



Context

Grasslands diversity providing balanced forage, rich in secondary metabolites can be useful for animal health management

- Condensed tannins enhance antiparasitic activity (Hoste *et al.*, 2005)
- Polyphenols can reduce oxidative stress and inflammation (Maxin *et al.*, 2020)

Few knowledge about how farmers are using grassland and plant diversity for animal health management

OBJECTIVE : study farmers' perceptions and management strategies linking grassland diversity and animal health

Materials and methods

Comprehensive interviews (recorded) of 30 farmers

Data collection about farm/forage system management and farmer's perceptions about animal health – grassland diversity links

Transcribed

Discourses analysis

to qualify the farmers on their **grasslands' diversity management strategies.**

to manually classified **farmers' perceptions about the link health - grassland diversity**

Crossed analysis

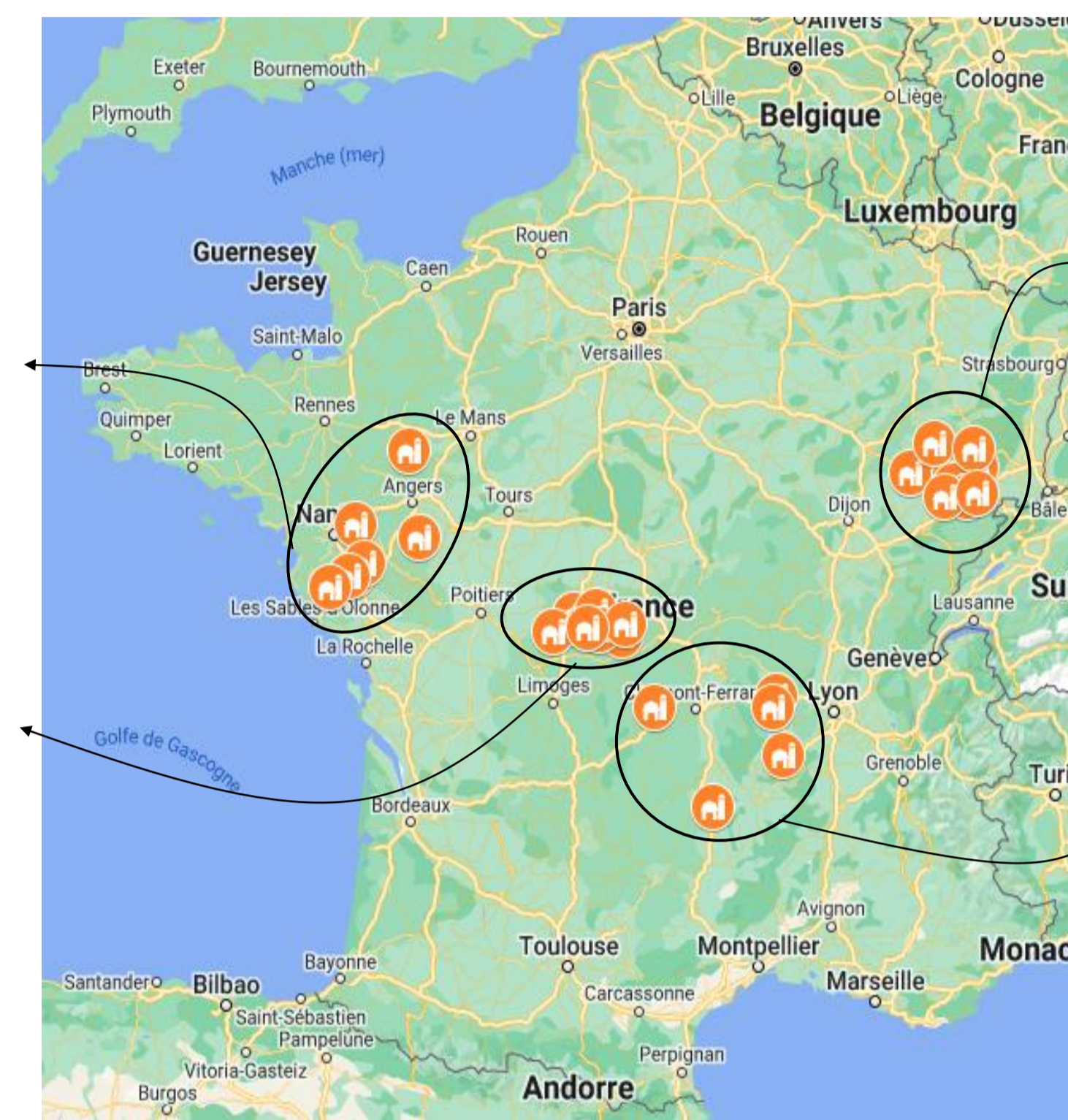
SELECTION CRITERIA :

- high proportion of grasslands in the agricultural area
- large range of production systems and pedoclimatic condition

