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science for people, life & earth



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ET DE LA COHÉSION
DES TERRITOIRES



Liberté
Égalité
Fraternité

Bocage Elevage Climat

FONDS
sea
pour la transition
des territoires


RÉGION
Nouvelle-
Aquitaine


BORDEAUX
MÉTROPOLE

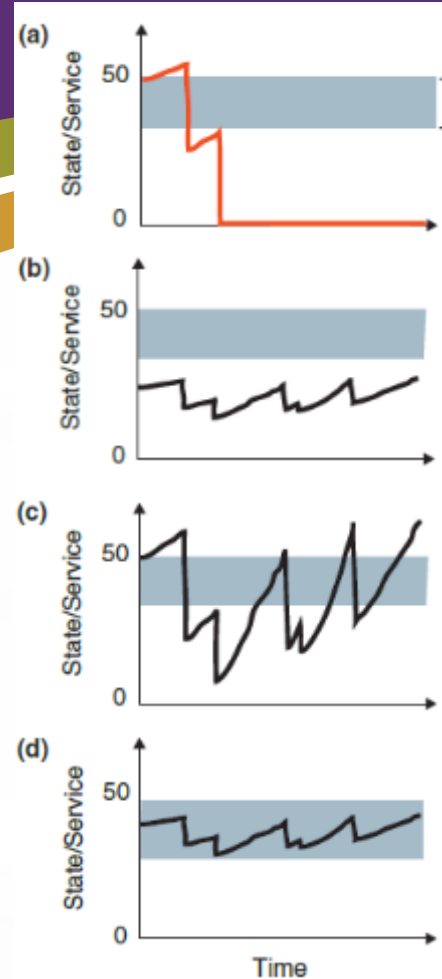
Physiological and Anatomical Criteria for Selecting Candidate Oak Species for AM

Annabel Porté
Maksym Netsvetov

biogeco


INRAE Univ. Bordeaux
NAS of Ukraine

How to get robust oak forests?



Non robust

Robustness of a forest when facing fluctuating environment will depend on the tree / species capacities

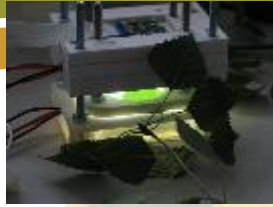
- Resistance to stress/ perturbation
- Resilience after loss of resistance
- Plasticity in response to change

