



“DISCUSSION IN SMALL GROUPS” SESSION

Luca Mazzoni

Ancona, 13 March 2025



Applying the EVA Framework to Perennial crops

- Which crops have a critical mass of interested partners – Have we covered all stakeholders?
- What is the time frame in which evaluations can be conducted?
- How can multi-environment evaluations be managed?
- How will material be exchanged?
- What are the main target traits?
- What specific data management needs exist?



What to expect from the “Discussions in small groups”

- Expectations from breeders, producers, and genebanks (material, traits, conditions of operation)
- Applying the EVA framework to perennial plants: Opportunities and limitations
- Which crop(s) and which traits could be the focus of the Network
- Feedback, comments and discussion towards the establishment of EVA Perennials



Expectations from breeders, producers, and genebanks

EXPECTATION: what you believe or hope will happen in the future

[Cambridge Dictionary | English Dictionary, Translations & Thesaurus](#)

In essence, **EXPECTATIONS** are influenced by how things begin (**starting conditions**) and how things turn out (**final results**). These factors work together to shape what you anticipate going forward.

Three main stakeholder categories are involved in this project: *breeders*, *producers*, and *genebanks*.





Expectations from breeders, producers, and genebanks

STARTING POINT: to know the general *starting conditions* for each plant category

STARTING CONDITIONS	BREEDERS	PRODUCERS	STAKEHOLDERS
<i>Ongoing initiatives (H2020,...)?</i>			
<i>Existing networks?</i>			
<i>Neglected crops?</i>			
<i>Commercial material?</i>			
<i>Who conducted/would be willing to conduct evaluations (limited budget)?</i>			
<i>Phytosanitary issues?</i>			
<i>Long timeframe?</i>			

EXPECTED OUTCOMES related to the general starting conditions already mentioned





Applying the EVA framework to perennial plants: Opportunities and limitations

Various restrictions, bottlenecks, and issues are among the most common problems that stakeholders may encounter during network creation.

Accessions are multiplied and distributed under a Standard Material Transfer Agreement (SMTA).

- Is this relevant for fruit tree genetic resources (GR) or pre-breeding and breeding?*
- What materials can be exchanged nationally and internationally?*
- What is the regeneration timeframe?*
- What phytosanitary issues should be considered?*
- An SMTA is required for material exchange.*





Applying the EVA framework to perennial plants: Opportunities and limitations

Partners assess accessions in different European environments: fields, labs, and greenhouses.

- *Can we use existing evaluation orchards?*
- *How many and which environments should we target per accession?*
- *Do any traits need specific environments/equipments (funding) for evaluation?*

Evaluated accessions have been genotyped, and the data is stored in public databases.

- *How can we use existing genotypic information from EU projects?*
- *What are effective genotyping approaches for various crops?*
- *What are the budget needs for genotyping?*

Coffee Break
15:30 – 16:00





Which crop(s) and which traits could be the focus of the Network?

From a more practical point of view, the core of the Network will be based on the precise definition of crops and traits to be evaluated for each plant category.

Networks should select accession sets from European genebanks and on-farm evaluation actions.

- *Which crops to include?*
- *Focus on neglected or well-studied crops?*
- *How do we utilize materials from EU projects?*
- *What existing data is available?*
- *Which reference cultivars for different crops?*





Which crop(s) and which traits could be the focus of the Network?

Standard experimental protocols and harmonized descriptors are developed for key traits.

- *What are the main traits?*
- *How can existing data inform these descriptors?*

Phenotypic evaluation data (raw or analyzed) is stored in the EURISCO-EVA database under embargo.

- *Can historical datasets be publicly released via EURISCO for EVA analyses?*
- *How can we integrate ongoing project data for public access?*
- *What methods can facilitate information exchange?*
- *Can any traits have the embargo lifted?*

Standardizing data provision is essential.





Feedback, comments and discussion towards the establishment of EVA Perennials

In the last 30-minutes group discussion, let's summarize the main outputs raised from the previous group meeting, considering also that:

Joint data analysis improves the value of European genebank accessions.

- *What outcomes are expected from the EVA network activities?*
- *How should the results be disseminated and exploited — publications or other materials?*
- *How can we analyze data from diverse partners with different experimental designs?*





THANK YOU