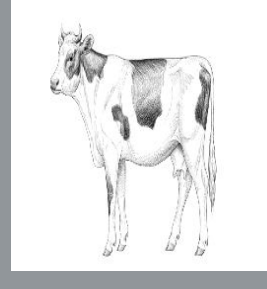
PRODUCER 1



RAW COW MILK



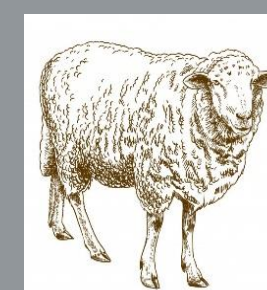
PRODUCER 2



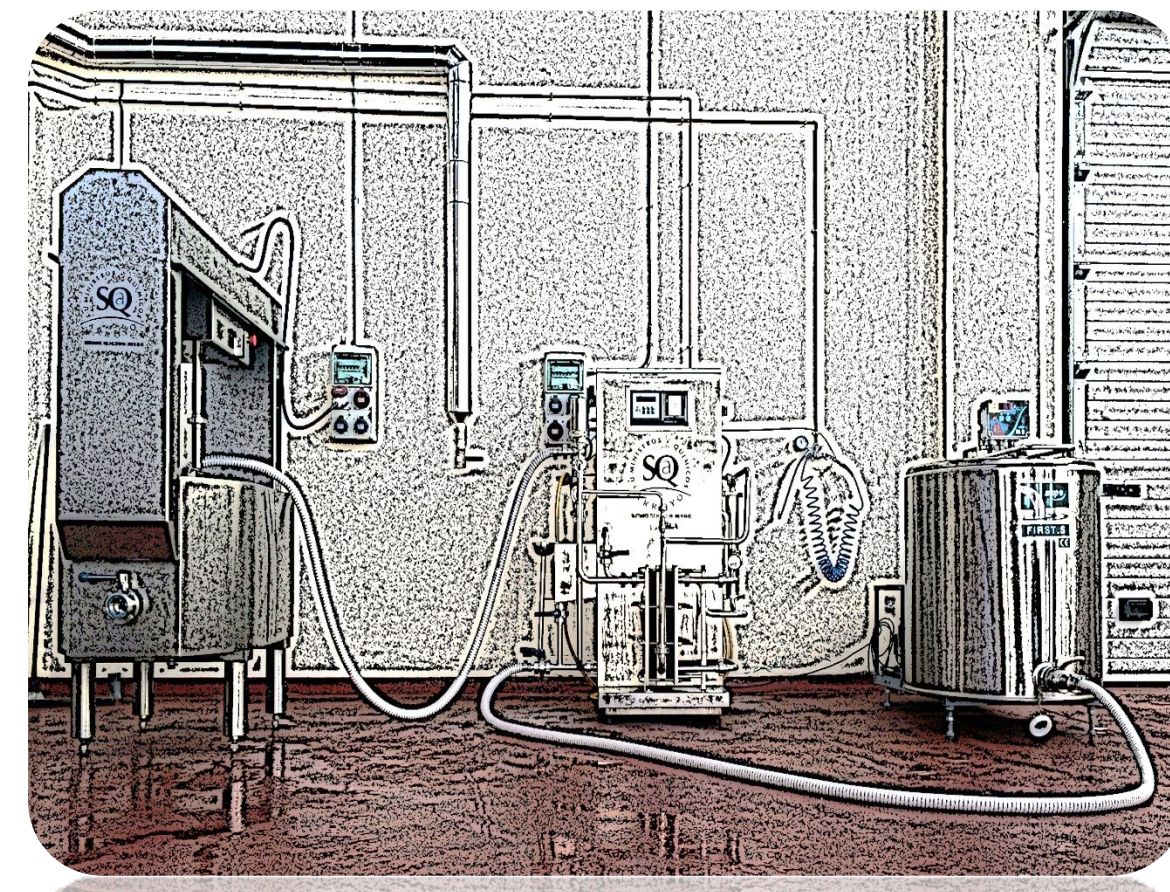
RAW COW MILK



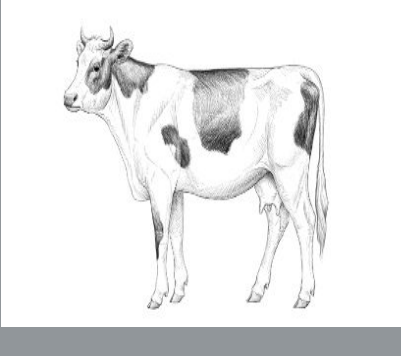
RAW GOAT MILK



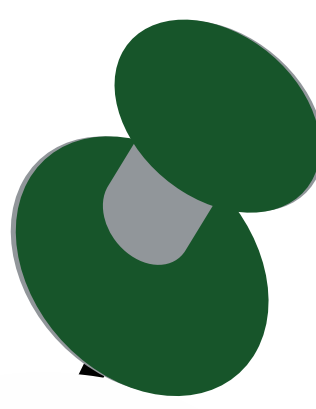
RAW SHEEP MILK



PRODUCER 3



RAW COW MILK



Sampling:

