Improving access to FORest GENetic resources Information and services for end-USers

Ergebnisse

Projektinformationen

FORGENIUS

ID Finanzhilfevereinbarung: 862221

Projektwebsite

DOI
10.3030/862221

EK-Unterschriftsdatum
26 Juni 2020

Startdatum
1 Januar 2021

Enddatum
31 Dezember 2025

Finanziert unter
SOCIETAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy

Gesamtkosten
€ 7 537 292,80

EU-Beitrag
€ 7 000 000,00

Koordiniert durch
INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT
France

CORDIS bietet Links zu öffentlichen Ergebnissen und Veröffentlichungen von HORIZONT-Projekten.

Links zu Ergebnissen und Veröffentlichungen von RP7-Projekten sowie Links zu einigen Typen spezifischer Ergebnisse wie Datensätzen und Software werden dynamisch von OpenAIRE abgerufen.

Leistungen

Documents, reports (22)

D3.1: Genetic, phenotypic and environmental characterisation of two GCUs for at least one species.

Genetic, phenotypic and environmental characterisation of two GCUs for at least one species.

D3.3: Trait proxy identification (relationship of phenotypes from WP2 and NIRS from WP3) & heritability estimates of trait proxy for at least one species.

Trait proxy identification (relationship of phenotypes from WP2 and NIRS from WP3) & heritability estimates of trait proxy for at least one species.

D2.1: Database of relevant phenotypic properties for the GenRes collection.

Database of relevant phenotypic properties for the GenRes collection.

D3.9: Distribution map of adaptive potential (climate-driven selection) for present and future climatic conditions for at least one species.

Distribution map of adaptive potential (climate-driven selection) for present and future climatic conditions for at least one species

D3.7: Estimation of GCUs adaptability (quantitative genetics linking trait proxy and genomics) for at least one species.

Estimation of GCUs adaptability (quantitative genetics linking trait proxy and genomics) for at least one species.

D4.5: Multivariate description of genomic, environmental and functional status for a subset of the selected GCUs/species.

Multivariate description of genomic, environmental and functional status for a subset of the selected GCUs/species.

7.3: Brief on connected learning pilot for European upscaling

Brief on connected learning pilot for European upscaling – tested methodologies for introducing forest education into public education curriculum.

D3.4: Trait proxy identification (relationship of phenotypes from WP2 and NIRS from WP3) & heritability estimates of trait proxy for the remaining species.

Trait proxy identification (relationship of phenotypes from WP2 and NIRS from WP3) & heritability estimates of trait proxy for the remaining species.

D1.3: Species ecophysiology

Species ecophysiology M18 A table describing the species ecophysiology published in a data paper

D2.4: Database of time series of relevant heat and water stress indicators for the GenRes collection.

Database of time series of relevant heat and water stress indicators for the GenRes.

7.7: Knowledge transfer guidelines for forest services in Europe

Knowledge transfer guidelines for forest services in Europe – a compilation of good practices on how to transfer scientific knowledge to forest managers and involve them in shaping protocols.

5.3: Terms of reference for data sharing and use in EUFGIS

Terms of reference for data sharing and use in EUFGIS. (M24). The data sharing agreement will be prepared through consultative process, checked by legal experts and signed by data providers.

7.4: EUFGIS training workshop report

Workshop reports – these will include participants' evaluation and feedback on the system functions as well as lessons learnt for possible replication in other countries after the project ends.

D1.5: Method for assessing forest GenRes state through remote sensing

Method for assessing forest GenRes state through remote sensing (M48): Published algorithms within a R package to assess forest state using a combination of meteorology and remote sensing data.

D3.5: Fitness (fertility estimated by drones, realised fecundity estimated via seedlings modelling) & selection gradients (relationship fitness and trait proxy) for at least one species.

Fitness (fertility estimated by drones, realised fecundity estimated via seedlings modelling) & selection gradients (relationship fitness and trait proxy) for at least one species.

D4.7: Multidimensional index of ecological resilience and vulnerability for a subset of the selected GCUs/species.

Multidimensional index of ecological resilience and vulnerability for a subset of the selected GCUs/species

6.1: Design of the web application

Design of the web application A report on the design of the web application describing the different elements

D2.3: Database of relevant wood hydraulics traits for the GenRes collection.

