



**LIFE4FIR – Project LIFE18 NAT/IT/000164**

**“Decisive in situ and ex situ conservation strategies to secure the critically endangered Sicilian fir, *Abies nebrodensis*”**

## **LIFE4FIR dissemination events at midterm period**

### **Action E.2**



**TABLE OF CONTENTS**

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1. Introduction ..... 3  
2. TV report ..... 4  
3. Events ..... 5

## **1. Introduction**

This report contains all LIFE4FIR dissemination events organized and participated by the project partners from the start of the project (01/10/2019) until mid-term period of the project (31/07/2021).

In particular LIFE4FIR project activities, objectives and preliminary results were disseminated in a TV report and 8 events.

## 2. TV report

During the mid-term period of the LIFE4FIR project, a TV report, managed mainly by EPM and UNIPA partners, on LIFE4FIR was broadcasted by the RAI3 regional and RAI2 national news the 24th and 25 December 2019.





### 3. Events

During the mid-term period of the LIFE4FIR project, all the LIFE4FIR beneficiaries disseminated the project activities, objectives and preliminary results to general public and Institutions participating at the following 8 events:

- On Sunday 10th November 2019 a group (about 100 people) of members of the FIAB, the Italian Friends of the Bicycle Federation of Catania visited the Madonie Park on the occasion of the thirty-year establishment of the Park and were acquainted on the objectives and actions of LIFE4FIR. Visitors showed great interest in the activities carried out for the protection and conservation of *Abies nebrodensis* and in the new actions and interventions envisaged in LIFE4FIR, illustrated by the director of the Park Dr. Peppuccio Bonomo.





- 21 May 2020, the day of the Natura 2000 network was celebrated: For the occasion, the coordinator Roberto Danti and his Sicilian colleagues Prof. Rosario Schicchi and Dr. Peppuccio Bonomo participated in the releasing of some short videos about our project.



- meeting held the 4 March 2021 by EPM, at the Mario Rutelli upper secondary school of Palermo as part of school-job alternation activity.



- Participation at the Congress of the Spanish Society for evolutionary biology (SESBE) on 5-7 February 2020 in Seville

VII BIENNIAL CONGRESS OF THE SPANISH SOCIETY FOR EVOLUTIONARY BIOLOGY (SESBE)  
SEVILLE, 5-7 FEBRUARY 2020

## CERTIFICATE OF PRESENTATION

**ANASS TERRAB**

Has presented a Poster entitled “*Development of SNP markers to monitor genetic relationship and hybridisation in natural population of Abies nebrodensis*” in the VII Biennial Congress of the Spanish Society for Evolutionary Biology that took place at the University of Seville (Seville, Spain) from 5<sup>th</sup> to 7<sup>th</sup> February (2020).

Co-authors:  
Francisco Balao; Pedro L. Ortiz; Jose Carlos del Valle; Montserrat Arista

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**Juan Arroyo**

Chair of the Organizing Committee of the VII Biennial Congress of SESBE

**CONGRESS OF THE SPANISH SOCIETY  
FOR EVOLUTIONARY BIOLOGY**  
SEVILLE, 5-7 FEBRUARY 2020

UNIVERSIDAD DE SEVILLA  
SESBE  
Sociedad Española de Biología Evolutiva

DECISION MAKING IN CELL COLLECTIVES  
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VII BIENNIAL CONGRESS OF SESBE  
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**Development of SNP markers to monitor genetic relationship and hybridisation in natural population of *Abies nebrodensis***  
Anass Terrab<sup>1</sup>; Francisco Balao<sup>1</sup>; Pedro L. Ortiz<sup>1</sup>; Jose Carlos del Valle<sup>1</sup>; Montserrat Arista<sup>1</sup>  
<sup>1</sup> Departamento Biología Vegetal y Ecología, Universidad de Sevilla  
atlas@us.es

*Abies nebrodensis* is an endemic species to the north-central part of Sicily. The Nebrodi fir is classified as critically endangered by the IUCN Red List and included in the list of 50 most endangered plants in the Mediterranean. According to recent estimates, it consists of a single population with 30 adult trees and a fluctuating number of juveniles derived from natural regeneration (170 according to the last census); besides, some thousands of cultivated plants are preserved as ex situ collection. Hybridisation between *A. nebrodensis* and both *A. alba* and *A. cephalonica* is one of the most important concerns in the conservation of this endangered fir, and conservation authorities suspect the hybrid origin of some seedlings in the natural population. In the last years, many papers highlighted the power of SNPs markers to study population diversity and parentage assessment, and as few as 100–500 SNPs are sufficient to resolve parentage completely in most situations. We used restriction site associated DNA sequencing (RAD-seq) to identify high-quality and information-rich SNPs in samples of *A. nebrodensis*, *A. alba* and *A. cephalonica*. We developed a 144 SNP-array for genotyping of *A. nebrodensis* adults and juveniles. This SNP panel will be tested to, (1) evaluate the variability and degree of genetic relationship among the adult mature plants of the original population (2) determine the rate of outcrossing, inbreeding and self-fertilisation and (3) assess the eventual hybridisation due to pollen coming from non-native *Abies* species planted in the park (*A. alba* and *A. cephalonica*).

228



- LIFE4FIR activities and main results were presented at the IV National Conference of IPSP-CNR on 24-26 February 2021



- On Saturday 5th May 2021, the ‘Germogli in Città’ event was organized in Piazza del Duomo in Messina to celebrate the World Environment Day. On this occasion, the Ente Parco delle Madonie prepared a space for the presentation and promotion of the Life4fir project, through the distribution of gadgets, brochures, hats, pencils and the assignment of some young plants of *Abies nebrodensis* delivered directly by the president of the Park Authority, Dr. Angelo Merlino.





- During the two-days Kick Off meeting, the LIFE4FIR group was welcomed by the Mayor of Polizzi Generosa, the municipality where *A. nebrodensis* population is located. He demonstrated a great interest in the project and its promotion. He proposed to set up the seedbank and cryobank in the Museo of *A. nebrodensis*, just established in the city hall.



- Meeting with researchers of FEM on 17/02/2021 to exchange information, experience, including Life4fir; brochures were delivered.