Rinds and  
cores

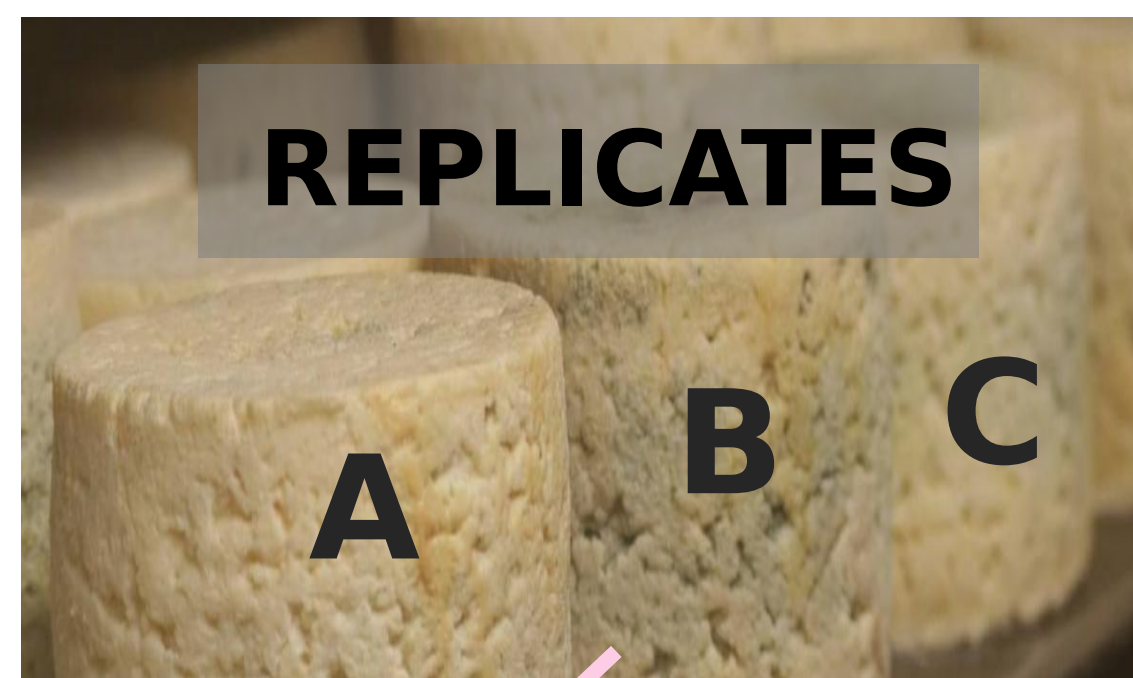
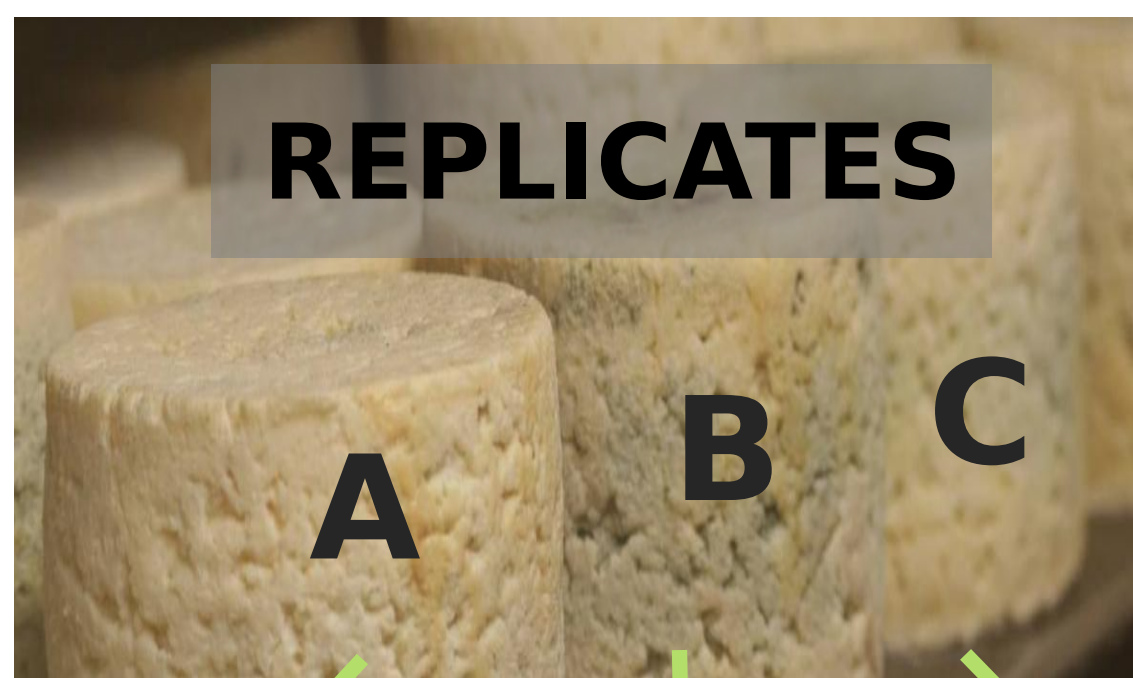
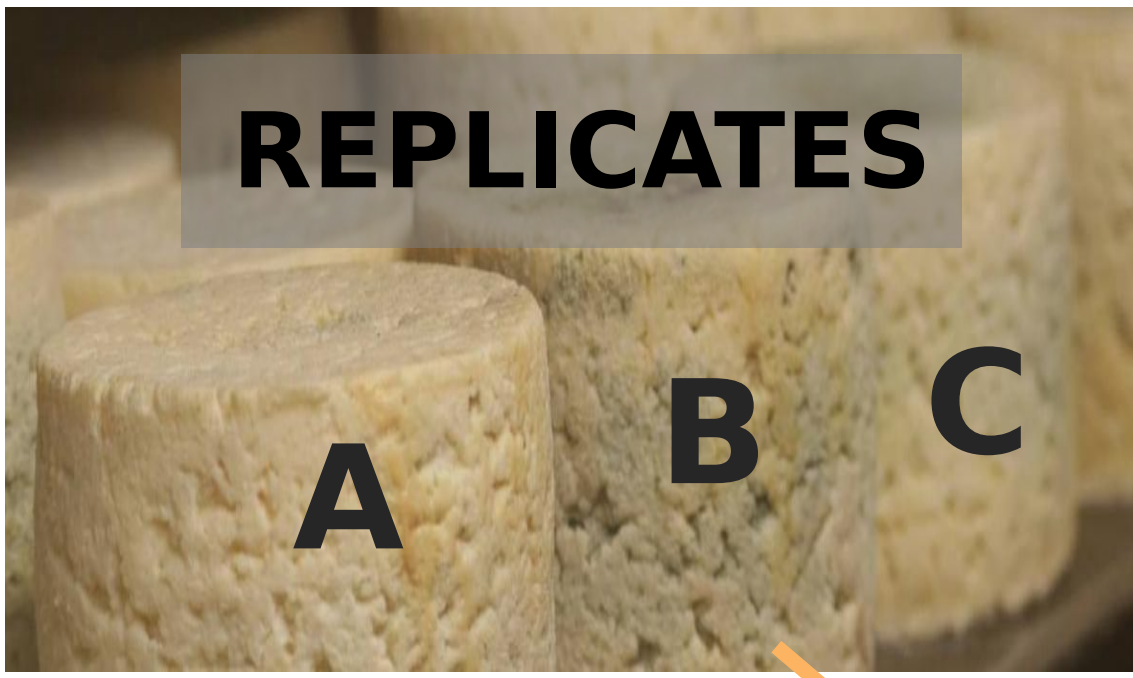
were separated



Ambient and  
equipment surface  
samples

INITIAL RIPENING STAGE

BEFORE BEING INTRODUCED IN CAVE



Cave ambient  
samples

MIDDLE RIPENING STAGE



Cave1



Cave2



Cave3

ALTITUDE

LOW

HIGH

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**

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**

FINAL RIPENING STAGE

PRODUCER 2

PRODUCER 1  
PRODUCER 2  
PRODUCER 3

PRODUCER 2

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

**VOLATILE COMPOUNDS  
AND BIOGENIC AMINES**

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

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

**BIOINFORMATIC  
ANALYSIS**