

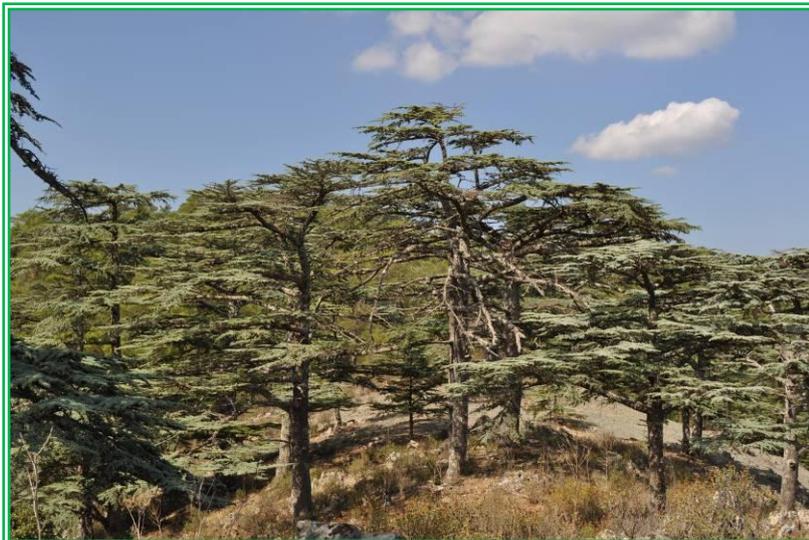


**FREDERICK RESEARCH CENTRE**

**Vulnerability of the narrow endemic *Cedrus brevifolia* from Cyprus: Detection of genes and phenotypic trait diversity linked to adaptation.**

Protocol No. DIDAKTOR/0609/13

## **Deliverable 1**



**Project Management Manual**

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## **List of key-words and abbreviations (when appropriate).**

DF: Department of Forests

DUTh: Demokritos University of Thrace

FRC: Frederick Research Centre

HO: Host Organisation

INRA: French National Institute for Agricultural Research (Avignon)

PA: Partner Organisation

PAs: Partner Organisations

RPF: Research Promotion Foundation

SC: Scientific Committee

WP: Work Package

WPs: Work Packages

# 1. Introduction

The current **Project Management Manual**<sup>2</sup> describes and ensures the:

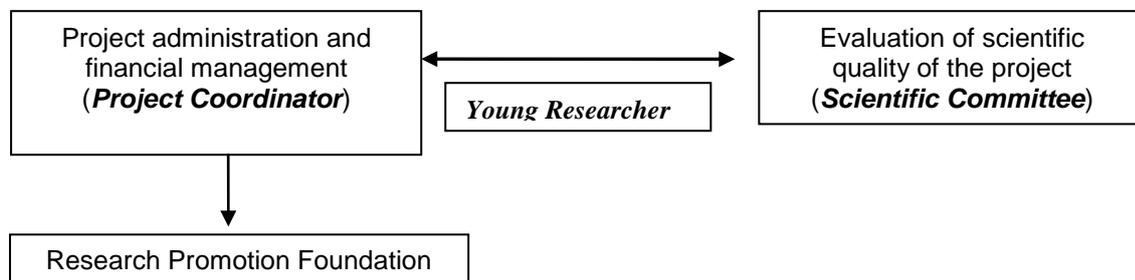
- 1) effective project management,
- 2) role and expected activities of the Partner Organisations (PAs),
- 3) flow of information between the PAs and the researchers involved in the project and the dissemination of project results and
- 4) timely preparation of actions and deliverables.

The purpose of this manual is to detail the procedures required to ensure the smooth and successful implementation of the present project's<sup>3</sup> aims and the objectives of "DIDAKTOR" programme<sup>4</sup>. This manual describes a clear framework within which each PA (and its corresponding researcher), as well as the Young Researcher, has a distinct role through effective and efficient communication / collaboration.

## 2 Project management

The management of the project is classified into two general categories, as these are presented in Figure 1.

Figure 1: Chart showing the scales of project management.