Robust

... and on their management

- Assisted migration
- Forest practices

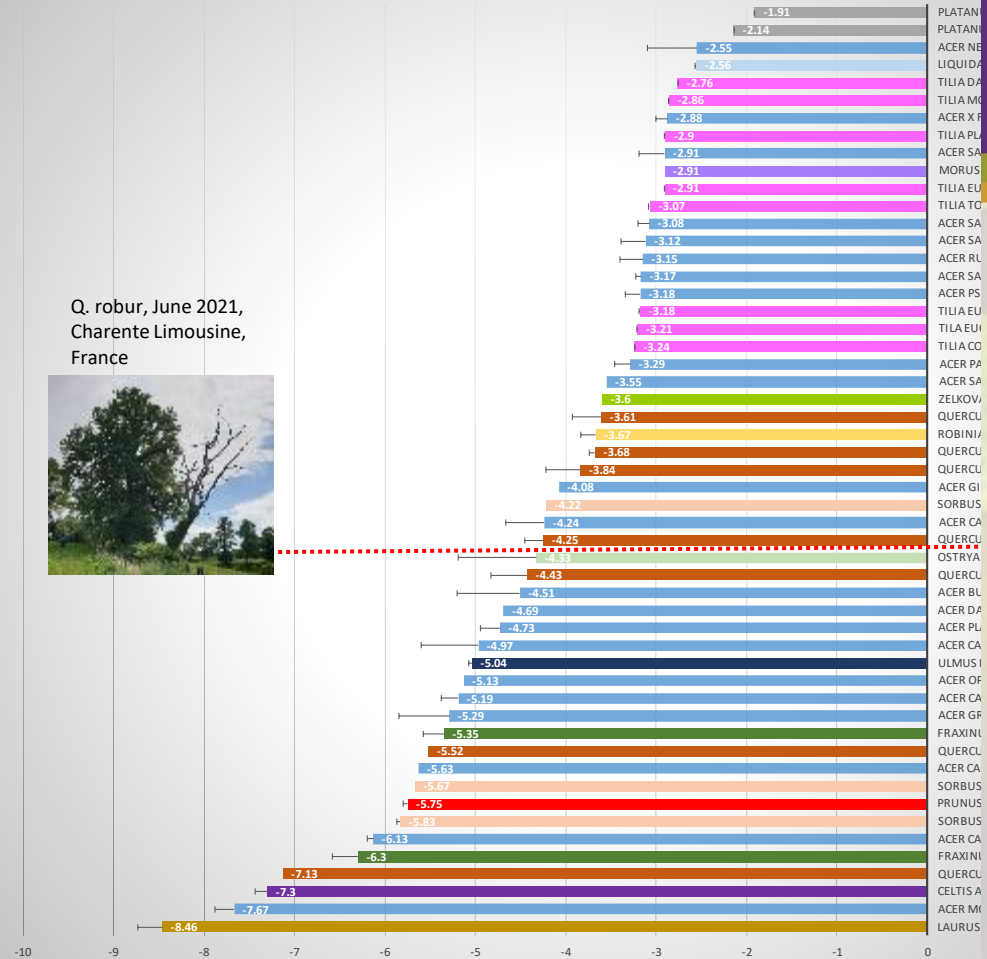
Drought resistance



Q. robur, June 2021,
Charente Limousine,
