Cross Comparison of Lamb Mortality in two Different Mediterranean Countries

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Aims

- Compare in two mediterranean countries:
 - Mortality rate
 - Distribution of lamb mortality by age
 - Mortality causes
 - Risk factors

• Determine if there are common issues?



Method

- The data were collected separately from two different countries
 - 2012-2014 in France (54 farms)
 - 2013-2014 in Turkey (49 farms)
- The purpose of data collection was not for this study
- An opportunity!





Data Collection Area: Turkey





The data is collected in the mountainous part of the Mediterranean Region of Turkey and the Main temp in summer and winter is 35.5 and 6°C, respectively.



49 suckler ewe breeders:

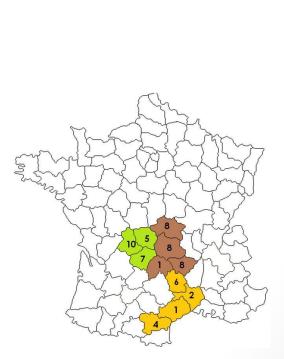
- 2 breeds (6 000 ewes 8 000 lambs)
- 2 rearing systems :
 - Extensive
 - Semi-intensive

Data Collection Area: France

54 suckler ewe breeders:

- 2 years
- Massif Central area (50 000 ewes; 70 000 lambs)
- 3 rearing systems :
 - two lambing periods (spring, autumn)
 - system type 3 lambing in two years
 - pastoral system (February-April)



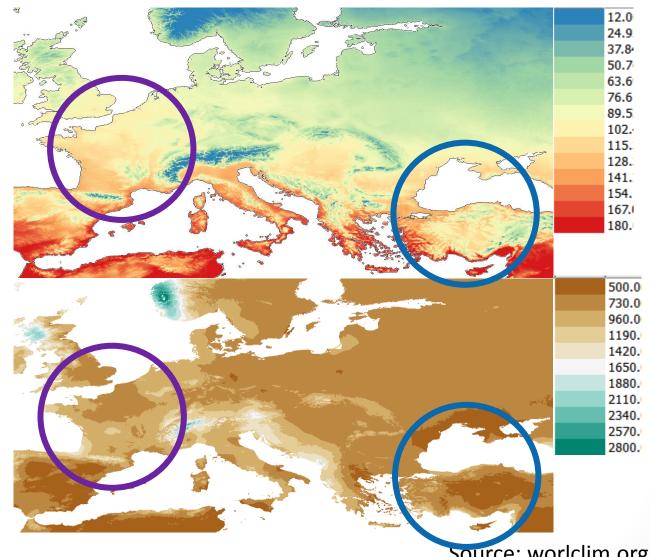




The 2 Mediterranean Countries

France Turkey

Average annual temperature



Accumulated rainfall

Source: worlclim.org

Mortality rate (median)

Turkey

- semi-intensive: 12%
- extensive system: 9%

France

- system type 3 lambing in two
 - years: **17,2**%
- pastoral system: 14,2%
- two lambing periods: 12,4%

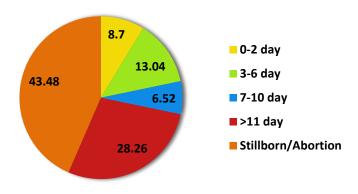
Wide variability between farm within each rearing system

TURKEY

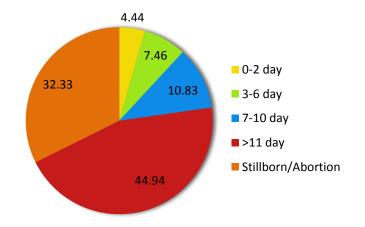
FRANCE

Age of death in different production systems

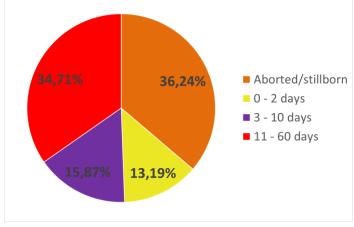
Semi –Intensive/3 lambing in 2 years



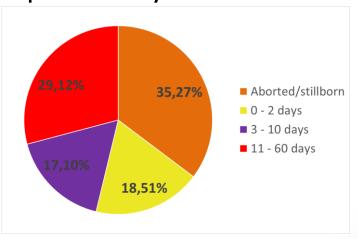
Extensive



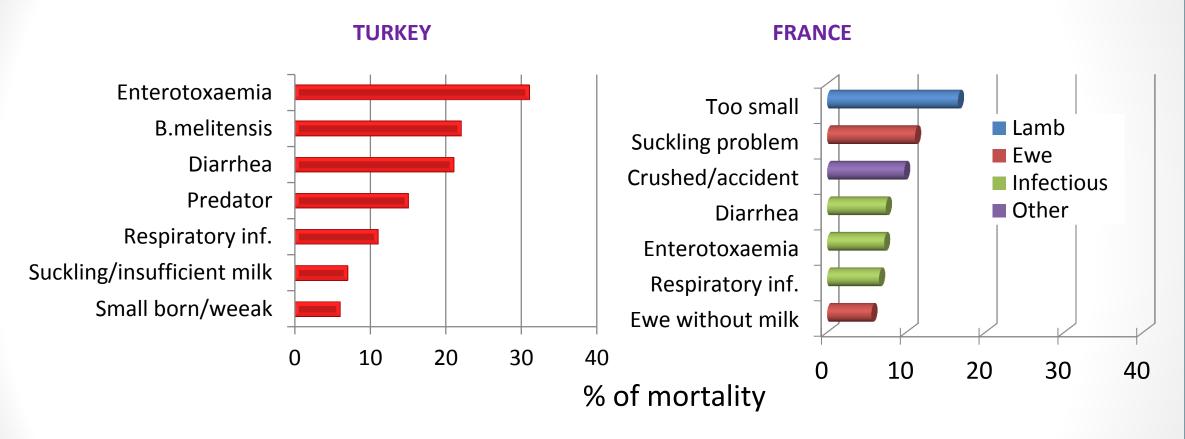
system type 3 lambing in two years



pastoral system



Main mortality causes







Risk Factors

TURKEY

LAMB

- Colostrum intake
- Too small
- predators

- Hygiene indoors
- Environmental temperature
- Contamination in pasture

EWE

- Lambing monitoring
- BCS
- Culling strategy
- Maternal care/mismothering

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FRANCE

LAMB

- Colostrum intake
- Too small

ENVIRONMENT

Lamb mortality

ENVIRONMENT

- Hygiene indoors
- Environmental temperature
- Difference of age

Conclusion

- ♦ The production system had an effect on lamb mortality in 2 countries
- ♦ Mortality rate: lower in Turkey
- ♦ Similar age of death (< 10 days) except Extensive system in Turkey</p>
- ♦ Different between causes of death
- ♦ Similar risk factors... and some differences

A better understanding of resilience of lambs: questions regarding lamb robustness





Thank you!

Teşekkür ederim! Merci!



Intensive vs.





Extensive Farming