### 2.1 Project Coordinator

The effective administration and management of the project will be undertaken by the **Project Coordinator** (Dr. Costas Kadis). The coordinator is the liaison between the Host Organisation (HO) and the PAs, as well as between the PAs and the RPF. Hence, any information and clarifications regarding the implementation of the project will be requested from the Project Coordinator who will

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<sup>2</sup> The current Project Management Manual has been sent to all participating organisations, according to the requirements of the Work Package 1.

<sup>3</sup> Assessment of gene and phenotypic adaptation of narrow endemic tree *C. brevifolia*, and proposals for its genetic resources conservation strategy.

<sup>4</sup> The main objective of the "DIDAKTOR" Programme is the immediate inclusion of young Post Doctoral scientists in the Research, Technological Development and Innovation System of Cyprus in order to implement high level research projects. The aim is the upgrading of the work force of research institutions and enterprises and the expansion of their research capabilities.

be solely responsible for the communication with the RPF. In addition, the Project Coordinator will be updated on a regular basis about the implementation progress of the Work Packages (WPs), as well as any possible issues that may arise, by the PA responsible for each WP. The Project Coordinator will also monitor and verify the timely realisation of the production of the expected periodical project reports which will be sent to the RPF (6-month Reports, Interim Report, Final Report). These reports will be the project monitoring indicators for both the project participants and the RPF. The project's administrative and financial management by the Project Coordinator will also include the compilation of all necessary information and documents required for the completion of the reports to be submitted to the RPF. Moreover, the **Young Researcher** (Dr. Nicolas-George Eliades) will also have a central role in the flow of all these administration issues, in order to become more familiar with the administration of high-level research projects.

## **2.2 Scientific Committee**

The scientific coordination and management of the project will be achieved by the establishing of the Scientific Committee (SC). The SC is necessary both as a support to the coordination by advising and evaluating the scientific quality of the project, as well as a body that can address the scientific and technical community on behalf of the project. The SC will be the corresponding body of the project for the affirmation of the:

- i. sampling design which will be used for the project purposes (WP 4)
- ii. locations of meteorological stations in the field (WP 4)
- iii. final number and type of genes which will be applied for the whole sample size (WP 5)

Therefore, the committee will be responsible for the decision-making process regarding the implementation of the project (through systematic overview of the progress and addressing possible problems), such as fieldwork methodology (WP4), labwork methodology (WP5, WP6, WP7), advising and evaluating the scientific quality of the work (WP1, WP2, WP8) and contribution in preparing technical documents and reports (WP1).

The SC consists of one representative from each PA, as well as the Project Coordinator and Young Researcher (both from HO), as presented below:

- i. Dr. Costas Kadis (Project Coordinator - Frederick Research Centre)
- ii. Dr. Nicolas-George Eliades (Young Researcher - Frederick Research Centre)
- iii. Dr. Bruno Fady (Senior Researcher at INRA Avignon, France)
- iv. Dr. Aristotelis C. Papageorgiou (Assistant Professor at the Department of Forestry and Management of Environment and Natural Resources, Democritus University of Thrace, Orestiada, Greece)
- v. Dr. Andreas Christou (Conservator of Forests A', Department of Forests, Ministry of Agriculture, Natural Resources and Environment)

For the effective coordination of its activities, the SC will meet at the beginning of the project (July 2011). The SC will also hold meetings annually (October 2011, October 2012, October 2013,

February 2014) in order to evaluate the scientific quality of the work and provide advice on further management of the project. Moreover, the SC will meet out of schedule in special cases, when significant issues arise. Given that the members of the SC are from different countries, the meetings will be done via teleconference (e.g. Skype), while the members of the Committee will be in continuous informal contact with the Project Coordinator and Young Researcher.

### **3. Role and expected activities of the participating organisations**

The role of the **Frederick Research Centre (FRC)** and the researchers involved in the project is multidimensional. FRC and its staff (Project Coordinator and Young Researcher) are responsible for managing and coordinating the project (WP1). The HO and the Project Coordinator are responsible for securing successful communication between participants during and at the end of each WP (WP1). Based on this assumption both the Project Coordinator and the Young Researcher are also members of the SC (WP1). FRC is also responsible for the project's dissemination activities (WP2). Further, the FRC will provide the library facilities to the Young Researcher for his bibliographical research (WP3), and the equipment for the fieldwork design and execution (WP4). The FRC will contribute in the meteorological data analysis using its expertise on such data (WP7). Moreover, the FRC will completely carry out statistical analyses from WP5 and WP6, with the collaboration of participants, in order to realise the project's objectives. Finally, the researchers from FRC will have an active role in formulating the general conclusions and developing the conservation strategy (WP8), as well as significant contribution to the scientific publications writing (WP2). The contribution of the Young Researcher, which is included in the HO activities, will be vital for the completion of all WPs.

