



Overview of the *Prunus* WG activities

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EVA Boost perennials – Towards the implementation of a European Evaluation Network for Berries and Fruit Trees

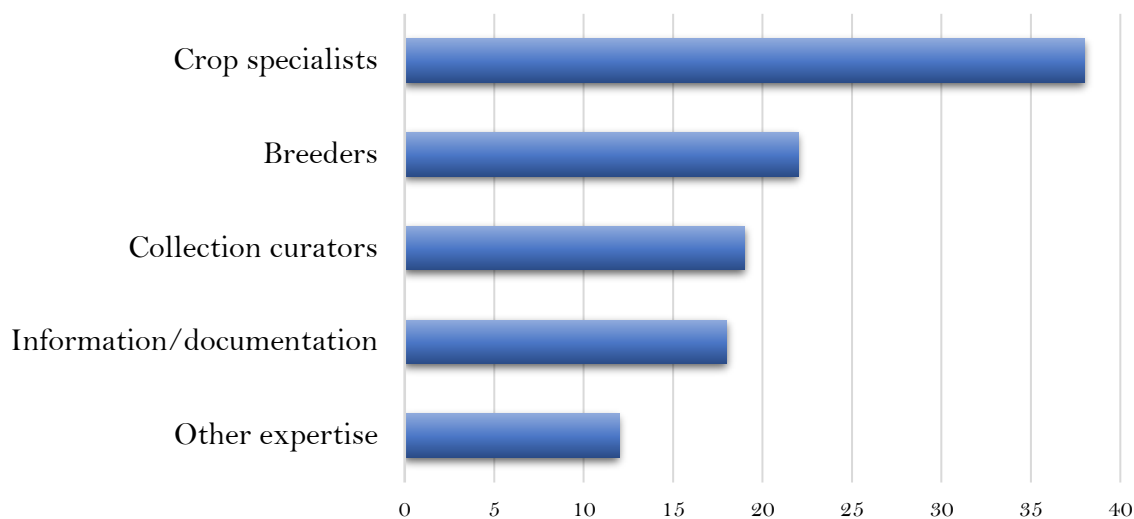
13-14 March 2025, Ancona, Italy



Prunus WG

- ✓ 80 Members
- ✓ 35 Countries

Prunus WG members expertise



- ✓ 7 main crops: **almond, apricot, cherry (sweet and sour), peach, plum (European and Japanese)**
- ✓ Accessions are maintained in open field collections, clonally propagated (onto rootstocks)
- ✓ Exchange material is mainly budwood

ECPGR Activity Grant Scheme



2014.

PRUNDOC - Identification of a representative set of *Prunus domestica* accessions of European origin, well documented and characterized, to be included into the AEGIS system

- List of **35 Plum** C&E Descriptors
- **85** accessions of 10 EU countries well described
- **9** best plum (exaploid) SSRs
- **46** accessions (and 7 References) of 10 EU countries genotyped



available on ECPGR site

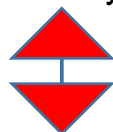


Hjeltnes et al., 2017; Nybom et al., 2020



2016.

EU.CHERRY - Collaborative action for updating, documenting and communicating the cherry patrimonial richness in EU



COST ACTION FA1104 on Cherry (2012-2016)

- List of **33 Cherry** C&E Descriptors
- **187** accessions of 10 EU countries well described
- **14** best SSRs for cherry (survey on previous studies of Partners)
- **324** accessions of 19 EU countries genotyped with 14 SSRs
- **180** unique (synonyms, mistakes)



available on ECPGR site



Barreneche et al., 2021

ECPGR Activity Grant Scheme



2020.

Prunus Alignment - Testing, Use and Alignment of genetic data to distinguish unique and characterized accessions in Prunus

GOAL 1. Align SSRs data across cherry germplasm collections in Europe



6 National +
EU.CHERRY
datasets

GBR

FRA

ITA

CHE

DEU

SWE

EU.CHERRY

14 SSRs

8 ECPGR References

RESULTS (Ordidge et al., 2021)

2241 profiles aligned

63 matching groups identified

40 CHerry UNiQue (CHUNQ) groups
assigned

CHUNQ # 3

Ferrovia; Badacsonyi; Schneiders Späte
Knorpel Typ Nordwunder; Van and 8
others



2020.

Prunus Alignment - Testing, Use and Alignment of genetic data to distinguish unique and characterized accessions in Prunus



GOAL 2. Enlarge the PRUNDOC list of well-described and genotyped EU plum accessions

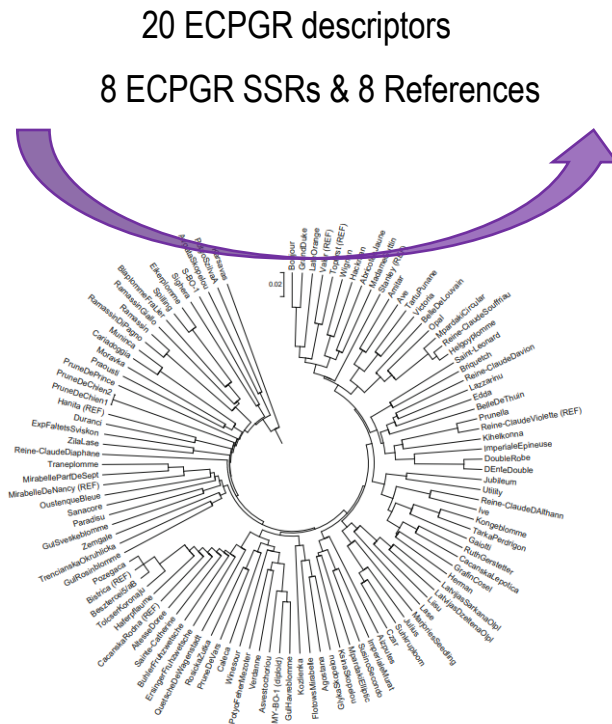


Fig. 2 Unweighted pair group method with arithmetic mean (UPGMA)-based dendrogram using molecular data for 104 local plum accessions and 8 reference cultivars

ECPGR Activity Grant Scheme



Prunus

Ongoing

FRUITREEDATA - Improvement of Fruit Tree Data Inclusion in EURISCO
19 Partners



Malus/Pyrus

GOAL. Improve the quality and quantity of *Prunus*, *Malus* and *Pyrus* data in EURISCO, also including available C&E data.

- More and better characterized accessions in EURISCO
- Collaborate with EURISCO DB manager to implement EURISCO functionality
- New candidates for AEGIS

Conclusions



Plum, Sweet cherry & Peach

- ✓ Standardized ECPGR protocols and descriptors for C&E activity
- ✓ SSR sets and Reference varieties
- ✓ Unique, well described, accessions are in principle AEGIS accessions
(phytosanitary status unknown)

Thanks for your attention!!