

Symposium Program

a joint International Congress organized by



International Union of Forest Research Organizations

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Ministero delle
politiche agricole,
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Regione Siciliana



CITTÀ METROPOLITANA DI PALERMO



Città di Palermo



Fondazione Internazionale
pro Herbario Mediterraneo



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DELL'ORDINE NAZIONALE
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A large banner for the congress. At the top left, the acronym "PACO" is written vertically. In the center, there is a stylized illustration of a landscape with green trees and a blue sky. On the far right, the year "2017" is written vertically. The main title "Sustainable restoration of Mediterranean forests" is centered in large, bold, green serif capital letters. Below the title, the text "International Congress" and "Palermo, 19-21 April, 2017" is written in a smaller, green serif font.

PROGRAM

WEDNESDAY, APRIL 19

SALA MATTARELLA – PALAZZO DEI NORMANNI

12.00 – 13.30 Registration

13.30 – 14.00 Opening Ceremony

14.00 – 14.30 Conceptual Introduction Lecture: Andreas Bolte, Palle Madsen, Mercy Afua Adutwumwaa Derkyi, John A. Stanturf - “Forest adaptation and restoration under global change - concept and status of an IUFRO Task Force”

Symposium 1 - Forest restoration in Mediterranean climates (Europe/other continents)

Chair : Andreas Bolte

14.30 – 14.55 **Veronica Loewe Munoz**, Gerardo Vadevenito, Manuel Acevedo, Marta Gonzalez, Susanna Benedetti, Eduardo Cartes, Ivan Quiroz - **“Successful experiences of restoration of Mediterranean forests restoration in Chile, South America”**

14.55 – 15.20 **Roberto Mercurio** - **“Forest degradation, conservation and restoration in the Mediterranean Basin”**

15.20 – 15.35 **Bernard Prévosto**, Jordane Gavinet, Catherine Fernandez: *Increasing diversity and resilience of Aleppo pine stands: thinning and introducing hardwood species.*

15.35 – 15.50 **Giannantonio Domina**, Francesco Maria Raimondo, Sebastiano Ciccarello: *Sustainable forest restoration of degraded relict forests in Sicily.*

15.50 – 16.05 **Marta Puglisi**, Patrizia Campisi, Maria Privitera, Maria Giovanna Dia, Giovanni Spampinato: *Bryophytes as ecological indicators in the beech woods of Sicily.*

Symposium 1 - Forest restoration in Mediterranean climates (Europe/other continents)

Chair : Orazio Ciancio

16.05 – 16.30 **Marco Marchetti** – **“Current processes affecting forests and challenges for forestry in Mediterranean area”**

16.30-16.55 **Leonor Calvo**, Elena Marcos, Victor Fernandez-Garcia, Jose Manuel Fernandez-Guisuraga, Susana Suarez-Seoane – **“Resilience in Mediterranean pine forest after recurrent wildfires: new tools to identify the role of restoration”**

16.55 – 17.10 **Giovanni Quilghini**, Alessandro Bottacci: *Forest restoration in Tuscany: from the mountain to the sea.*

17.10 – 17.25 **Fulvio Ducci**, Roberta Proietti, Giovanbattista De Dato, Maria Cristina Monteverdi, Piero Belletti, Enrico Calvo: *Restoring oak populations: a study case of applied assisted migration applied on Quercus robur [Po valley, Italy].*

17.25 – 17.40 Filippou Bantis, **Kalliopi Radoglou**, Wolfgang Brüggemann: *Differences in ecophysiological responses to seasonal drought of three co-existing oaks in Northern Greece.*

17.40 – 17.55 Giovanni Spampinato, Rita Crisarà, Piergiorgio Cameriere, Carmelo Maria Musarella: *Phytotoponyms a tool to forest landscape analysis and its transformations. The case study of Calabria (Southern Italy)*.

17.55 – 18.10 Leonardo Nocentini, Massimiliano Tancredi Hajny: *Experiences on good standard density restoration in oak coppices*.