France



P50 - water potential inducing 50% of cavitation



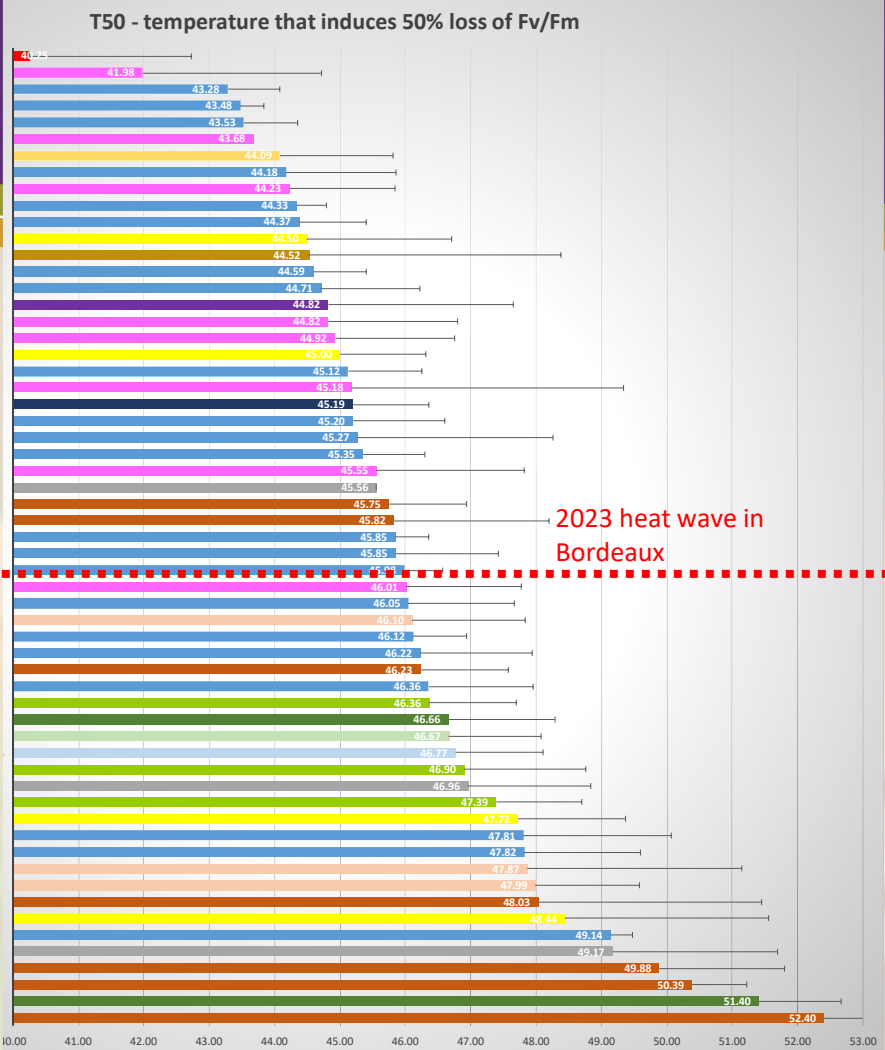
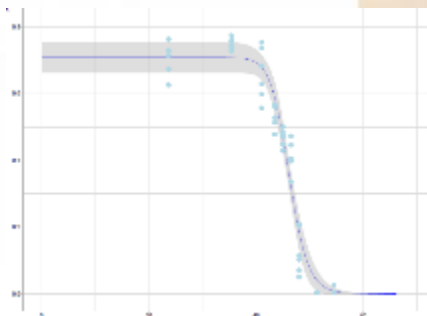
Heat resistance