The **French National Institute for Agricultural Research (INRA, Avignon)** (INRA-URFM – PA1) will participate in most phases of the project, transferring its expertise and experience on population genetics in Mediterranean ecosystems. It will participate in the structuring of the project and in the SC (WP1), as well as in bibliographical research (WP3). It will be the main collaborator for the realisation of gene amplification and nucleotide diversity (WP5), since it has the appropriate laboratory facilities. INRA-URFM will contribute to the processing of final results and to the formulating of general conclusions (WP8); staff from this institution (Dr. Bruno Fady) will participate in the final info day workshop (WP2), presenting a topic related to the project's scopes. Finally, it will also participate, using its experience on scientific writing, in the dissemination of results by being responsible for journal publications (WP2).

The Forest Genetics Laboratory (Department of Forestry and Management of the Environment and Natural Resources) from **Demokritos University of Thrace (DUTH – PA2)** will contribute by transferring its knowledge and experience on phenotypic and anatomic traits, as well as on population genetics. More specifically, the DUTH will be the main collaborator for the measurement and analysis of phenotypic and anatomic traits (WP6), since it has the specific experience in the interpretation of phenotypic and anatomic data. The DUTH will also contribute to bibliographical research (WP3) and to the SC (WP1). Regarding results dissemination, its participation will also be important, since it will contribute to the writing of articles for journal publications (WP2); a staff member of DUTH (Assist. Prof. Aristotelis Papageorgiou) will participate in the final info day

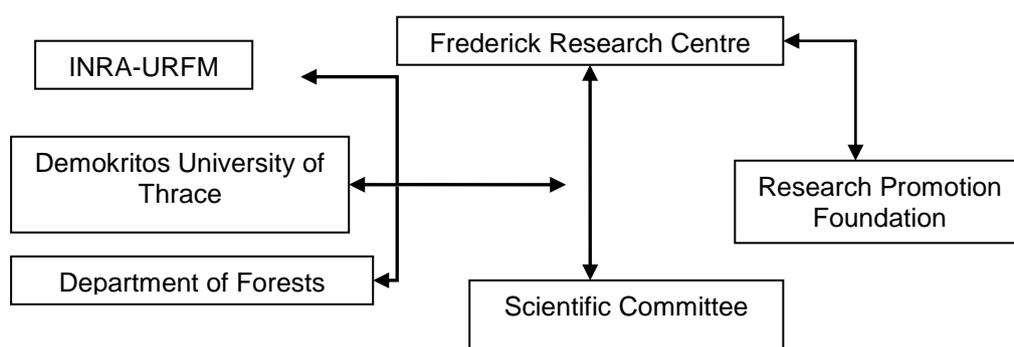
workshop (WP2), with an oral presentation on topics related to the project's scopes. Further, the DUTH will contribute to the processing of final results and to formulating the general conclusions (WP8).

The **Department of Forests** (DF – PA3) is the most knowledgeable Department in Cyprus in regards to its practical, scientific and bibliographical knowledge on Cyprus forests. This makes DF a significant collaborator in the SC (WP1), as well as for office data collection (WP3) and fieldwork (WP4), since it will secure successful fieldwork through its staff and equipment. DF will be the main collaborator for laboratory analysis of soil profiles and for meteorological data analysis (WP7). It will also contribute to the analysis of phenotypic-anatomic traits (WP6). It has an important role in utilising the project's results (WP2) and formulating the general conclusions (WP8). In addition, staff from DF will participate in the final info day workshop (WP2), with an oral presentation on topics related to the project's scopes. DF is the most appropriate governmental department in Cyprus regarding conservation and management of forests, and in extent, of genetic resources.