18.10 – 21.00 Welcome Reception –Piazza Bologni “I Cucci - Bistrorante”

THURSDAY, APRIL 20

SALA MARTORANA – PALAZZO COMITINI

08.30 – 09.00 Registration– Poster session

Symposium 1 - Forest restoration in Mediterranean climates (Europe/other continents)

Chair : Donato Chiatante

09.00 – 09.25 Jordi Cortina, Alejandro Acebal, Antonio Aledo, Andreu Bonet, German Lopez, Guadalupe Ortiz - ***“Prioritization of restoration actions at a regional scale”***

09.25 – 09.50 Derya Esen, Oktay Yildiz - ***“Forest restoration in the Mediterranean region of Turkey”***

09.50 – 10.05 Franco Palla, Francesco Maria Raimondo, Anna Scialabba: *Conservation of forest biodiversity in Sicily: contribution of the University of Palermo Germplasm Bank (Italy)*.

10.05 – 10.20 Yassina Amrat, Fazia Krouchi, Nadia Abdelkrim, Francois Lefevre, Arezki Derridj. *Atlas cedar regeneration and structure at forest edges (Djurdjura north-western, Algeria): role of microsite and anthropogenic disturbance*.

10.20 – 10.35 Vera Lavadinovic, Vasilije Isajev, Ljubinko Rakonjac, Zoran Poduška: *The importance of bioecological characteristics of white-bark pine (Pinus heldreichii) for the target seedling production*.

10.35 – 10.50 Federico Guglielmo Maetzke, Donato Salvatore La Mela Veca, Tommaso La Mantia, Emilio Badalamenti, Sebastiano Sferlaza: *The use of species in plantations renaturalisation and reforestation in Sicily*.

10.50 – 11.05 Patrizia Campisi, Maria Giovanna Dia, Francescos Maria Raimondo, Giuseppe Venturella, Maria Letizia Gargano: *The role of phanerogams and cryptogams in the recolonization of cork oak forests crossed by wildfire in Sicily*.

11.05 – 11.20 Idir Guechoud, Fazia Krouchi, Federico Vessella, Arezki Derridj: *Analysis of Yew (Taxus baccata) participation to structural features of Atlas cedar forest stands at Chrea (Algeria)*.

11.20 – 11.45 Coffee Break – Poster Session

Symposium 2 - Scientific and technological advancements for a sustainable forest restoration
Chair : John Stanturf

- 11.45 – 12.10 **Woodam Chung**, Enrico Marchi - “*Adaptation measures for sustainable forest operations*”
- 12.10 – 12.25 **Corrado Battisti**, Alessandro Zocchi: *Selecting surrogate species to improve experience of forest ecosystems in youngest nature-disconnected generations: a framework to select Experiential Key Species.*
- 12.25 – 12.40 **Abdelkader Bouahmed**, Federico Vessella, Fazia Krouchi, Bartolomeo Schirone, Arezki Derridj: *Predicting the current and future potential distributions of Cerdus atlantica in North Africa using Maxent.*
- 12.40 – 12.55 **Veronica De Micco**, Angela Balzano, Enrica Zalloni, Giovanna Aronne, Katarina Čufar, Paolo Cherubini, Giovanna Battipaglia: *Wood responses to drought in Mediterranean forests: evidences from xylogenesis and functional wood traits in tree-ring series.*
- 12.55 – 13.10 **Barbara Mariotti**, Martina Cambi, Fabio Fabiano, Alberto Maltoni, Andrea Tani, Enrico Marchi: *Effect of soil compaction on early growth of Quercus robur seedlings since germination.*

13.10 – 14.15 Lunch – Poster session

Symposium 2 - Scientific and technological advancements for a sustainable forest restoration
Chair : Palle Madsen

