



Sustainable preservation of indigenous South Eastern European legumes and their traditional food and feed products

No. 168/01

Intermediate report



Structure of the Intermediate report

Part A: To be prepared by the coordinator

1. Publishable summary (4)

2. & 3. Project objectives and work progress and achievements during the period (6)

- 4. Deliverables and milestones
- 5. Project management (8)
- 6. & 7. Explanation of the use of the resources and finances

Appendix I: List of publications

Appendix II: List of non-project individual partners

Part B: To be prepared by each research group (partner)

Part A



- 1. Publishable summary (4)
- A summary description of project context and objectives
- A description of the work performed since the beginning of the project and the main results achieved so far

• WP1 - expeditions, mapping, collecting, ex situ and in situ preservation and construction of the database with accessions of collected species. (checking the references in existing national catalogues, and provided updated information on annual legume species in both wild and agricultural flora, wild populations and locally grown landraces)





• Initiate an *in situ* evaluation of their response to climate and soil factors and its cultivation potential



• Within WP1, most project participants made one or few expeditions to a highly targeted area.





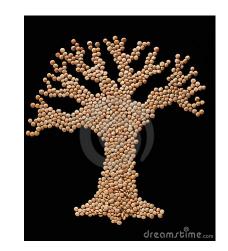
•Most expeditions, both local (national) and international were carried out over growing season (May, June and July) with primary goal to identify wild and agricultural legume flora. In case there are two participants in one country, they performed concerted actions (NS example).





- Some of collected plant material has been described in a concerted action aimed at the charaterization of the most important botanical and agronomic traits, combining conventional and molecular approaches.
- One of the results of both WPs is establishing the joint collection within WP1 and its description within WP2.
- Both WPs comprised numerous milestones and deliverables given separately, including numerous publications in journals and at meetings.









The expected final results and their potential impact and use (including the socio-economic impact and the wider societal implications of the project so far)

- Creating of efficient network that would stop the current and prevent any future trends towards fragmenting, as well as to accelerate the inclusion of its WBC in the existing European Research Core Countries networks and increase the visibility of its WBC and SEE participants in the European and global scientific audience.
- The project also aims at linking researchers, farmers and other end-users and policy-makers into a functional and organic chain of projecting common future to the mutual benefit.



http://polj.uns.ac.rs/~seelegumes/index.html





2. & 3. Project objectives and Work progress and achievements during the period

Please provide a concise overview of the progress of the work in line with the structure of the Annex A to the contract. For each work package, except project management, which will be reported in section 5, please provide the following information:

• A summary of progress towards objectives and details for each task



- Unexpected and uncertain delays in the first instalment had a decisive impact upon the progress towards the objectives of the project and the volume of the activities within both WPs.
- This had no essentially negative influence upon the progress of the project.
- The most important segment in the beginnings of the project is related to the successful launch of various in situ research and collecting expeditions that successfully updated the references from numerous national literature resources, enriching them with novel data.
- One of the fine examples is the re-discovery of *Pisum elatius* in southern Serbia and the first reports on the cultivation of chickpea in these regions.





- The results made within WP1, despite an extremely short duration of its first stage as defined by this intermediate report, gave a most solid basis for achieving the objectives of WP2 (deliverables and milestones)
- Also, novel and unplanned opportunities appeared, directly stemming out of the project objectives and contributing to their fulfilment, such as the successful extraction of ancient DNA from the charred legume seed of local origin (IMGGE, IFVCNS, FANS...)









Highlight clearly significant results;

- developing an integrated SEE ecogeographical study of wild and agricultural legume flora;
- re-discovering important legume crop wild relatives such as *Pisum elatius, Pisum arvense, Lens nigricans, Vicia narbonensis, Vicia serratifolia* or *Vavilovia formosa*





- •locating locally cultivated and maintained landraces of important annual legume crops such as faba bean or chickpea
- building up a joint ex situ SEE annual legume collection with its passport database



- conventional and molecular characterisation and evaluation of yield, quality and stress response
- defining joint protocols for common lab research





- establishing a complex network of field trials throughout SEE countries under the unified methodology
- published papers (listed separately at the end of the report)





If applicable, explain the reasons for deviations from Annex A and their impact on other tasks as well as on available resources and planning;

• Delay in the first instalment led to the delay of all the scheduled activities. No fatal outcome Consequences in some cases.



GENXPRO (Germany)-WP2, postponed all their activities for the next stage due to inability to provide material for molecular characterisation.

If applicable, explain the reasons for failing to achieve critical objectives and/or not being on schedule and explain the impact on other tasks as well as on available resources and planning (the explanations should be coherent with the declaration by the project coordinator)

•Activities within both WPs had to be delayed or cancelled due to the well-known events regarding the first instalment.

- Many activities were done within both WPs and many results were already achieved.
- The first period of the project, as covered by this intermediate report, was satisfactory and that is offers rather solid grounds for continuing with all scheduled activities in both WPs.
- Perhaps the most significant change in the project plan is an delay of the first annual project workshop



- A statement on the use of resources, in particular highlighting and explaining deviations between actual and planned person-months per work package and per beneficiary in Annex A;
- •In some cases, there were changes in the project personnel, especially within WP1. A financial surplus in comparison to the planned budget caused a larger number of participants in some of the collecting expeditions, resulting in better achievement of the scheduled results.
- •All these changes are justified by a separate annex.
- •There was no disagreement between the planned budget and the personnel salaries.
- If applicable, propose corrective actions.
- We suggest a significantly greater flexibility in the financial justification of the project, for the sake of the volume and the quality of the project results. Naturally, this potential broadened flexibility would be fully justified by necessary annexes and statements in order not to corrupt the basic SEE-ERA.NET (No. 168)









4. Deliverables table [Table 1] - 38 Milestones table [Table 2] - 31

To be prepared by the responsible participants (as indicated in Annex A), and then approved and submitted by the Coordinator. This table is cumulative, that is, it should always show all deliverables from the beginning of the project.

