



HAL
open science

INTERPOPPER: Interactions between natural and artificial poplar stands and selection pressures associated with their management in French landscape. Poster.

Véronique V. Jorge, Arnaud A. Dowkiw, Mary Juteau, Vanina Guérin, Patrick Poursat, Marc M. Villar, Catherine Bastien, Pascal Frey, Jean Pinon, Sébastien Duplessis, et al.

► **To cite this version:**

Véronique V. Jorge, Arnaud A. Dowkiw, Mary Juteau, Vanina Guérin, Patrick Poursat, et al.. INTER-POPGER: Interactions between natural and artificial poplar stands and selection pressures associated with their management in French landscape. Poster.. Population genetics and genomics of forest trees: from gene function to evolutionary dynamics and conservation; A joint conference of IUFRO working groups 2.04.01 (population, ecological and conservation genetics) and 2.04.10 (genomics), and COST Action E-28 (genosilva: european forest genomics network), Oct 2006, Madrid, Spain. 1 p., 2006, Population genetics and genomics of forest trees: from gene function to evolutionary dynamics and conservation. Programme and conference abstract book. hal-02755567

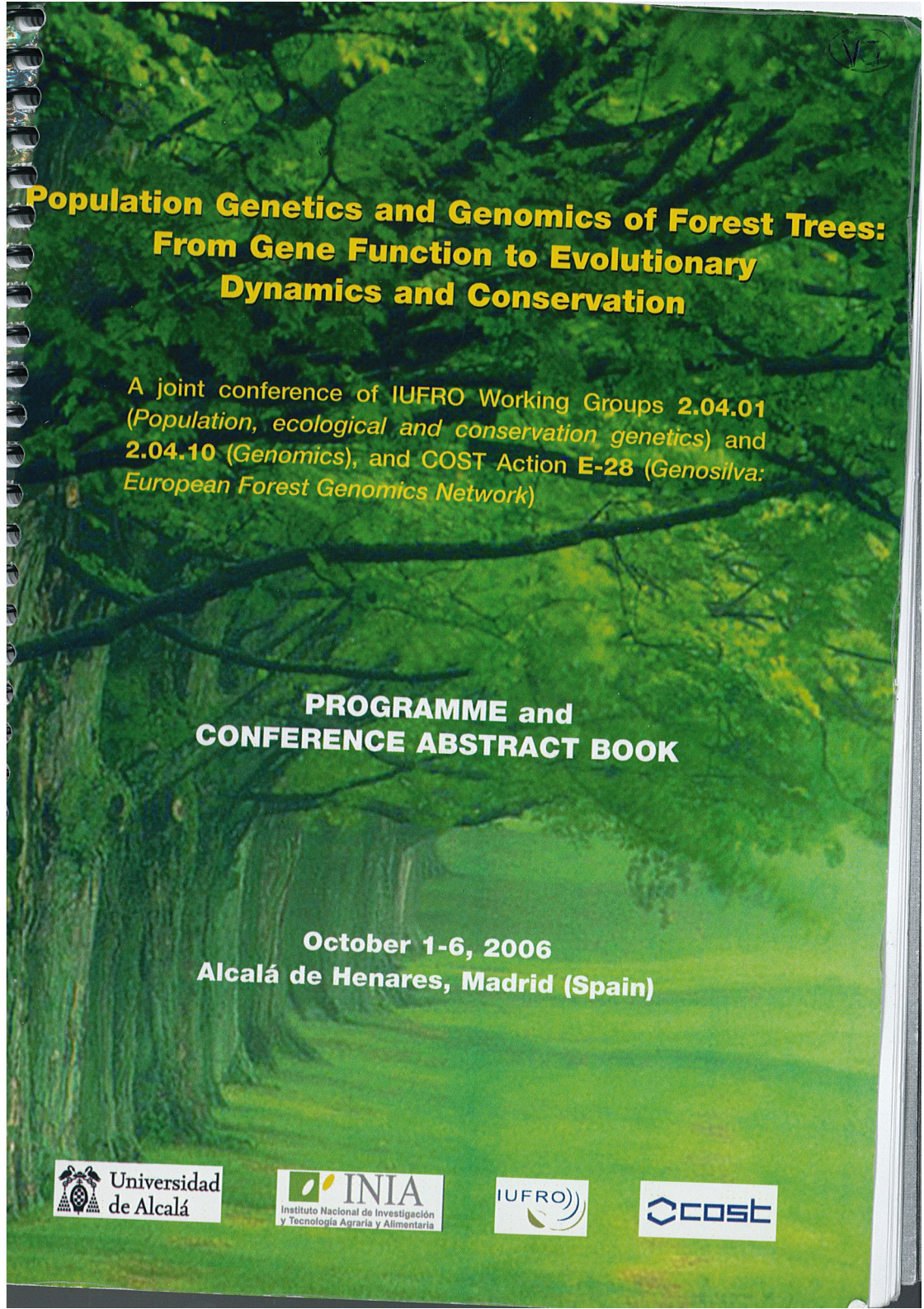
HAL Id: hal-02755567

<https://hal.inrae.fr/hal-02755567>

Submitted on 3 Jun 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



**Population Genetics and Genomics of Forest Trees:
From Gene Function to Evolutionary
Dynamics and Conservation**

A joint conference of IUFRO Working Groups **2.04.01**
(*Population, ecological and conservation genetics*) and
2.04.10 (*Genomics*), and COST Action **E-28** (*Genosilva:
European Forest Genomics Network*)

**PROGRAMME and
CONFERENCE ABSTRACT BOOK**

**October 1-6, 2006
Alcalá de Henares, Madrid (Spain)**



INTERPOPGER: Interactions between natural and artificial poplar stands and selection pressures associated with their management in French landscape

**V. Jorge, A. Dowkiw, V. Guérin, P. Poursat, M. Villar, C. Bastien ¹
P. Frey, J. Pinon, S. Duplessis, A. Kohler, B. Barres, C. Rinaldi, F. Martin ²