- 14.15 – 14.40 **Vladan Ivetic**, Jovana Devetakovic - “*Concerns and evidences on genetic diversity in planted forests*”
- 14.40 – 15.05 **Gianluca Piovesan**, Alfredo Di Filippo, Goffredo Filibeck, Irene Tunno, Scott Mensing - “*The contribution of historical ecology to functional restoration: case studies from Apennines forests* ”
- 15.05 – 15.20 **Federico Vessella**, Javier López-Tirado, Bartolomeo Schirone: *Moving towards a definitive high-resolution map of cork oak in the Mediterranean Basin to restoration purposes.*
- 15.20 – 15.35 **Giovanna Battipaglia**, Paolo Cherubini, Veronica De Micco: *Responses of water use efficiency to drought in Mediterranean forests: evidences from stable isotopes.*
- 15.35 – 15.50 **Maria Letizia Gargano**, Giuseppe Venturella: *Mycoforestry in Sicily: a proposal to enhance the multifunctionality of forests.*
- 15.50 – 16.05 **Antonio Montagnoli**, Mattia Terzaghi, Gabriella Stefania Scippa, Donato Chiatante: *Adaptation and restoration of Mediterranean forests: the role of the hidden half.*
- 16.05 – 16.20 **Maria Raffaella Ortolani**, Massimiliano Marani, Avra Schirone, Gabriele Camillotti, Giampiero Ciaschetti, Teodoro Andrisano: *New approach of*

aerial seeding to restore Mediterranean mountains: a case of study in Parco Nazionale della Majella (Abruzzi, Italy).

16.20 – 17.00 Coffee Break– Poster session

Symposium 2 - Scientific and technological advancements for a sustainable forest restoration
Chair : Vladan Ivetic

- 17.00 – 17.25 **Kalliopi Radoglou** -“*Nursery production of wide variety forestry seedlings in order to enhance the biodiversity and the regeneration success in forest restoration*”
- 17.25 – 17.40 **Camilla Wellstein**, Francesco Spada: *Florogenetic origin explains forest resprouting capacity across topographical gradients in peninsular Italy.*
- 17.40 – 17.55 **Mika Yoshida**, Rin Sakurai, Hideo Sakai: *Forest road planning and maintenance under climate change.*
- 17.55 – 18.10 **Tatiana Marras**, Camilla Wellstein, Domenico Ragno, Agnese Allegrini, Bartolomeo Schirone: *The use of multipurpose species in forest landscape restoration. The case of Salento (Apulia, Italy).*
- 18.10 – 18.25 **Ugo Chiavetta**, Gianluigi Mazza, Nicolò Camarretta, Paolo Cantiani, Isabella De Meo, Alessandro Paletto, Alessandra Lagomarsino: *Use of terrestrial laser scanner to monitor structural and biometrical variables in degraded peri-urban forests.*

18.25 – 20.30 Round Table “Mediterranean forests: Guidelines for adaptive measures”
Chairs: Orazio Ciancio and Francesco Maria Raimondo

20.30 Buffet dinner at Palazzo Sant'Elia

FRIDAY, APRIL 21
SALA DELLE LAPIDI – PALAZZO DELLE AQUILE

08.30 – 09.00 Registration

Symposium 3 - Political, social, and economical implications related to forest restoration activities
Chair : Kalliopi Radoglou

- 09.00 – 09.25 **Davide Pettenella**, Lorenzo Ciccarese, Aynur Mammadova, Caroline Sartorato – “*Formal commitments on Zero forest degradation and on deforestation-free supply chain: an effective mean of forest protection?*”
- 09.25 – 09.50 **Eduardo Rojas Briales** - “*Opportunities for forest landscape restoration especially in dry lands*”

09.50– 10.05 Irene Koutseri, Anna Logotheti, Vassiliki Roumeliotou: *Grazing as a conservation tool for priority habitat types in Prespa National Park and the case study of *9562 - Grecian Juniper Woods: philosophy, implications and opportunities*

Symposium 4 - Forest restoration, landscape management, and ecosystem services
Chair : Catherine Collet

10.05 – 10.30 **John A. Stanturf** - “*Anticipating climate change and transforming degraded forests: The billion hectare challenge*”.

