



# Organic breeding: the perspective of the commercial seed industry

28 November 2019

Potentialities and challenges of breeding for the vegetable organic systems







# Introducing Euroseeds

Who we are



# Introducing Euroseeds

- SINGLE voice of the **European seed sector**
- Represents the European seed industry via the **European institutions**
- Continuous contact with other **industry associations:**
  - related to agriculture & biotechnology
  - non-governmental organisations
  - the wider interested public





## Euroseeds members

- **38 national seed associations**  
(Euroseeds Association Members)
- **40 direct company members**  
(Euroseeds Individual Members)
- **29 associate members**  
(Euroseeds Associate Members)



# Euroseeds' principal role

- **Inform – Represent – Lobby**

On **all seed related issues**:

- seed marketing, incl. GM and organic seed
  - IPRs ; biodiversity ; access ; research
  - plant/seed health ; seed treatment ;  
environment
  - land use and food production
- **Help solve collective problems of  
members**







# Challenges for EU agriculture

Worldwide challenges and European  
commitments



# Global challenges

- Growing population: 9,7 billion people in 2050 – 11,2 billion people in 2100 - UN
- Food security and diets: 780 million people undernourished and 640 million people with overweight or obesity (2014-2016) - FAO
- Food losses and food waste: 1/3 of food produced for human consumption is lost - FAO
- Climate change and global warming
- Emerging pests and diseases: more than 2000 interceptions of harmful organisms every year – EC
- Slowdown in productivity growth – EC

# EC Political guidelines for 2019-2024

- **Climate neutrality by 2050**
- **European Green Deal**
- **Biodiversity Strategy for 2030**
- **“Farm to Fork Strategy” on sustainable food**



Brussels, 10 September 2019

**Frans Timmermans**

**Executive Vice-President-designate for the European Green Deal**

Dear Frans,

Earlier this year, the people of Europe made their voices heard in record numbers at the European elections. They presented us with a mission to be decisive and ambitious on the big issues of our time that are shaping the future of our society, economy and planet.

Changes in climate, digital technologies and geopolitics are already having a profound effect on the lives of Europeans. We are witnessing major shifts all the way from global power structures to local politics. While these transformations may be different in nature, we must show the same ambition and determination in our response. What we do now will