P. Faivre-Rampant ³ C. Plomion, C. Lalanne ⁴ E. Klein, D. Allard ⁵**

In French landscape, poplars are major components of three ecosystems contrasting for the biological resources, local management and public awareness. *Populus nigra* is an important species of the natural riparian ecosystem when compatible interspecific hybrids are deployed in monoclonal plantations nearby. With its columnar growth habit, Lombardy poplar is undoubtedly the most famous poplar of the landscape. INTERPOPGER project aims at evaluating impact of this land mosaic on genetic diversity of natural black poplar (*P. nigra*) and on the evolution of genetic diversity of the associated pathogen *Melampsora larici-populina* (Mlp). Identification of molecular determinants of poplar/Mlp interaction will offer pertinent markers with adaptive value for both organisms. Gene flow from cultivated to natural populations will be quantified at different developmental ages. Impact on gene flow level of landscape components and biological factors such as phenology and fertility will be evaluated. Finally, joint analysis of evolutionary and functional impacts of poplar/Mlp interactions will provide guidelines for sustainable management of natural and cultivated poplar populations.

NOTES:

CONTACT INFORMATION

Unité Amélioration, Génétique et
Physiologie Forestières, INRA
Orléans, BP20619, Ardon 45166 Orléans
Cedex, France (e-mail:
jorge@orleans.inra.fr)

² UMR INRA-UHP 1136 Interactions
Arbres/Micro-organismes, Centre
INRA Nancy, 54280 Champenoux,
France

³ Unité de Recherches en Génétique
végétale, INRA Evry, 91057
Evry Cedex, France

⁴ UMR BIOGECO 1202 Biodiversité,
gènes et écosystèmes, INRA
Pierroton, 33612 Cestas cedex,
France

⁵ UR Biométrie Domaine St-Paul, site
Agroparc 84 914 Avignon cedex
9 INRA, France

KEYWORDS:

Natural resources, land mosaic, gene
flow, resistance durability, sustaina-
ble management.