10.30 – 10.55 **Orazio La Marca**, Monica Notarangelo, Nicola Moretti - **Italy** - “*On the forest restoration times*”

10.55 – 11.10 Alessandra Lagomarsino, Kalliopi Radoglou, Foteini Doukalianou, Alessandro Elio Agnelli, Gianluigi Mazza, Ugo Chiavetta, Isabella De Meo, Michail Orfanoudakis: *Monitoring of soil carbon and nitrogen cycling in degraded forest after thinning intervention for ecosystem restoration and climate change mitigation*.

11.10 – 11.25 Giuseppe Pignatti, Gianni Facciotto, Giulio Sperandio, Stefano Verani: *Eucalyptus plantations in Italy and forest rehabilitation: the way towards a sustainable management*.

11.25 – 14.30 Visit to the Botanical Garden and Lunch

SALA DELLE LAPIDI – PALAZZO DELLE AQUILE

Symposium 4 - Forest restoration, landscape management, and ecosystem services
Chair : Catherine Collet

14.30 – 14.55 **Palle Madsen**, Khosro Sagheb-Talebi, Ole Kim Hansen - “*A new collaborative project on the Caspian forests of Iran: A gene pool for the adaptation of European forests?*”

14.55 – 15.20 **Lorenzo Ciccarese**, Davide Pettenella - “*From afforestation and reforestation to forestation, from goods to services. How science and society can shape the transition*”

15.20 – 15.35 Renzo Motta, Roberta Berretti, Pierpaolo Brenta, Fabio Meloni, Antonio Nosenzo, Pier Giorgio Terzuolo, Giorgio Vacchiano: *Restoration and sustainable management of beech (Fagus sylvatica) stored coppices in North Western Italy*.

15.35 – 15.50 Mohamed Fennane, Francesco Maria Raimondo, Mohamed Rejdali: *Conservation of the biodiversity and sustainable restoration of cork oak Maamora forest (Morocco)*

15.50 – 16.05 Martina Cambi, Francesca Giannetti, Davide Travaglini, Gherardo Chirici, Enrico Marchi: *Assessing forest logging soils disturbance by multi-temporal analysis of ground high resolution model derived by Portable Laser Scanner and physical parameters sampling*.

Symposium 4 - Forest restoration, landscape management, and ecosystem services*Chair : Francesco Spada*

- 16.05 – 16.30 **Catherine Collet**, Claudine Richter, Erwin Ulrich, Marieke Blondet - *“Innovating forest plantation practices: science, technical development and knowledge exchange”*
- 16.30 – 16.45 **Francesco Spada**: *Geobotanical foundations and diversity patterns in the Mediterranean forests.*
- 16.45 – 17.00 **Magda Bou Dagher Kharrat**, Marine Lovero, Valentine Pleiss, Pedro Regato Pajares, Alain Chaudron: *MEDFORVAL, the Mediterranean network of forested areas of high ecological value: restoration, protection or management of woodlands sites.*
- 17.00 – 17.15 **Rafael Da Silveira Bueno**, Daniel Garcia, Mauro Galetti, Tommaso La Mantia: *Spatio-temporal patterns and drivers of secondary succession in a Mediterranean landscape.*
- 17.15 – 17.30 **Cristina Salmeri**, Francesco Maria Raimondo, Giannantonio Domina: *The contribution of forest restoration to the conservation of woody endangered species in Sicily.*
- 17.30 – 17.45 **Dusan Danilo Jokanovic**, Dragica Milan Vilotic, Vesna Milan Nikolic, Dragica Stankovic: *Radial increment of Taxodium distichum from Veliko ratno ostrvo area (Belgrade-Serbia) at two different heights of the trunk.*
- 17.45 – 18.00 **Valeria Tomaselli**, Giuseppe Veronico, Cristina Tarantino, Palma Blonda: *Mapping and monitoring in protected natural areas: the use of the FAO LCCS as an effective tool for habitat mapping and change detection.*

