

Advancing understanding of forest dynamics: a global initiative on interspecific interactions through triplet networks

RUANO, I.¹, PRETZSCH, H.^{1,2} and BRAVO, F.¹

¹ SMART Ecosystems Group, iuFOR Instituto Universitario de Investigación en Gestión Forestal Sostenible, ETS de Ingenierías Agrarias, Universidad de Valladolid, Avda. de Madrid 44, Palencia 34004, Spain

² Chair of Forest Growth and Yield Science, Department of Life Science Systems, TUM School of LifeSciences, Technical University of Munich, Freising, Germany



SMART GLOBAL ECOSYSTEMS



Background

Tree species mixing can increase and stabilize stand productivity

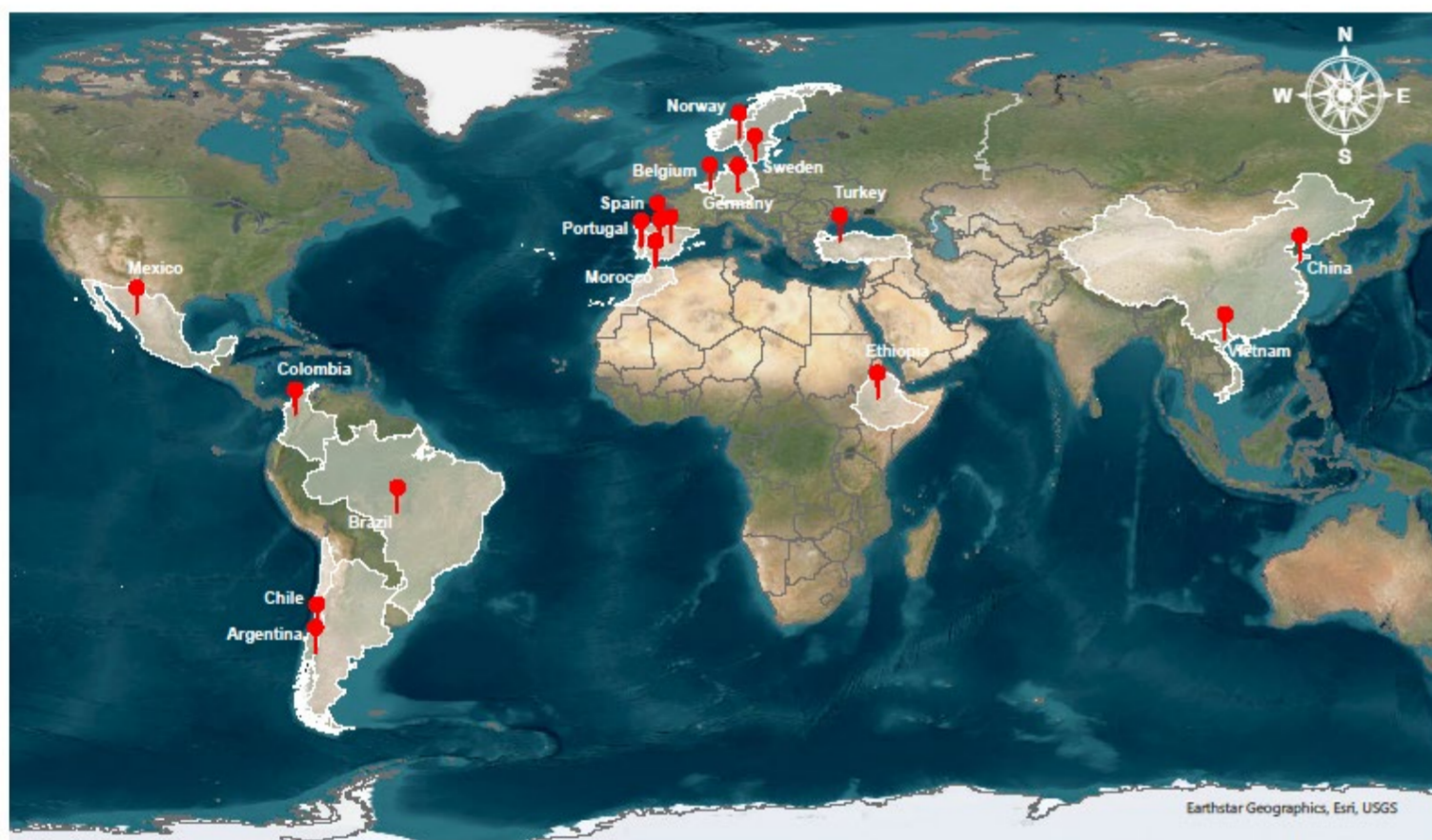
The increase and stabilization of stand productivity by tree species mixing may contribute to climate change mitigation and adaptation

