



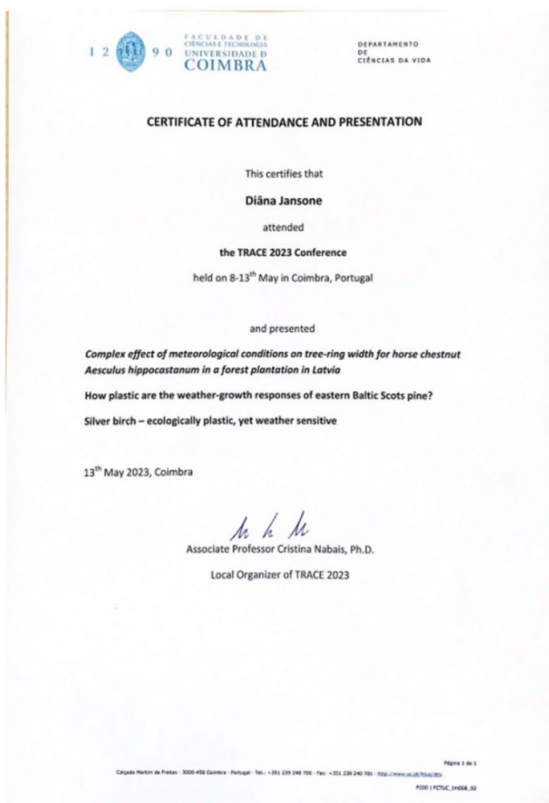
Lēmumu pieņemšanas atbalsta instruments meža ražības paaugstināšanai, nodrošinot efektīvu un klimatam piemērotu selekcijas efekta pārnesi (Nr. 1.1.1.1/19/A/111)

01.06.2023.

Pētījuma rezultāti prezentēti starptautiskā zinātniskā konferencē

Rezultāti prezentēti konferencē TRACE 2023 (<https://www.uc.pt/events/trace2023/conference-program/>) “Tree rings in Archaeology, Climatology and Ecology”, kas pulcēja zinātniekus un studentus, kuri izmanto koku ikgadējos pieaugumus kā vides, vēstures un klimatoloģiskās informācijas arhīvus. Konferences mērķis ir veicināt zināšanu apmaiņu starp dažādām zinātnes disciplīnām, kas strādā ar koku pieaugumiem. Konference notika Koimbrā, Portugālē un pulcēja vadošos Eiropas dendroekoloģijas speciālistus.

Pētījuma rezultāti ietverti stenda ziņojumā šīs konferences dalībniekiem.



How plastic are the weather-growth responses of eastern Baltic Scots pine?

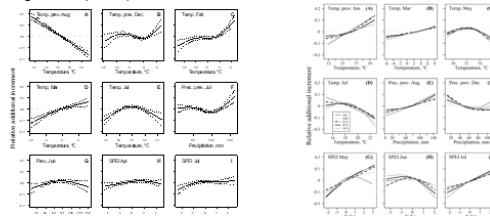
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Local adaptation of provenances



- Nonlinear regional responses were estimated
- Complex meteorological effects on increment
- Winter temperature and summer water availability were the main regional driver of radial increment
- Local populations show plastic responses
- Limited local genetic adaptation
- Local genetic adaptation present
- Sensitivity-productivity relationships among populations
- More productive provenances are more sensitive, yet resilient indicating plastic responses crucial for adaptability
- Less productive populations show more conservative growth strategy



Material and Methods

- 10-15 trees per site or provenance/trial
- 20 stands and five provenances in five trials
- Two cores per tree taken
- Tree-ring widths measures
- Time series crossdated and double detrended
- Weather-growth relationships assessed using a generalized additive mixed models presuming nonlinear responses

The study was conducted as part of ERDF project "Decision support tool for increased forest productivity via efficient climate adjusted transfer of genetic gain" (No. 1.1.1.12/19V/131) (Diāna Jansone)



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