#### 4. Flow of information between participating organisations and dissemination of project results

The flow of information between the PAs and the researchers involved in the project will ensure the continuous and secure progress of the project. The described flow of information among the PAs is presented in Figure 2. Indirectly, this information flow is ensured through the SC meetings. However, the Young Researcher will ensure the direct and effective flow of information and communication among researchers from each PA, using a range of appropriate tools such as electronic mailing, telephoning and teleconferences.

**Figure 2:** Chart showing the flow of information between the project PAs.



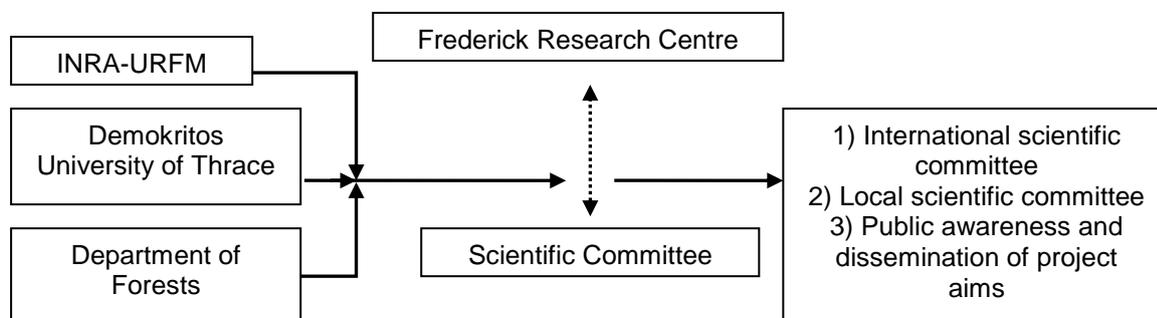
Flow of information and communication will be further facilitated by visits of the Young Researcher to the participating institutions abroad (PA1, PA2). During these visits, the aims and progress of the project overviewed, and the Young Researcher will have more direct discussions on the management and the scientific quality of the project (outcomes and deliverables from each WP).

Furthermore, the Young Researcher will have the opportunity of personal contact with other staff members of the participating institutions. Such contact will also contribute to sharing the project's aims with the wider scientific community, as well as to enriching the Young Researcher's scientific knowledge and experience (implementation of the objectives of "DIDAKTOR" programme). The Young Researcher will visit each of the institutions abroad two times for at least five days per visit (a total of four visits)<sup>5</sup>:

- a. INRA-URFM (PA1): Spring 2012, Spring 2013
- b. Demokritos University of Thrace (PA2): Spring 2012, Spring 2013

An important aspect of the project is also the dissemination of results, both to the international and local scientific committee, as well as to the wider public (Figure 3). The FRC will be responsible for these activities, with the assistance of the other participants. The Project Coordinator and Young Researcher will have a coordinating role in preparing and finalising all dissemination activities.

**Figure 3:** Chart showing the flow of project dissemination to the public.



Public awareness and dissemination of the project aims and progress to a large and diverse audience will be achieved by:

- i. promoting the project activities and outputs through the media: one TV-programme and three press releases,
- ii. including the project results and progress in the annual reports of the PAs and
- iii. creating a specialised webpage on the FRC website, which will host information related to the project.

Implementation of these three activities will be done by the Young Researcher, who will be supervised by the Project Coordinator.

The dissemination of the project results to the local interested parties and environmental scientists will be done through a one-day workshop which will be organised. This workshop will be a "final info day" in which the project's results will be presented by the Young Researcher. In addition, the scientific experts from the project partners abroad (Dr. Bruno Fady – INRA-URFM and Assis. Prof. Aristotelis Papageorgiou – DUTh) and a representative from the DF will be invited to give presentations on topics related to the project's results. A list of invited individuals and organisations

<sup>5</sup> These dates are an initial estimation; the dates may change during the project's running period.

will be prepared by the HO, which is the host institution of this event. Responsible for organising this workshop will be the YR and the Assistant Scientist (AS).

The presentation and publication of the scientific data and results that will arise from the project will be done, at an international level, by the:

- i. submission of three articles in international scientific journals,
- ii. submission and deposit of genes sequences from this project (WP 5) in the international GenBank and
- iii. participation of the YR in at least two international scientific conferences.

Implementation of these three activities will be done by the Young Researcher, who will be supervised by the other members of SC.

