Growing ideas through networks



### RIPARIAN GENETIC RESOURCES CONSERVATION IN EUROPE

(GC-WG2: Progress report II)

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Funded by the Horizon 2020 Framework Programme of the European Union

Belgrade 4-5 September 2019 - COST CONVERGES WG2 Meeting

Genetic Conservation subgroup was formed during the meeting of the WG2 that was held in September 2018 in Selfoss, Iceland





The second meeting occurred in Pruhonice, Czech Republic, April 2019, during the MC CONVERGES COST Meeting



### Outine

- Context and goals of Gen Con subgroup within WG2
- General schedule for the subgroup Gen Con, deadlines and tools to be used within CONVERGES
- Presentation of results:
  - Literature review
  - Experts consultation
    - 1<sup>st</sup> questionnaire- Directory of experts
    - 2<sup>nd</sup> questionnaire results Structured interview



# Context

- Restoration of riparian areas
  - WFD good ecological status for 2027
  - o Aichi Targets, EU Biodiversity Strategy,
  - Declaration of the UN Decade on Ecosystem Restoration... 2021 – 2030
- Increasing demand of riparian restoration often through reforestation, planting;
- Yet...issues on management riparian species on restoration
  - Genetic origin/diversity of plant material?
  - Specific riparian processes considered?





### Aims to be achieved by GenCon group

- Review the state of art in genetic conservation of riparian ecosystems/species at the European level;
- Promote knowledge transfer of recent scientific developments into the practice (riverscape genetics):
  - Specificity of conservation of genetic resources in riparian areas
  - Spatial and ecological processes in riparian systems ->
     consideration in genetic conservation of riparian vegetation
- Identify knowledge gaps, conservation barriers and future research and management needs;



# SCHEDULE

Expected Output	Methodology	Deadline Minutes Selfoss Meeting	Current status	COST Tool
Directory of experts	Contact database	15/12/2018	OK	N/A
List of relevant contacts, bibliography and information about most important riparian species from each country	Short Questionnaire	1/02/2019	ОК	N/A
Progress report I	Information analysis, literature review and structured interview	15/03/2019	ongoing	N/A
Brief country reports	Structured interview	15/06/2019	Ongoing (enlarge coverage 20/09/2019)	N/A
Progress report II	Systematic review and data analysis	15/10/2019	Planned 1/11/2019-30/11/2019	STSM
Review paper on the state of art in genetic conservation of riparian ecosystems/species	Systematic review and data analysis	15/10/2020	Before next MC Meeting in Feb 2020	Publicati on fee



### • LITERATURE REVIEW – part 1

- 55 publications recommended by experts responding to short questionnaires
- Mostly scientific articles, but also project reports, conference proceedings etc.



### • LITERATURE REVIEW – part 2

- Additional review to describe state-of-the-art in riverscape genetics (separate project but harmonious with WG2-GC goals);
- Database with nearly 100 papers on riparian plants genetics



### • LITERATURE REVIEW – part 2

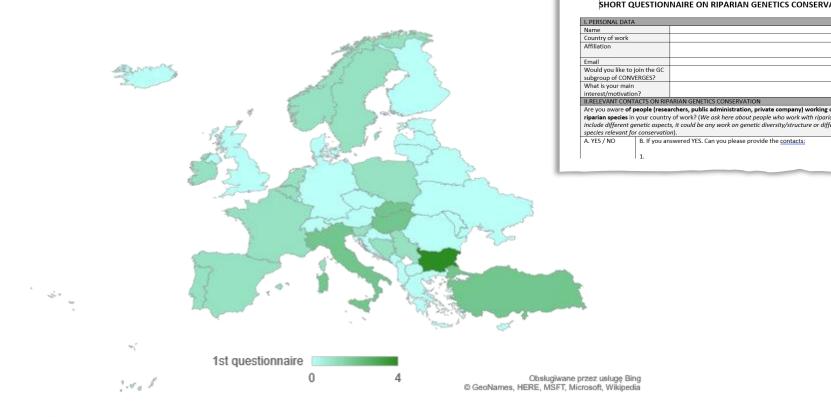
Main topics addressed in the review:

- Spatial patterns of genetic diversity along rivers
- Relationships between environment and genetic characteristics of plant populations
- Effect of barriers and landscape fragmentation



# SHORT QUESTIONNAIRE (1st stage, identification of experts)

- Number of respondents = 26
- Number of countries represented = 18





CONVERGES Genetic Conservation (GC)