Heating plates

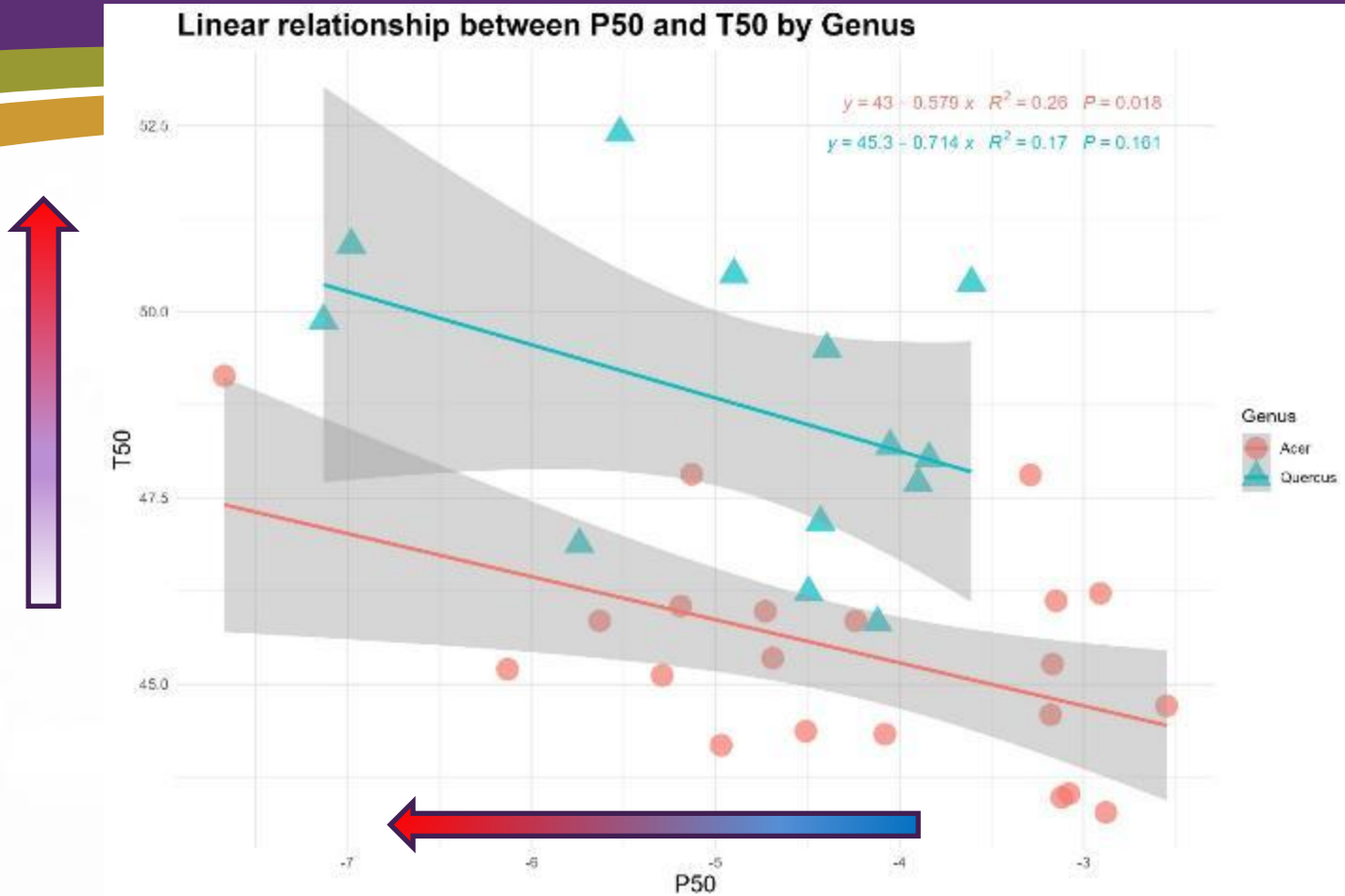


WALZ fluorometer



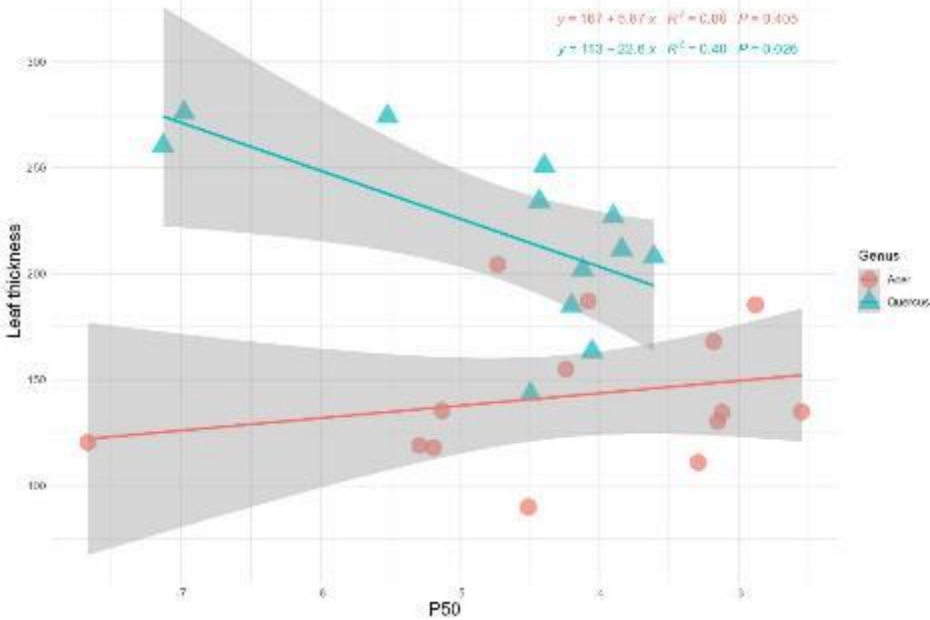
Fauvernier 2023, Netsvetova 2023, Gurrute Velasco 2024, Villalba Malaver 2024, Aurigo 2025