## **5. Timely preparation of deliverables:**

A vital parameter of this Project Management Manual is the description of the procedure for effective preparation of the project deliverables; their timely completion and high quality will be indicators of successful implementation.

The YR, with the supervision of the Project Coordinator, has the overall responsibility for coordinating the preparation of deliverables. However, the responsibility for each particular deliverable belongs to the corresponding PA as described in **Table 1**. The Project Coordinator and Young Researcher will be in continuous contact with the PA involved in each deliverable; the PAs will regularly inform the coordinator about the progress and any problems that may arise.

The project requires the preparation of eighteen deliverables in total. **Table 1** presents a short description of each deliverable, the work packages within which each deliverable will be prepared, the completion months, the PAs involved in preparing the deliverables and the PA mainly responsible for each deliverable. In addition, **Table 2** presents the timely preparation of the deliverable products of the project.

**Table 1:** Project deliverables and responsibility for their compilation according to the corresponding Participating Organisation.

<b>Deliverable</b>	<b>Description</b>	<b>Work Package</b>	<b>Completion (project Month)</b>	<b>Type of Deliverable</b>	<b>Participating Organisation</b>	<b>Responsible Organisation</b>
<b>D1</b>	Project Management Manual.	WP 1	2	Report	FRC, INRA, DUTh, DF	FRC
<b>D2</b>	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report.	WP 1	6, 12, 18, 24, 30, 36	Report	FRC, INRA, DUTh, DF	FRC
<b>D3</b>	Four reports, one for each of the YR's visits to the Partner Organisations abroad.	WP 1	12, 18, 24, 36	Reports	FRC	FRC
<b>D4</b>	Submission of three publications to international journals.	WP 2	36	Publications	FRC, INRA, DUTh, DF	FRC
<b>D5</b>	Presentations at least in two international scientific conferences.	WP 2	24, 36	Presentation	FRC	FRC
<b>D6</b>	Report on One-day workshop organized at the FRC at the end of the project, including the Workshop's Agenda and List of Participants.	WP 2	35	Report on Workshop, Agenda, List of Participants	FRC	FRC
<b>D7</b>	One TV program at a local TV channel.	WP 2	30	Presentation	FRC	FRC
<b>D8</b>	Update of the FRC website with press releases related to the project. Dissemination of the press releases (three) to the	WP 2	12, 24, 36	Presentation	FRC	FRC

<b>Deliverable</b>	<b>Description</b>	<b>Work Package</b>	<b>Completion (project Month)</b>	<b>Type of Deliverable</b>	<b>Participating Organisation</b>	<b>Responsible Organisation</b>
	press media.					
<b>D9</b>	Report of genes which will be tested in this project, responsible for phenotypic characteristics and physiological functions.	WP 3	4	Report	FRC, INRA	FRC
<b>D10</b>	Report on the creation of a Database including alternatives for the equipment to be used for environmental data collection (e.g. model, technical characteristics).	WP 3	4	Report	FRC	FRC
<b>D11</b>	Report on the creation of a Database with the ID number, the coordinates and the characteristics of each sampled individual.	WP 4	8	Report	FRC	FRC
<b>D12</b>	Report on the creation of a Database with the description of each of the sampled soil profile.	WP 4	8	Report	DF	FRC
<b>D13</b>	Principles and Laboratory Protocols of Molecular Techniques Employed in assessments for the present project.	WP 5	10	Report	INRA	FRC
<b>D14</b>	Preliminary report with the statistic measurements of population diversity.	WP 5	23	Report	INRA	FRC

<b>Deliverable</b>	<b>Description</b>	<b>Work Package</b>	<b>Completion (project Month)</b>	<b>Type of Deliverable</b>	<b>Participating Organisation</b>	<b>Responsible Organisation</b>
<b>D15</b>	Preliminary report with the results from the statistical analysis of phenotypic and anatomic traits.	WP 6	24	Report	DUTh	FRC
<b>D16</b>	Report of soil profiles and meteorological data analysis.	WP 7	14	Report	DF, FRC	FRC
<b>D17</b>	Report on the creation of digital maps (.jpeg) for illustration of gene diversity in the space.	WP 8	36	Report	DF, FRC	FRC
<b>D18</b>	Report with the conclusions and the conservation strategy proposal.	WP 8	36	Report	FRC, INRA, DUTh, DF	FRC