Database of relevant wood hydraulics traits for the GenRes.

7.8: Updated version of the Dissemination, Exploitation and Communication plan

An updated version of the Dissemination, Exploitation and Communication Plan.

6.2: Updated and final design of the web application

Updated and final design of the web application. A report on the final design on the web application due to amendments occuring during the development process.

D3.2: Genetic, phenotypic and environmental characterisation of two GCUs for the remaining species considered in WP3.

Genetic, phenotypic and environmental characterisation of two GCUs for the remaining species considered in WP3.

D2.2: Database of relevant leaf/wood economics and water relations traits for the GenRes collection.

Database of relevant leaf/wood economics and water relations traits for the GenRes collection.

Websites, patent fillings, videos etc. (2)

7.1: Website with related channels

Website with related channels the project website with regular newsblogs from partners and links to the newsletters materials and twitter feed

7.2: Calendar of events for sharing knowledge with stakeholders

Calendar of events for sharing knowledge with stakeholders

Open Research Data Pilot (1)

5.1: FORGENIUS data management plan

FORGENIUS data management plan M6 It will include information on dataset reference and name dataset description standards and metadata data sharing data archiving and preservation

Other (1)

6.4: Results of the testing of the web application

Results of the testing of the web application. A report on the outcomes of the testing of the web application and suggestions for improvement.

Veröffentlichungen

Peer reviewed articles (12)

Assisted tree migration can reduce but not avert the decline of forest ecosystem services in Europe,

Autoren: Achille Mauri, Marco Girardello, Giovanni Forzieri, Federica Manca, Pieter S.A. Beck, Alessandro Cescatti, Giovanni Strona,
Veröffentlicht in: Global Environmental Change, Ausgabe Volume 80, 2023, ISSN 0959-3780
Herausgeber: Elsevier BV
DOI: 10.1016/j.gloenvcha.2023.102676

On the feasibility of estimating contemporary effective population size (Ne) for genetic conservation and monitoring of forest trees

Autoren: Santos-del-Blanco, Luis; Olsson, Sanna; Budde, Katharina Birgit; Grivet, Delphine; González-Martínez, Santiago C.; Alía, Ricardo; Robledo-Arnuncio, Juan J.; 0000-0002-5361-2815
Veröffentlicht in: Biological Conservation, Ausgabe 5, 2022, ISSN 0006-3207
Herausgeber: Elsevier BV
DOI: 10.1016/j.biocon.2022.109704

EU-Trees4F, a dataset on the future distribution of European tree species

Autoren: Mauri A., Girardello M., Strona, G., Beck, P. S. A, Forzieri G., Caudullo G.Manca F., Cescatti A.
Veröffentlicht in: Scientific Data, 2022, ISSN 2052-4463
Herausgeber: Nature
DOI: 10.1038/s41597-022-01128-5

Combining climatic and genomic data improves range-wide tree height growth prediction in a forest tree

Autoren: Archambeau J, Benito-Garzón M, Barraquand F, de Miguel M, Plomion C, González-Martínez SC
Veröffentlicht in: American Naturalist, Ausgabe 200, 2022, Seite(n) 141-159, ISSN 0003-0147

Herausgeber: University of Chicago Press
DOI: 10.1086/720619

Empirical approach for modelling tree phenology in mixed forests using remote sensing
Autoren: Noumonvi Koffi Dodji, Oblišar Gal, Žust Ana, Vilhar Urša
Veröffentlicht in: Remote sensing, Ausgabe 15(13), 2021, ISSN 2072-4292
Herausgeber: Multidisciplinary Digital Publishing Institute (MDPI)
DOI: 10.3390/rs13153015

Low but significant evolutionary potential for growth, phenology and reproduction traits in European beech
Autoren: Marjana Westergren, Juliette Archambeau, Marko Bajc, Rok Damjanić, Adélaïde Theraroz, Hojka Kraigher, Sylvie Oddou-Muratorio, Santiago C. González-Martínez
Veröffentlicht in: Molecular Ecology, Ausgabe Early View on-line, 2023, ISSN 0962-1083
Herausgeber: Blackwell Publishing Inc.
DOI: 10.1111/mec.17196