Main objective

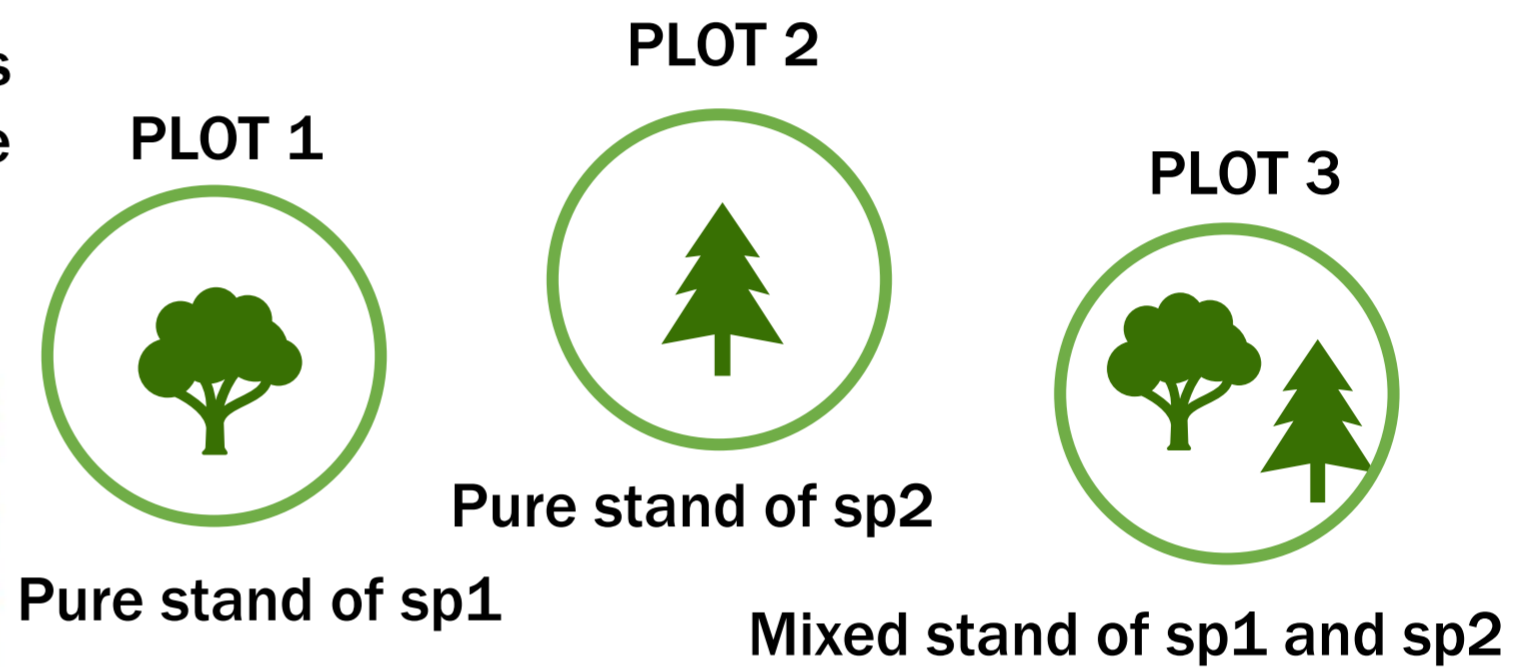
To analyse on interspecific interactions across diverse forest ecosystems to broaden current understanding of mixed forests.

Worldwide triplets network

Triplets encompassing both pure and mixed forests worldwide, across boreal, tropical, and temperate regions in Europe, America, Africa, and Asia.



What is a triplet?



Our data



STATIC DATA: dendrometric variables

DYNAMIC DATA: growth (cores or inventories over time)

How?

To analyze interspecific interactions from a global perspective, we study species through the lens of functional traits:

Shade tolerance



Wood density



We will fit models to identify influential variables: climatic indices, site characteristics, and functional traits.



Join us!



If you have triplets or plots where we can redesign a triplet, we invite you to become part of our international network.

Participation offers you the opportunity to contribute their expertise, fostering a holistic comprehension of the ecological implications and dynamics inherent in mixed and pure forest stands.

Funding was possible by the project ESCALERA DE LA EXCELENCIA, iufor Recognition as a unit of excellence" (GA: CLU 2019-01).



Scientific symposium
Promoting diversity in plant-based ecosystems as a tool for Ecosystem Services provision



Universidad de Valladolid

