

Potential and limitations of genomic selection in small ruminants

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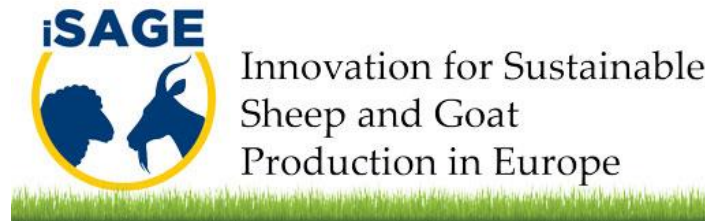
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Partners involved

Industry: AGRAMA, ARDIEKIN, ASSAF.E, CAPGENES, CNBL, FRIZARTA

Research: INIA, AUTH, IDELE, CITA, IRIAF

France, Greece and Spain



- **Genomic Selection programs in dairy cattle industry are in place and working:** well organized, “one large population”, “willing to innovate”, international collaboration tradition.
- **Why does it work from a genetic perspective?**
Improves the relationship matrix
- **What about the small ruminant populations?**
Many breeds, large N_e , economic resources

- **What is the perception of small ruminant stakeholders ?** to identify potential limitations and possible drivers?
- **What could we do to get the most?** to maximize the amount of information
- **What about the main actors: “farmers”?** would they be willing to adopt the genomic tools?

Conclusions (I)

- Limiting factors:
 - Costs of genotyping and phenotyping
 - Change in breeding structures: cooperative work
 - Media effort to revert public opinion
 - Farmer's Attitude toward Traditional selection
- Driving factors:
 - Stimulate extension services toward G&G , business oriented.

- Genotyping scenarios

Same cost of genotyping:

- Provide different responses
 - Different correlated responses
- Comprehensive selection objective?
 - More complex production scenarios
 - Non directional variability?

CITA, INIA and IRIAF thanks to



Confederación de Asociaciones
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