**Table 2: Timely preparation of the project deliverable products.**

Deliverable	Description	Work Package	Completion (project Month)
D1	Project Management Manual.	WP 1	2
D9	Report of genes which will be tested in this project, responsible for phenotypic characteristics and physiological functions.	WP 3	4
D10	Report on the creation of a Database including alternatives for the equipment to be used for environmental data collection (e.g. model, technical characteristics).	WP 3	4
D2	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report / <b>6<sup>th</sup> - month Progress Report.</b>	WP 1	6
D11	Report on the creation of a Database with the ID number, the coordinates and the characteristics of each sampled individual.	WP 4	8
D12	Report on the creation of a Database with the description of each of the sampled soil profile.	WP 4	8
D13	Principles and Laboratory Protocols of Molecular Techniques Employed in assessments for the present project.	WP 5	10
D2	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report / <b>12<sup>th</sup> - month Progress Report.</b>	WP 1	12
D3	Four reports, one for each of the YR's visits to the Partner Organisations abroad. <b>First report of YR's visits to the PA1 (INRA-URFM) abroad.</b>	WP 1	12
D8	Update of the FRC website with press releases related to the project. Dissemination of the press releases (three) to the	WP 2	12

Deliverable	Description	Work Package	Completion (project Month)
	press media. <b>First press releases.</b>		
D16	Report of soil profiles and meteorological data analysis.	WP 7	14
D2	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report / <b>Interim Report.</b>	WP 1	18
D3	Four reports, one for each of the YR's visits to the Partner Organisations abroad. <b>First report of YR's visits to the PA2 (DUTh) abroad.</b>	WP 1	18
D14	Preliminary report with the statistic measurements of population diversity.	WP 5	23
D2	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report / <b>24<sup>th</sup> – month Progress Report.</b>	WP 1	24
D3	Four reports, one for each of the YR's visits to the Partner Organisations abroad. <b>Second report of YR's visits to the PA1 (INRA-URFM) abroad.</b>	WP 1	24
D5	Presentations at least in two international scientific conferences. <b>First presentation in international scientific conference.</b>	WP 2	24
D15	Preliminary report with the results from the statistical analysis of phenotypic and anatomic traits.	WP 6	24
D8	Update of the FRC website with press releases related to the project. Dissemination of the press releases (three) to the press media. <b>Second press releases.</b>	WP 2	24

Deliverable	Description	Work Package	Completion (project Month)
D7	One TV program at a local TV channel.	WP 2	30
D2	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report / <b>30<sup>th</sup> -month Progress Report.</b>	WP 1	30
D6	Report on One-day workshop organized at the FRC at the end of the project, including the Workshop's Agenda and List of Participants.	WP 2	35
D3	Four reports, one for each of the YR's visits to the Partner Organisations abroad. <b>Second report of YR's visits to the PA2 (DUTH) abroad.</b>	WP 1	36
D5	Presentations at least in two international scientific conferences. <b>Second presentation in an international scientific conference.</b>	WP 2	36
D18	Report with the conclusions and the conservation strategy proposal.	WP 8	36
D8	Update of the FRC website with press releases related to the project. Dissemination of the press releases (three) to the press media. <b>Third press releases.</b>	WP 2	36
D17	Report on the creation of digital maps (.jpeg) for illustration of gene diversity in the space.	WP 8	36
D4	Submission of three publications to international journals.	WP 2	36
D2	Six Progress Reports: Four 6-month Reports (6th, 12th, 24th, 30th month of the project), Interim Report and Final Report / <b>Final Report.</b>	WP 1	36

## 6. Project Time frame

Work Package Number / Title	D U R A T I O N (months)																																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul		
WP1. Project Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WP2. Dissemination of Results										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WP3. Bibliographic research and data collection	X	X	X	X																																		
WP4. Fieldwork -sampling of plant material and environmental data			X	X	X	X	X	X																														
WP5. Application and analysis of molecular markers -gene amplification and nucleotide diversity									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X															
WP6. Measurement and analysis of phenotypic and anatomic traits									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X															
WP7. Analysis of environmental data							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WP8. Final processing of data and proposal for conservation																																		X	X	X	X	X
Progress Reports Submitted to RPF						X						X						X						X													X	