



# THE DEVELOPMENT OF PLANT PROTEINS IN THE EUROPEAN UNION

OPPORTUNITIES AND CHALLENGES

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## Panel “Research and Innovation”

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# Highlights of the workshop on “Research and Innovation”

Main topics discussed:

- Competitiveness of protein crops in the EU
- Breeding of protein crops for EU markets
- Large diversity of EU climatic conditions and agro-ecological systems
- Societal developments influencing change
  - Regional and circular food systems
  - Climate change
  - Biodiversity decrease

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# Highlights of the workshop on “Research and Innovation”

## Competitiveness and eco systems:

- Pathway dependency: investments in chosen technologies widens the gap with alternative technologies (protein crops EU)
- Financial gross margin gap
- Increasing on-farm experience leads to increasing on-farm performance
- Valuing ecosystem services: nitrogen fixation, soil structure, crop rotation effects
- Legumes: positive impacts on biodiversity in cereal dominated cropping systems



# Highlights of the workshop on “Research and Innovation”

## Breeding:

- Many traits to consider:
  - Diverse climatic and agro-ecological conditions
  - Varying traits for varying markets (food-feed)
- Number of new varieties on legumes in EU is poor compared to starch crops
- There is no Farmer Saved Seeds licence collection system, which endanger financial returns for breeding investments
- Development of a hybrid variety takes 15 years





# Highlights of the workshop on “Research and Innovation”

Interesting statements and remarks:

- Success story of Australia and Canada on growing pulses, based on levy for applied research, producers organisation, benefits to rotations
- Grain legumes in the EU 2-4% of cropping area. Worldwide higher
- There is a need for peer information (among farmers)
- There is a poor communication between feed producers and breeders

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# Opportunities

Main opportunities derived from workshop:

- Stimulate public breeding and private breeding alike
- Align public breeding programs to match the required diversity of protein crops
- Recognise ecosystem services of legumes in crop production systems
- Stimulate peer learning among farmers
- Reduce the competitive gap: increase yield (stability) and identify markets
- Increase R&D investments to break path dependency
- More circularity in farming would benefit from small scale processing technologies (feed processing)






# Way forward

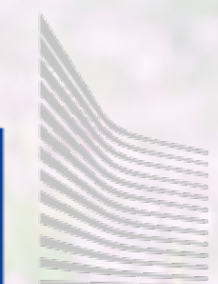
Actions necessary to develop plant proteins in EU based on workshop conclusions:

- Increase of breeding programmes responding to the diverse agro-climatic conditions in the EU
- Exploit the beneficial role of pulses and protein crops in crop rotations
- Yield increasing R&D for protein crops
- Stress the role of protein crops in ecosystem services
- Breaking path dependency on investments: from starch to protein
- Market driven transition is needed: alliances between actors, new markets
- Consistent and coherent policies

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