# SHORT QUESTIONNAIRE (1st stage, identification of experts)

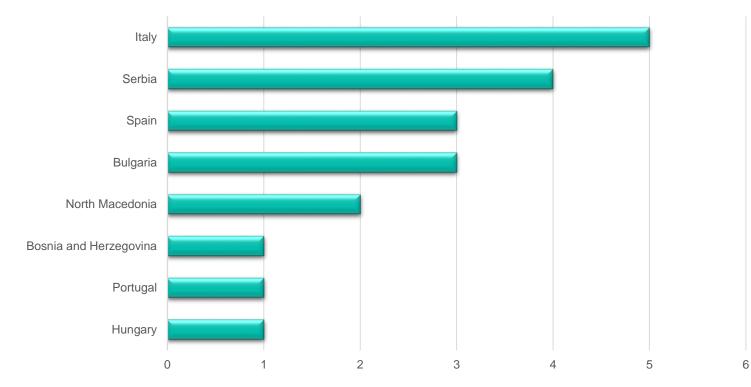
#### **RESPONSES TO 1ST QUESTIONNAIRE**





### SHORT QUESTIONNAIRE (1st questionaire, identification of experts)

Projects on riparian genetic resources conservation





# STRUCTURED INTERVIEW (2nd stage)

#### Number of respondents = 13 Number of countries represented = 9



CONVERGES GenCon WG2 subgroup STRUCTURED INTERVIEW 2019-06-15

STRUCTURED INTERVIEW STATUS AND NEEDS ON GENETIC RESOURCES CONSERVATION ACROSS EUROPEAN RIPARIAN ECOSYSTEMS

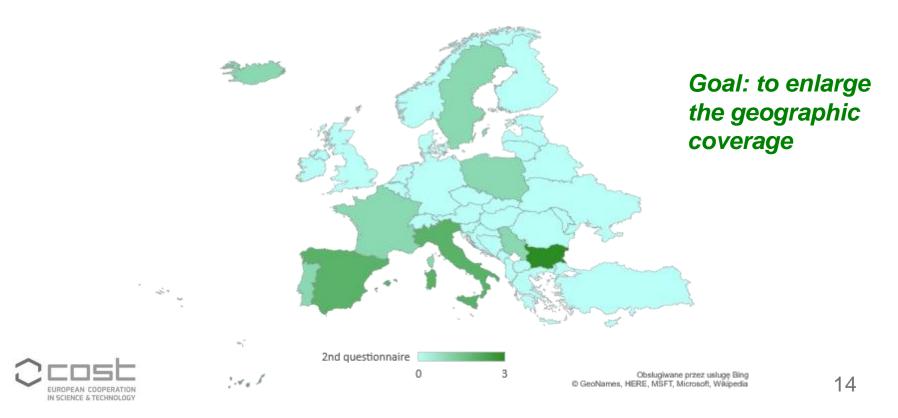
L PROFILE OF THE RESPONDENT			
Name Country of work			
Affiliation			
Email			
Which sector are you most involved?	A) University/Research institute     Public administration     Private sector     D) Civil society     E) Other:		
Which vegetation type/species you focus on?	cy oner.		
How many years have you worked on: (a) Genetic conservation; (b) Genetic conservation of riparian vegetation?	(a)(b)		
IL GENETIC CONSERVATION OF RIPARIAN VEGETATION	O formalised and the formalised by		
In your view, which are the main benefits of conserving riparian genetic resources? (rank up to 5 choices)	Economic advantages/benefits     Food security     Fresh water ecosystem conservation     Fittering water polluters     Scientific interest     Social importance     Other		
In your view, which is the most effective approach to conserving riparian genetic resources? (choose one option)	A) In situ conservation     B; Ex situ conservation     C; In situ x ex situ combination     D) Integrative conservation (conservation that relies on the     enhanced participation of local people to achieve sustainable     management of naturi resources)		
In your view, which are the specificities of conserving riparian genetic resources in comparison with other systems/species? (list up to 5 specificities)			
In your opinion, have there been changes in riparian genetic diversity in your country over the past ten years? Please, define the observed changes.	No significant changes     Improving status     Degrading		
III. STATUS ON RIPARIAN GENETIC RESOURCES CONSERVATION According to your knowledge, please answer following question			
Has the state of diversity of riparian ecosystems in your country been assessed since 2000? If YES, please provide a link to the project or information on the results.	NO     YES     Link for project     "Reference on scientific or grey     liberature		