On the basis on individual reports





5. Project Management

Please use this section to summarise management of the consortium activities during the period.

• Consortium management tasks and achievements;

- The consortium management had a regular and efficient communication with the representatives of all the partners involved.
- All the decisions, especially those related to individual steps and actions within both WPs and those caused by the first instalment delay, were brought together and with a full consensus, as another testimony of the project compactness and complementing despite an unusually large number of participants.
- The managing process has been carried efficiently, with a particular acknowledgement to colleagues from management team in complex financial issues.



- Problems which have occurred and how they were solved or envisaged solutions;
- The delay in the first instalment influenced the communication between the project partners,
- The first annual project workshop would have been of great significance if had been held as scheduled
- In some cases, there are serious discrepancies between the local rules as given in annexes and the general SEE-ERA.NET Plus rules,
- The communication with NPC in several countries was constantly of little use and no significant assistance even in the matters of great importance for the project realisation.





• Changes in the consortium, if any;

•No changes in the SEELEGUMES consortium. Few changes in the staff, mainly involved inWP1.

• List of project meetings, dates and venues;

•19th and 20th October 2011 in Banja Luka

•The second one will be held in Thessaloniki in 2012, as scheduled, with exact date yet to be defined. •The SEELEGUMES coordinator participated in both SEE-ERA web conferences during June.

•Impact of possible deviations from the planned milestones and deliverables, if any;

- •The delay of the first instalment had a negative impact only on the timetable and number of the project milestones and deliverables in both WPs, but not on their quality and significance.
- Any changes to the legal status of any of the beneficiaries, in particular non-profit public bodies, secondary and higher education establishments, research organisations and SMEs;
- No such changes occurred in SEELEGUMES.
- Development of the Project website, if applicable;
- The SEELEGUMES web site has already set up and will be permanently updated in line with project activities.



• The section should also provide short comments and information on co-ordination activities during the period in question, such as communication between beneficiaries, possible co-operation with other projects/programmes etc.

•SEELEGUMES project is emphasized in diverse project applications such as -COST action on legumes (Title-European legume research network), -few bilateral proposals.

6. & 7. Explanation of the use of the resources and Finances

Appendix I: List of publications (NS group) WP1-13 WP2-17 SEERA 168 Acknowledgement Appendix II: List of non-project individual partners

Working Package 1:

Mike Ambrose (John Innes Centre, Norwich, UK) - genetic resources, crop wild relatives Snežana Anđelković (Institute for Forage Crops, Kruševac, Serbia) - faba bean *in situ* collecting and ethnobotany Aleksandar Medović (Museum of Vojvodina, Novi Sad, Serbia) - archaeobotany, crop history Petr Smýkal (Palacky University, Olomouc, Czech Republic) - crop evolution, molecular taxonomy Bojan Zlatković (University of Niš, Faculty of Sciences and Mathematics, Department of Biology and Ecology, Niš, Serbia) - plant taxonomy, ecogeography, *in situ* conservation

Working Package 2:

Jovanka Atlagić (IFVCNS) – cytogenetics Jelica Gvozdanović-Varga (IFVCNS) – genetic resources Tijana Zeremski-Škorić (IFVCNS) – chemical characterization Lana Zorić (University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology, Novi Sad, Serbia) – anatomy, morphology



Part B: To be prepared by each research group (partner)

5thInternational Food Legume Research Conference 7thEuropean Conference on Grain Legumes, Antalya, Turkey, April, 2010 IFLRC V -AEP VII

FIRST INTERNATIONAL LEGUME FOOTBALL CUP

Monday, April 26 20:30 h LENTIL vs. VICIA 21.15 h PEA vs. CHICKPEA Wednesday, April 28 20:30 h 3RDPLACE 21.15 H FINAL











Further project steps

- The first period of the project, was satisfactory and that is offers rather solid grounds for continuing with all scheduled activities in both WPs.
- Fund allocation (saved money)
- Expeditions to be performed by each participants (WP1) extra expeditions (saved money)
- WP2-participants involved in WP1 should provide material for molecular characterisation
- Individual steps (*P. elatius*-SR)
- Publishing joint papers
- Strategically including in existing networks (ICPGR) and projects (COST, FP7+...)
- Second workshop (Thessaloniki in 2012)
- Field trials network and common trials methodologies WP2

•Developing joint core collection (seeds and herbarium)

•WEB SEELEGUMES

Institution	2011 Expeditions	2012
FANS	WP1 Romania-twice July	WP1 Bulgaria and Slovenia May/June
IMGGE	WP2	WP2
AIO	Slovenia, Srbia	> May/July
ARCNG	2 local exp. 1800EUR-126EUR for one exp.	>
FABG	-	Bosnia
FABL	Trial with legumes local expeditions	Autumn and spring local expedition
AIS	Local expedition	Local expedition (Own funding)

Institution	2011	2012
FAOS	Srbia Slovenia Bosnia	May/June
ATTC	Local expedition (575 EUR) (not allowed) Permission NCP	-
IAS	Local expedition	Local expedition
ASAMVBT	Local expedition (NS) (own funding)	
INRA	WP2	WP2
IPGR	Local expedition	Local expedition Dijon (France)
GNXPRO	WP2	WP2
IFVCNS	Romania July	Bulgaria and Slovenia May/June