Symposium 4 - Forest restoration, landscape management, and ecosystem services*Chair : Bartolomeo Schirone*

- 18.00 – 18.15 **Roberto Greco**, Maria Immacolata Marzulli, Manuela Persia, Patrizia Tartarino: *Changes of forest communities surface in the Murge of Taranto (Puglia - Southern Italy) in the last 60 years.*
- 18.15 – 18.30 **Javier López-Tirado**, Federico Vessella, Pablo J. Hidalgo: *Quercus suber in the Iberian Peninsula: ecological characteristics and cork exploitation.*
- 18.30 – 18.45 **Said Lahssini**, Mustapha Naggar, Said Moukrim: *Toward sustainable forest management in Morocco: restoration, certification and regional program as cases.*
- 18.45 – 19.00 Pietro Minissale, **Saverio Sciandrello**: *The coastal communities of Junipers in Sicily: conservation status and perspectives of management and restoration.*

19.00 – 20.00 Closing Ceremony

POSTER SESSION

THURSDAY, APRIL 20 - FRIDAY, APRIL 21
SALA MARTORANA – PALAZZO COMITINI

- 1 Anna Dinella, Ingo Heinrich, Alfredo Di Filippo, Michele Baliva, Aldo Schettino, Giuseppe De Vivo, Gianluca Piovesan: *The longevity and resilience of Pinus leuco-dermis Antoine: a long tree-ring chronology to investigate the Mediterranean climate.*
- 2 Carmelo Maria Musarella, Ana Cano Ortiz, José Carlos Piñar Fuentes, Sara Del Río, Carlos José Pinto Gomes, Giovanni Spampinato, Eusebio Cano: *Analysis vegetation of Juniperus oxycedrus subsp. badia microforests in the Iberian Peninsula: increasing their knowledge for a better restoration.*
- 3 Tommaso La Mantia, Donato Salvatore La Mela Veca, Giulia Casamento, Angelo Dimarca, Giuseppe Giaramida, Giovanni Landini, Giuseppe Pace, Rafael Da Silveira Bueno: *Strategies for the re-naturalization of reforestation: the case study of the Sicilian clay hills.*
- 4 Vasilije Isajev, Milan Mataruga, Rakonjac Ljubinko, Vera Lavadinovic, Aleksandar Lucic: *Genetic variability of Austrian pine (Pinus nigra) seedlings in response to water deficit and its importance to reforestation in arid terrain.*
- 5 Aurelio Angelini, Francesco Cancellieri, Renato Carella, Giuseppe Lo Paro, Vincenzo Piccione, Francesco Maria Raimondo, Salvatore Scuto: *In defence of biodiversity and Mediterranean landscape: the “Carta dei Comuni custodi della macchia mediterranea”.*
- 6 Emilio Badalamenti, Olimpia Campo, Rafael Da Silveira Bueno, Martina Gallo, Donato Salvatore La Mela Veca, Salvatore Pasta, Giovanna Sala, Tommaso La Mantia: *Vegetation dynamics within afforested coastal areas: regeneration by native species or invasion by alien species?*
- 7 Jovana Devetakovic, Vladan Ivetic, Mirjana Sijacic-Nikolic, Jelena M Aleksic: *Nuclear and chloroplast variability of Ulmus laevis populations near Belgrade (Serbia): prospects for conservation.*
- 8 Marina Nonic, Mirjana Sijacic-Nikolic: *Production of European beech cultivars by grafting on different rootstocks.*
- 9 Markus Hoehl, Andreas Bolte: *Online survey on forest adaptation and restoration under global change - An approach to gathering expert knowledge and local experiences worldwide.*
- 10 Giorgos Varsamis, Petros Kakouros, Annita Logotheti, Theodora Merou: *Is the use of seeds for the restoration of the Grecian juniper wood (Juniperus excelsa) stands in the Prespa National Park a good practice?*
- 11 Rachid Meddour, Radia Larbi, Ouahiba Meddour-Sahar: *Dynamics and vulnerability of a mountain forest ecosystem: case of the cedar forest of Tikjda (Djurdjura National Park, Algeria)*
- 12 Sara Martelletti, Fabio Meloni, Renzo Motta, Michele Lonati, Marco Pittarello, Michele Freppaz, Andrea Paone, Massimiliano Ferrarato, Antonio Nosenzo: *Effects*