CONVERGES GenCon WG2 subgroup STRUCTURED INTERVIEW 2019-06-15

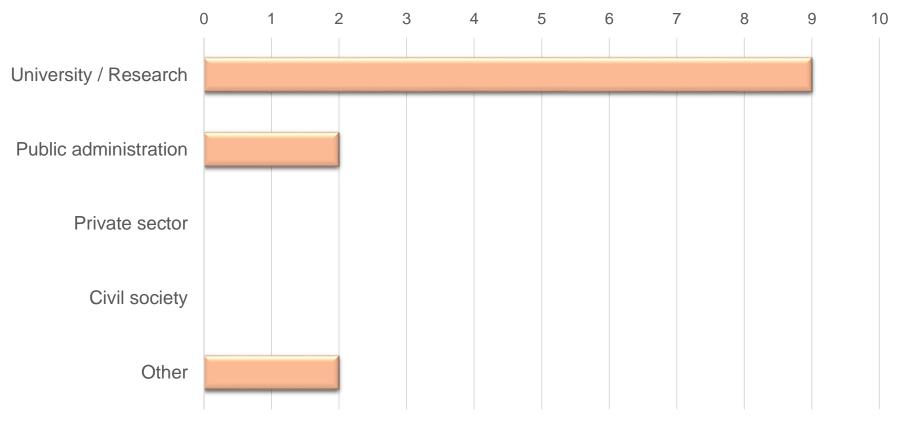
Does your country have plans/programs to assess the state of genetic diversity of riparian ecosystems? If YES, please specify existing documents.	O NO VES Link for project	
Does your country have procedures in place to monitor or measure genetic erosion in riparian ecosystems? If YES, which institutions are in charge of implementing these procedures?	O NO O YES	
Which entity is in charge of riparian genetic resources conservation in your country? Whether it is a separate entity or its scope includes genetic conservation in a wider sense? Put the name, link and briefly describe its profile.	Name of institution Link of institution: Profile description	
Is there a coordinated Strategy/National Program for the conservation of riparian plant genetic resources in your country? Whether it is a separate document or its scope includes genetic conservation in a wider sense? Put the name, link and briefly describe it.	Name of Strategy/Program Link: Description	
Please, list and briefly describe examples of riparian genetic resources conservation good practices (projects) in your country (national, regional and/or local level) for: <ul> <li>In situ approach</li> <li>Ex situ approach</li> <li>Combined approach</li> <li>Integrative conservation (local people participation)</li> </ul>	Example 1 Example 2 Example 3	
Please, in your descriptions emphasize examples with visible connection between conservation methods and nature protection and/or sustainable development.	Example 4	
IV. NEEDS ON RIPARIAN GENETIC RESOURCES RESEARCH AND	CONSERVATION MANAGEMENT IN YOUR COUNTRY	
Indicate and rank strengths of riparian genetic resources conservation in your country.	Diversity status/inventories of species     Environmental conditions/accessibility     Scientific knowledge level     Policy priority     Legislation framework     Institutional/organisational framework     Community awareness     Financial support     Other:	
In your opinion, how above ranked strengths can be used to achieve effective riparian genetic resources conservation in your country? Describe further development of recognized strengths.		
Indicate and rank weaknesses of riparian genetic resources conservation in your country.	Diversity status/inventories of species     Environmental barriers     Scientific knowledge level     Lack of policy priority     Legislation framework     Institutional/organisational framework     Community awareness	

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- Number of countries represented = 9



