

Illustration of breeding networks :

GSP

(Groupement des Sélectionneurs de Protéagineux / Protein
Crop Breeders Group)

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European Legumes in Transition, "Pushing the boundaries of legume breeding"



Organization of the GSP

- **GSP**: economic interest group gathering the main French seed companies dealing with pea and faba bean breeding

Creation date : 1979

- **Current members :**



- **Human and financial support from Terres Inovia** (the French technical center for the oil and protein sector), and **Terres Univia**, the French interbranch organization for oil and protein crops and products

- **Technical coordination :** Terres Inovia (the technical center)



Aims of the GSP

- Identification of varietal improvement objectives on common targets
- Creation and maintenance of pre-breeding populations
- Development of tools and methods to characterized plant materials
- Carrying out field trials or tests under controlled conditions

Material in tests : common material from populations created by the GSP, or material specific to each breeder (breeding lines or lines before application).

The GSP offers also a place for consultation and information : transfer of research results & contribution to large projects



3 research axes

1 Resistance of peas to diseases, and in particular to aphanomyces

- Screening of material from selection programs under controlled conditions
- Testing advanced material on a network of contaminated fields



F. Desprez

3 research axes

2 Genetic improvement of winter peas (agronomic traits and resistance to cold and frost)

- Development of screening methods for the resistance of peas to frost (with INRAE)
- Screening of material from selection programs for frost in specific INRAE greenhouses
- Establishment and monitoring of a field networks, to assess winter peas



3 research axes

3 Genetic improvement of faba bean (yield, seed quality, resistance to diseases & weevil)

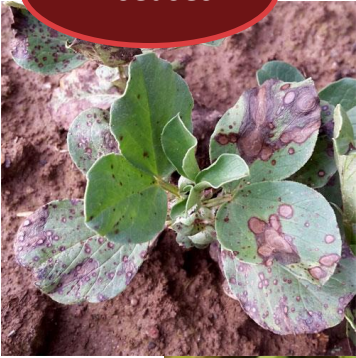
- Creation and maintenance of prebreeding population – introduction of improved traits in agronomic materials.
- Establishment and monitoring of a field networks, to assess winter faba bean
- Screening of material for specific traits through genotyping or phenotyping in controlled conditions



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Diseases



Winter Pea



Faba bean

Thanks for your attention !