Plant hydraulics at the heart of plant, crops and ecosystem functions in the face of climate change
Autoren: Torres-Ruiz, José M. Cochard, Hervé Delzon, Sylvain Boivin, Thomas Burlett, Regis Cailleret, Maxime Corso, Déborah Delmas, Chloé E. L. De Caceres, Miquel Diaz-Espejo, Antonio Fernández-Conradi, Pilar Guillemot, Joannes Lamarque, Laurent J. Limousin, Jean-Marc Mantova, Marylou Mencuccini, Maurizio Morin, Xavier Pimont, François De Dios, Victor Resco Ruffault, Julien Trueba, Santiago Martin-St
Veröffentlicht in: New Phytologist, Ausgabe Vol 241, 2024, ISSN 0028-646X
Herausgeber: Blackwell Publishing Inc.
DOI: 10.1111/nph.19463

Tree Mortality Risks Under Climate Change in Europe: Assessment of Silviculture Practices and Genetic Conservation Networks
Autoren: Petit-Cailleux, Cathleen; Davi, Hendrik; Lefèvre, François; Verkerk, Pieter Johannes; Fady, Bruno; Lindner, Marcus; Oddou-Muratorio, Sylvie
Veröffentlicht in: Frontiers in Ecology and Evolution, Ausgabe 6, 2021, Seite(n) volume 9, ISSN 2296-701X
Herausgeber: Frontiers
DOI: 10.3389/fevo.2021.706414

How woody plants adjust above- and below-ground traits in response to sustained drought
Autoren: Lucy Rowland; Jose-Alberto Ramírez-Valiente; Iain P. Hartley; Maurizio Mencuccini
Veröffentlicht in: New Phytologist, Ausgabe 6, 2023, ISSN 0028-646X

Herausgeber: Blackwell Publishing Inc.
DOI: 10.1111/nph.19000

Growth plasticity of conifers did not avoid declining resilience to soil and atmospheric droughts during the 20th century

Autoren: Tong Zheng, Jordi Martínez-Vilalta, Raúl García-Valdés, Antonio Gazol, J. Julio Camarero, Changcheng Mu, Maurizio Mencuccini,
Veröffentlicht in: Forest Ecosystems,, Ausgabe Volume 10,, 2023, ISSN 2197-5620
Herausgeber: KeAi Communications Co., Ltd
DOI: 10.1016/j.fecs.2023.100107

Marginality indices for biodiversity conservation in forest trees

Autoren: Picard, Nicolas; Marchi, Maurizio; Serra-Varela, Maria, Jesus; Westergren, Marjana; Cavers, Stephen; Notivol, Eduardo; Piotti, Andrea; Alizoti, Paraskevi; Bozzano, Michele; González-Martínez, Santiago, C; Grivet, Delphine; Aravanopoulos, Filippos, A; Vendramin, Giovanni, Giuseppe; Ducci, Fulvio; Fady, Bruno; Alía, Ricardo
Veröffentlicht in: Ecological Indicators, Ausgabe 4, 2022, ISSN 1470-160X
Herausgeber: Elsevier BV
DOI: 10.1016/j.ecolind.2022.109367

Reduced within-population quantitative genetic variation is associated with climate harshness in maritime pine

Autoren: Juliette Archambeau; Marta Benito Garzón; Marina de Miguel; Benjamin Brachi; Frédéric Barraquand; Santiago C. González-Martínez
Veröffentlicht in: Heredity, Ausgabe 131, 2023, Seite(n) 68/78, ISSN 0018-067X
Herausgeber: Nature Publishing Group
DOI: 10.1038/s41437-023-00622-9

Non-peer reviewed articles (1)

The genetic consequences of population marginality: a case study in maritime pine

Autoren: Adélaïde Theraroz Carlos Guadaño-Peyrot Juliette Archambeau Sara Pinosio Francesca Bagnoli Andrea Piotti Camilla Avanzi Giovanni G. Vendramin Ricardo Alía Delphine Grivet Marjana Westergren Santiago C. González-Martínez
Veröffentlicht in: bioRxiv, 2023, ISSN 2692-8205

Herausgeber: bioRxiv
DOI: 10.1101/2023.12.27.573436

Letzte Aktualisierung: 30 April 2025