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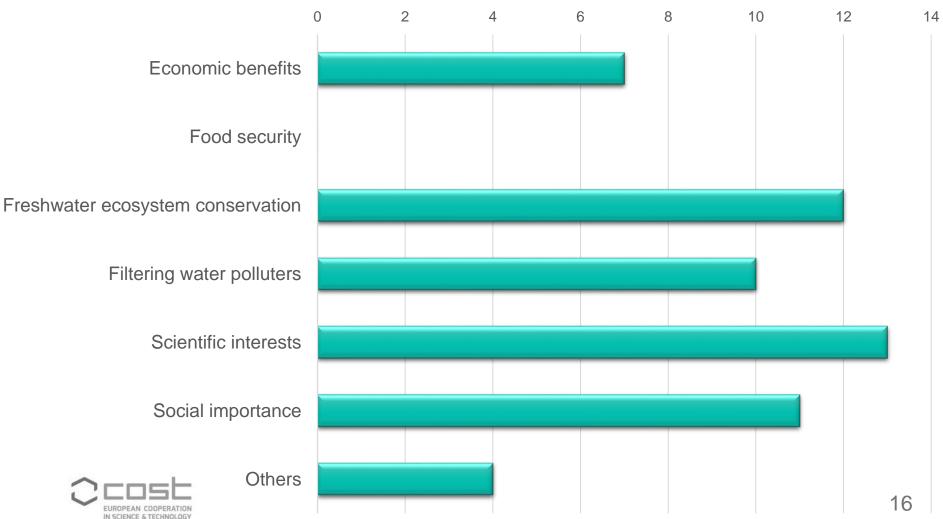
**Responder's (2nd questionnaire) involvement sector** 





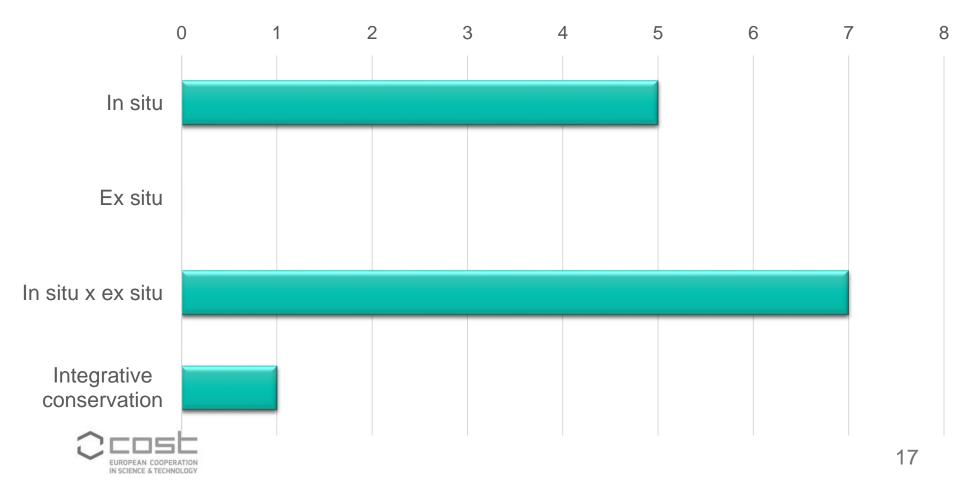
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Main benefits of conserving riparian genetic resources



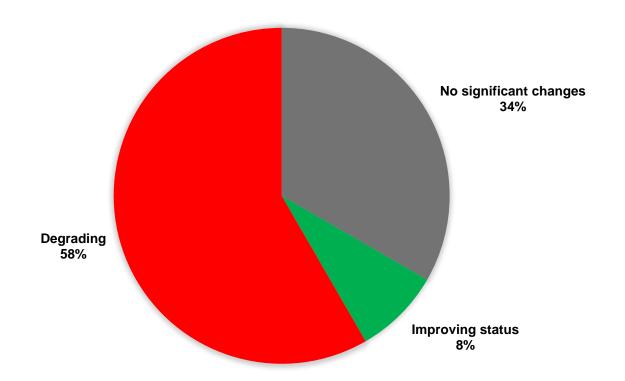
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The most effective approach to conserving riparian genetic resources



- Number of respondents = 13
- Number of countries represented = 9

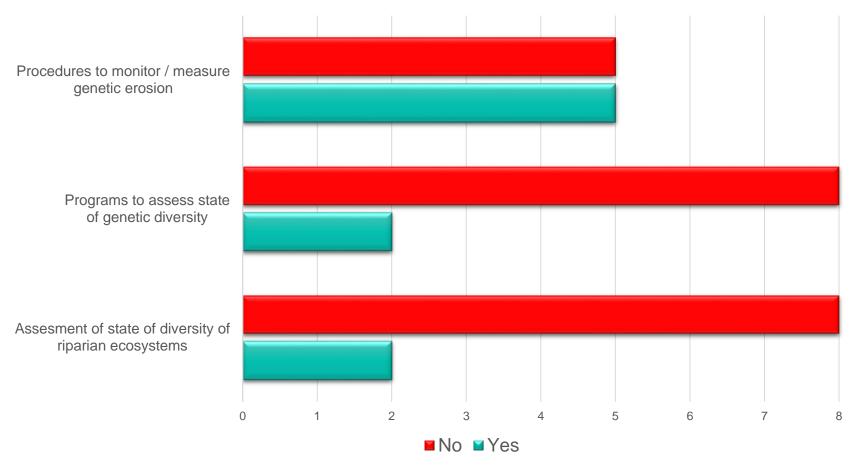
#### CHANGES IN RIPARIAN GENETIC DIVERSITY OVER THE PAST TEN YEARS





- Number of respondents = 13
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#### Assesment and monitoring of riparian genetic resources





