



Collaboration within the French Daucus Network

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Collaboration within the French Daucus Network

Origin and context in 1996

- ◆ The improved cultivars derived from modern breeding programs were rapidly replacing old traditional Open Pollinated population-varieties (OP) and landraces
- ◆ Need to secure the historical genetic resources of importance for the future
- ◆ Initiation of the “Carrot and other Daucus French Network”.

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Principal Aim



The French genetic patrimonial resources under a National collection

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The partners



A voluntary based PPP with a wide range of partner profiles

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Roles

Identify

- Analysis of the French heritage and accessions of interest

Share

- Partners participate to the collection constitution

Assess

- Common evaluation during an annual trial

Maintain

- shared effort and experience (seed propagation and conservation)



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Reasons

- ◆ A unique opportunity to be part of a group of carrot national experts
- ◆ The will to secure the historical genetic resources of importance for the future
- ◆ Mutualize the characterization and conservation of the French genetic resources.





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Benefits from PPP

Knowledge sharing
within an Expert group

Better understanding of
Daucus genus

Direct access to unique
resources

Share with international
community

Descriptions for further
use in breeding



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Reporting

One Annual
steering meeting

One annual field
trial

Annual Financial
reporting (internal to
each partner)

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Data management

- Observation data are made available to partners in the yearly report following the annual meeting and trial.
- Data and seeds resource list are not yet made publicly available :
 - Lack of web interface
 - Questioning about the status of resources regarding the Nagoya protocol.
 - However, information and seeds are provided upon request
- Seeds available through:
 - Special MTA for network partners
 - SMTA for external partners

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Factors of success & limitations

Voluntary based organization

reactivity,
flexibility and
efficiency

Shared interest in
the species

Equilibrium:
private/common
/public good

Motivation of the
participants and
their related
managements.

Need to be
challenged

Difficulty to
acquire
collaborative
evaluation data

Difficulty to initiate
small/medium
scale projects
(funding).

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A nursery for collaborative projects

- ◆ Genetic resources : Valorizing wild carrot genetic resources for an innovative breeding (2008-2011):
 - Collect *In-situ*, conserve and make available French wild genetic resources
 - Improve knowledge and taxonomic identification of wild subspecies
 - Estimate the diversity within the French wild compartment (Molecular)
 - Describe and evaluate the traits of interest for further use in breeding
- ◆ But also for genetics and breeding oriented projects: carrot pigments, carrot quality.....





Carrot and other Daucus French Network

- With the hope that the PPP for the good of genetic resources will continue despite hardening regulations and competing interests !

- LINK:
 - https://www6.angers-nantes.inra.fr/irhs_eng/Research/QuaRVeg/Research-topics/BRC-Vegetable-Apiaceae