No trade-off between drought and heat resistance traits

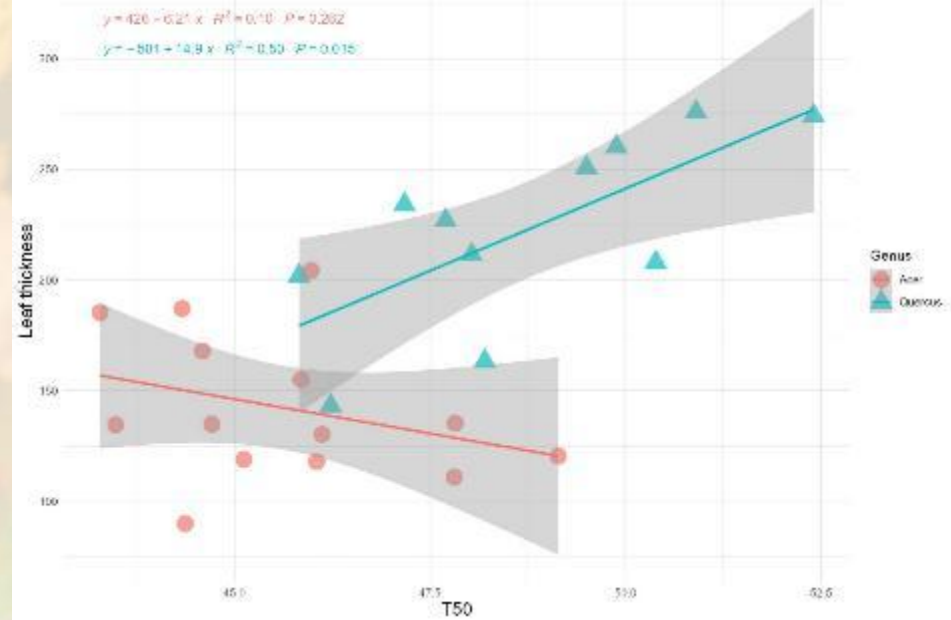


Leaf thickness, anatomical proxy ?

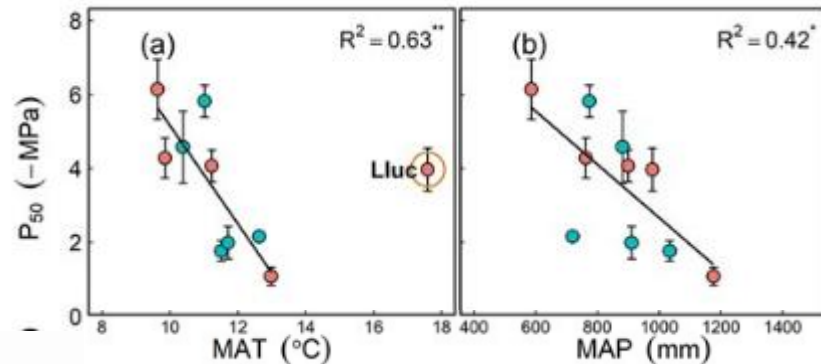
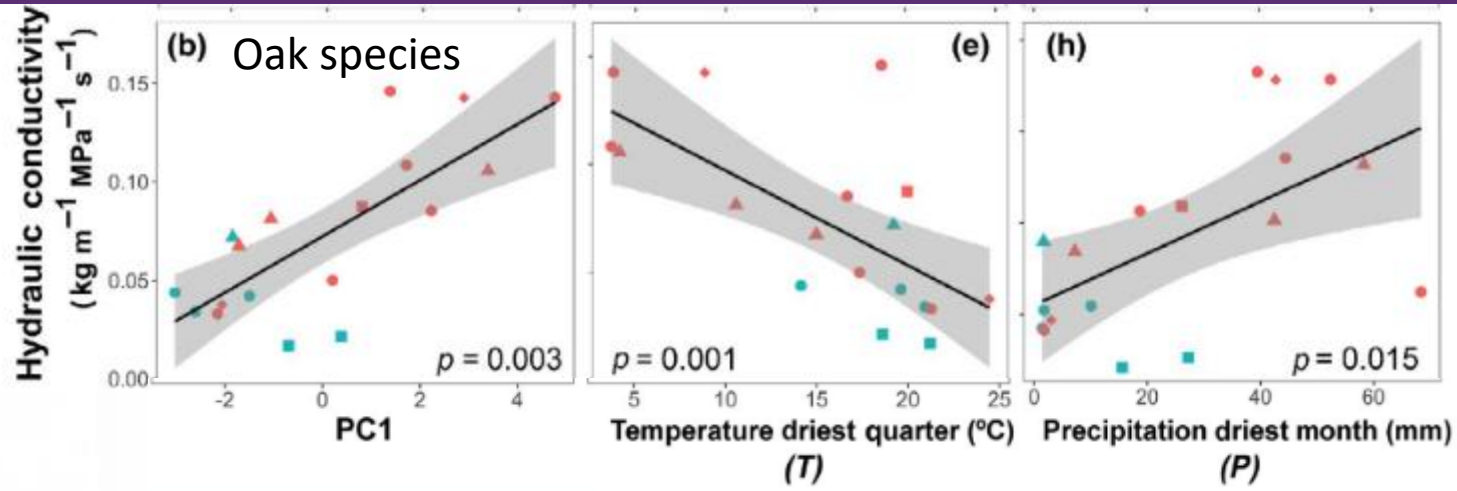
Linear relationship between Leaf Thickness and P50 by Genus