- of soil and plant species competition on sward restoration and plantations eight years after restoration*
- 13 Saverio Sciandrello, Salvatore Brullo, Pietro Minissale, Carlo Prato, Giovanni Signorello, Giovanni Spampinato, Gianpietro Giusso Del Galdo: *Woodlands of Sicily: biodiversity, conservation and future perspectives*
 - 14 Tommaso La Mantia, Mario Azzarello, Emilio Badalamenti, Angelo Dimarca, Domenico Fontana, Daniele Gucciardo, Salvatore Livreri Console, Elena Prazzi, Salvatore Tirrito, Paola Quatrini: *Restoration practices in Mediterranean habitats using native woody species*
 - 15 Teodoro Andrisano: *The forest portal of Majella National Park.*
 - 16 Nadia Abdelkrim, Fazia Krouchi, Yassina Amirat, Francois Lefevre, Djaffer Aitsidhoum, Federico Vessella, Arezki Derridj: *Synchronized masting across Atlas cedar forest patches of the Djurdjura.*
 - 17 Paolo Cantiani, Isabella De Meo, Alessandra Lagomarsino, Maurizio Marchi, Alessandro Paletto: *Analysis of the influence of the silvicultural treatments on ecosystem services in black pine (*Pinus nigra*) stands in Central Italy.*
 - 18 Elisa Bianchetto, Paolo Cantiani, Ugo Chiavetta, Isabella De Meo, Alessandra Lagomarsino, Alessandro Paletto, Stefano Mocali, Silvia Landi, Elena Salerni: *The role of forest management practices to increase the provision of forest ecosystem services: the experiences of two LIFE projects in Central Italy.*
 - 19 Pietro Mazzola, Francesco Maria Raimondo, Vivienne Spadaro: *Protection and conservation of the manna ash landscape in Sicily.*
 - 20 Francesco Maria Raimondo, Filippo Scafidi, Emilio Di Gristina: *Sustainable use of Mediterranean forest resources: the collection and recycling of cork stoppers.*
 - 21 Riccardo Boschetto, Carmela Cascone, Lorenzo Ciccarese, Piera Pellegrino, Valerio Silli: *Forest restoration for disaster risk reduction. Success stories in Italy.*
 - 22 Giuseppe Modica, Angelo Merlino, Francesco Solano: *Sentinel-2 imagery for mapping Cork oak (*Quercus suber*) distribution in Calabria (Italy): capabilities and quantitative estimation for forest restoration activities.*
 - 23 Ignazio Camarda, Antonello Brunu, Luisa Carta, Gabriella Vacca, Giuseppe Brundu: *Main types of forest, macchia and garigues of Sardinian island.*
 - 24 Anna Maria Mercuri, Assunta Florenzano, Paola Torri: *Environment, human impact and the role of trees on the Po plain during the Middle and Recent Bronze Age: Pollen evidence from the Terramara of Santa Rosa di Poviglio (SUCCESSO-TERRA).*



Congress locations

1. Palazzo dei Normanni, Piazza della Vittoria.
2. Palazzo Comitini, Via Maqueda, 100.
3. Palazzo delle Aquile, Piazza Bellini.
4. Orto Botanico, Via Lincoln, 2.
5. I CUCCI Bistrorante, Piazza Bologni, 3/4.
6. Palazzo Sant'Elia, Via Maqueda, 81.