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## NEXT STEPS

- Enlarge the geographic coverage of countries represented in Structured questionnaires
- Outline of the outupts (Belgrade meeting)
- Assess information available, perform data analysis, findings – STSM
- Produce Report and review paper
- Others to discuss



## **SCHEDULE - Steps to achieve the aims**

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Thank you for your attention!

Thank you to all contributors for filling the Questionnaires If you would like to join the GenCon group, contact us: Jelena Milovanovic, Patricia M Rodríguez González, Remigiusz Pielech, Georgi Hinkov Roland Jansson

> jmilovanovic@singidunum.ac.rs patri@isa.ulisboa.pt remekpielech@gmail.com georgihi@abv.bg roland.jansson@umu.se

Patricia M Rodríguez-González is funded by Portuguese Foundation for Science and Technology, through Investigador FCT programme



Europeu Social Europeu





Funded by the Horizon 2020 Framework Programme of the European Union



### Opened a Biodiversa Call on CC and NBS,

I would suggest that the group can think in potential ideas during these two days and discuss again before leaving if there is interest/potential partners....

### https://www.biodiversa.org/1587



### https://www.biodiversa.org/1587

# 2019-2020 Joint Call

BiodivERsA is pleased to announce the launch of its 2019-2020 Call on the theme:

 $\rightarrow$ 

liversa call

### "BIODIVERSITY AND CLIMATE CHANGE"

#### CALL PRIORITIES

This call will cover the following four non-exclusive themes:

>

Consequences of climate change on biodiversity and nature's contributions to people

>

Climate-biodiversity feedback processes

>

Potential of nature-based solutions for mitigating and adapting to climate change

)

Synergies and trade-offs between policies on biodiversity, climate and other relevant sectors, and the role of agents of change

#### > The link to the EPSS will be available soon here <

Launch of the call: Monday 02 September 2019

Deadline for pre-proposals submission (mandatory): Tuesday 05 November 2019, 16:00 CET (local time in Brussels)

Deadline for full-proposals submission: Tuesday 10 April 2020, 16:00 CEST (local time in Brussels)

#### MORE INFORMATION

Make sure to consult the complete announcement of opportunities and all supporting documents (call documents - see below). You can also consult the FAQ.

For general information on the call, please contact the Call Secretariat: Céline Billière, celine.billiere@agencerecherche.fr

For specific questions related to the budget, criteria and rules of your funding organisation, please consult your Funding organisation's rules and contact your FCP (available here).

For technical questions regarding the EPSS, please contact the EPSS technical helpdesk: Taavi Tiirik, epss.biodivclim@g.etag.ee

#### SAVE THE DATE

An information webinar will be organised on <u>September 13, from 15:00 to 16:30</u> <u>CEST</u> (local time in Brussels) to answer all your questions about this call.

> To participate, register HERE!

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#### CALL DOCUMENTS

>

Consult the complete call documents (including the scientific call text, more information on procedures, evaluation criteria, etc.)

Consult the pre-proposal application form (.doc version) - for information only, submission of pre-proposals has to be done online only, via the EPSS.

Consult the full proposal application form (.doc version) - for information only, submission of full proposals has to be done online only, via the EPSS.

last modified 2019-09-03 at 11:57

#### STRATEGY

BiodivERsA SRIA BiodivERsA Implementation plan... Strategic analysis Stakeholder Engagement

#### EUROPEAN JOINT CALLS

2008 Joint call 2010-2011 Joint call 2011-2012 Joint call 2012-2013 Joint call 2013-2014 Joint call 2015-2016 Joint Call 2017-2018 Joint Call 2018-2019 Joint Call 2019-2020 Joint Call

#### RESOURCES

General information BiodivERsA Prize Database Calls and funded projects Policy and Society Stakeholder Engagement. Publications Meetings reports Newsletters