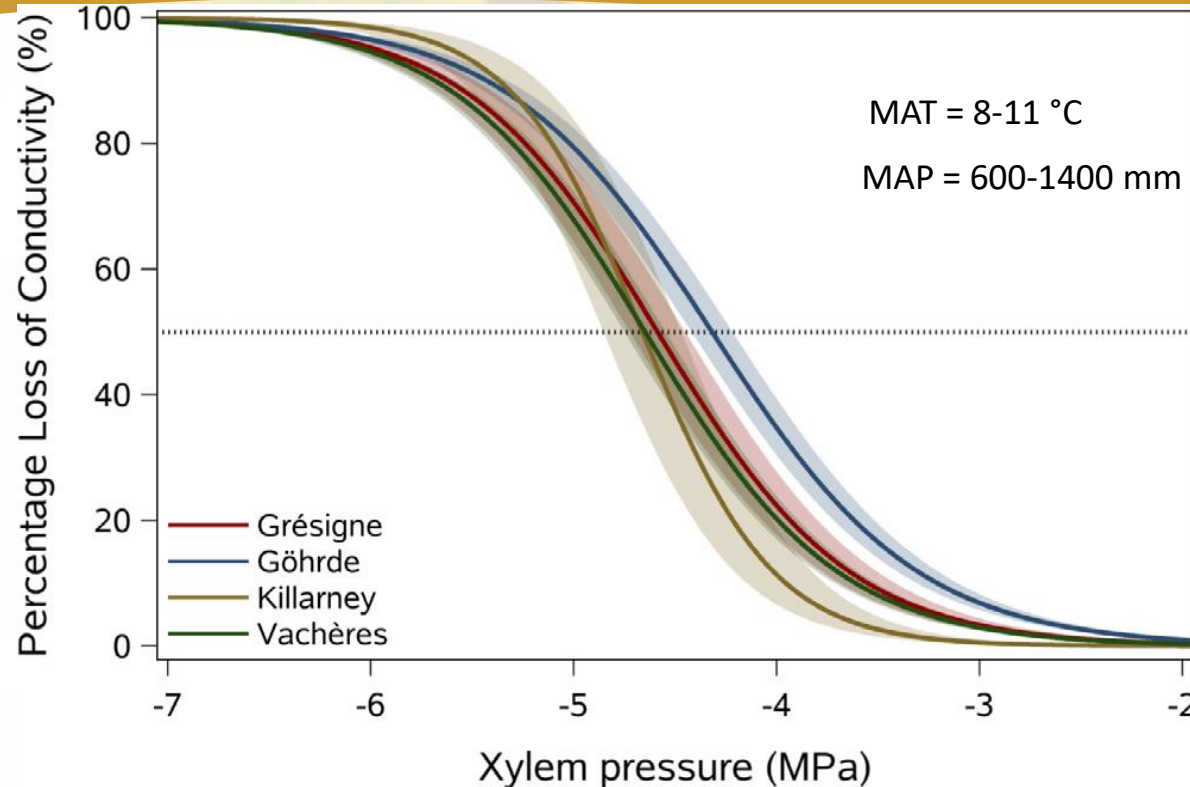
Linear relationship between Leaf Thickness and T50 by Genus