- n = 12
- n = 7
- n = 3
- n = 8

Oceanic, plain n = 7

Altered Oceanic Hilly n = 9



Semi-continental Hilly n = 9

Mountain n = 5

Results

Grassland diversity management strategies

Permanent grasslands

Temporary grasslands

“One grassland for multiple services” (n=10)

Farmers are looking for multiple services
One ideal diversified grassland type provides all expected services



“One grassland by service” (n=10)

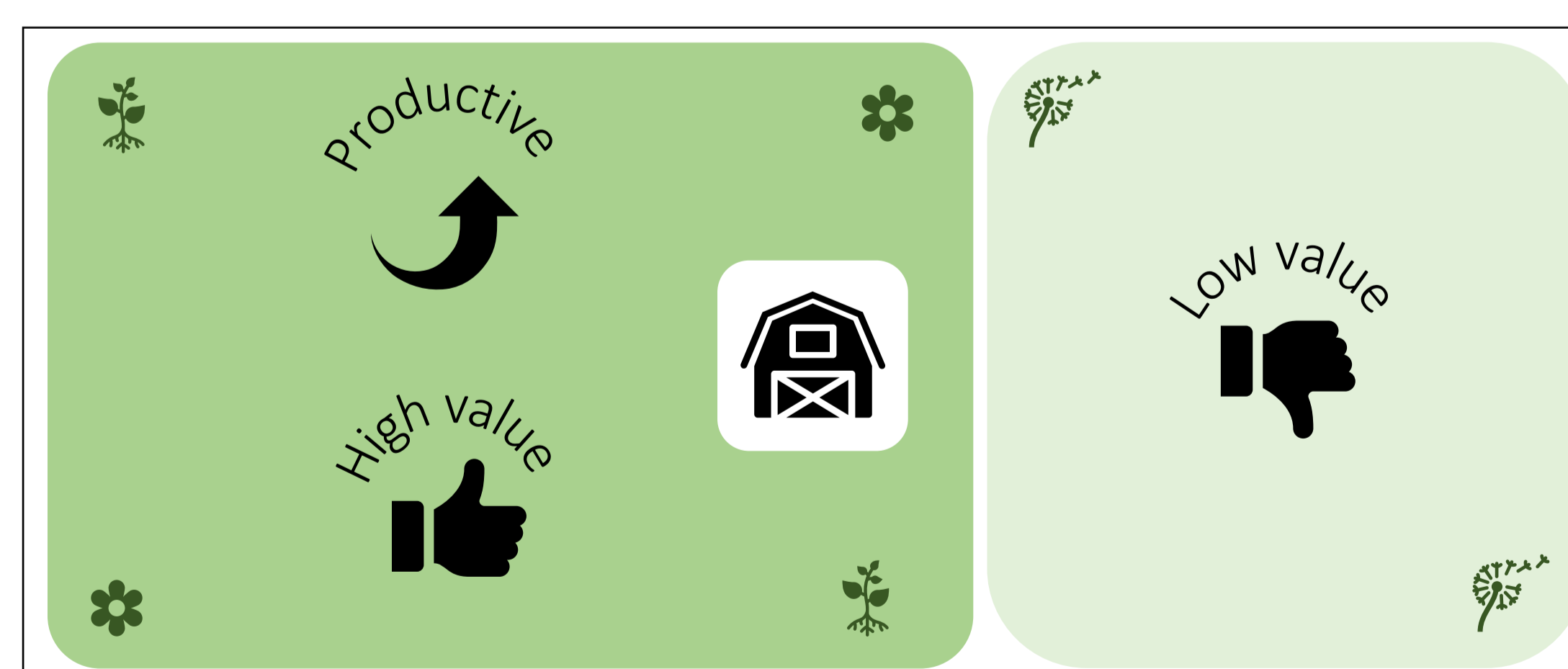
Farmers are looking for multiple services
Each grassland provides a specific service

- Hilly context : inducing various agronomical potentials



“Single service grassland” (n=10)

Farmers are looking only for the feed service
One ideal grassland type



Farmers' perceptions of the link between animal health and grassland diversity

“Convinced” (n=14)

- speaking spontaneously about health services of grassland.
- giving examples of health effects of diversity

“Looking for evidence” (n=8)

- thinking that diversity can be useful for animal health
- lacking knowledge

“Not Convinced” (n=8)

Hardly speaking of the link health - grassland diversity

Conclusion

Farmers' perceptions of grasslands' health service are associated with grassland diversity management at farm scale

To promote health service provided by grasslands, researchers and advisors would have to produce local references according to the different ways to manage grassland's diversity at farm scale.

References:

- Hoste H., Gaillard L., Le Fibreux Y. (2005). Consequences of the regular distribution of sainfoin hay on gastrointestinal parasitisme with nematodes and milk production in dairy goats. *Small Ruminant. Research.*, 59, 265-271.
- Maxin G., Cornu A., Andueza D., Laverroux S., Graulet B. (2020). Carotenoid, tocopherol, and phenolic compound content and composition in cover crops used as forage. *Journal of Agricultural and Food Chemistry*, 68, 23, 6286–6296