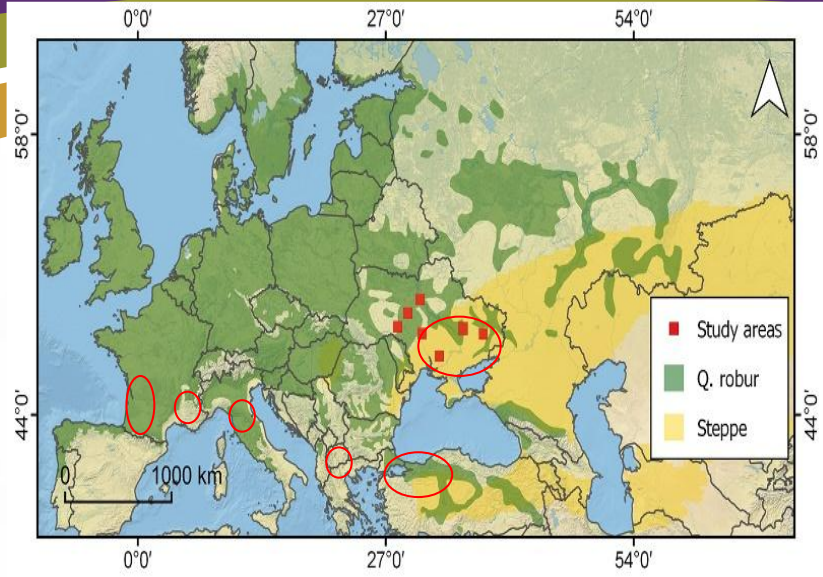
Hydraulic properties seem related to climate at origin



Weak variability at intra-specific *Q. petraea*

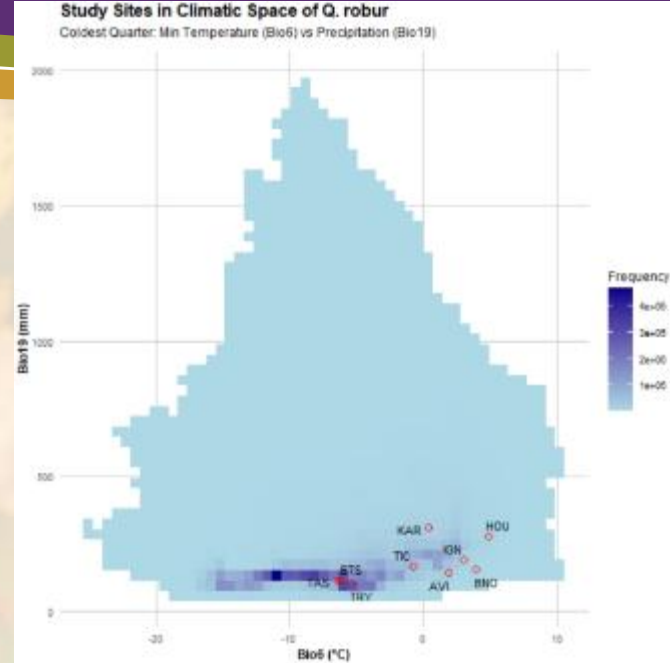


WHAT DO WE KNOW ABOUT MARGINAL POPULATIONS OF *Q. ROBUR*?



Populations in

- Ukraine
- France SW / SE
- Turkey
- Italy



Dendroecology

- Tree ring width
- Wood anatomy

Дякую

MERCI

THANK YOU

The role of latitude and the Carpathian Mountain barrier in the spatial spread and population bottlenecks of *Schizophyllum commune*

Research | Conservation | Published: 05 February 2024
Volume 26, Article number 20, (2024) | Open Access Article

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Single Author

Acknowledgements

The author would like to express their gratitude to Annette J. Porte, Museum National, and Yulia Terentjeva for their assistance in sample collection.

Schizophyllum commune



- Geographic coordinates
- Date
- Tree species if possible (or coniferous/broadleaved)