# Organic farming in the EU

General trends and plant reproductive material

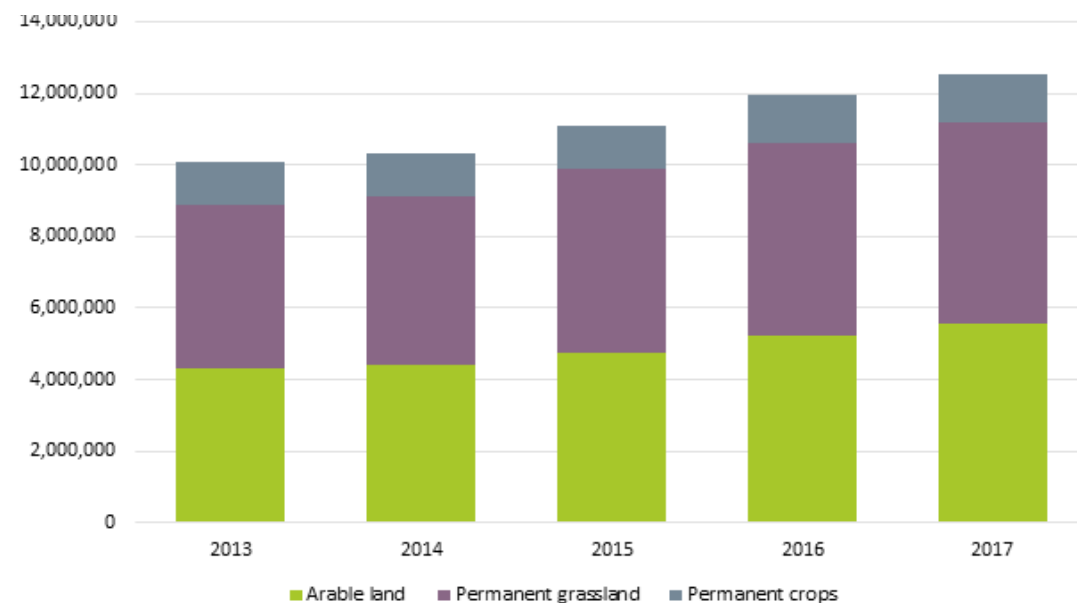
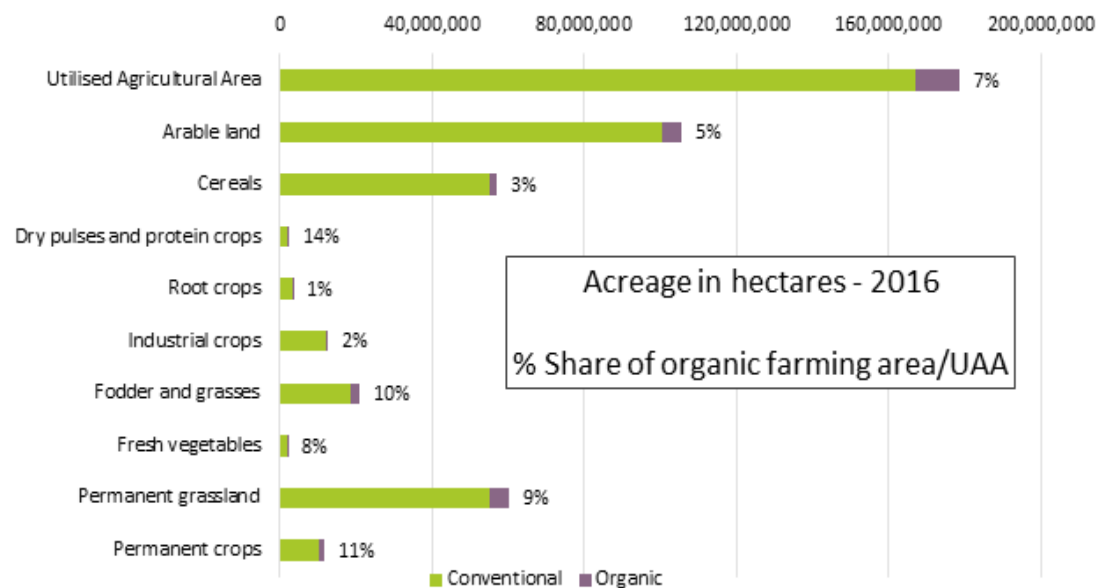




# Organic farming in the EU

- Organic farming area in the EU
- In 2030 → 19 million hectares
- Yields in organic are significantly lower than in conventional production (40% to 85%)
- Increased imports of organic agri-food products (under the principle of equivalent standards)

Source: EU agricultural outlook 2018-2030, EC





# Types of plant reproductive material for organic farming (I)

- Regulation 2018/848. Article 6 (f-h) on Specific principles – Plant reproductive material:
  - f) in the choosing of plant varieties, having regard to the particularities of the specific organic production systems, focussing on agronomic performance, disease resistance, adaptation to diverse local soil and climate conditions and **respect for the natural crossing barriers**;*
  - g) the use of **organic plant reproductive material**, such as plant reproductive material of organic heterogeneous material and of organic varieties suitable for organic production;*
  - h) the production of organic varieties through natural reproductive ability and focussing on containment within natural crossing barriers;***
- Regulation 2018/848. Article 11 – Prohibition of the use of **regulated GMOs**

## Types of plant reproductive material for organic farming (II)

- Seed propagated under certified organic conditions but originated from cultivars bred under conventional non-organic certified conditions - **"Seed propagated under certified organic conditions"**
- Organic seed from organically bred cultivars - **"Seed from breeding and propagation under certified organic conditions"**
- Organic seed from conservation and/ or amateur varieties – **"Seed of conservation and/ or amateur varieties"**
- Conventionally bred cultivars propagated under conventional conditions, but without synthetic seed treatment – **"Conventional untreated seed"**
- Others: Organic Heterogeneous Material/in-conversion seed reproductive material/



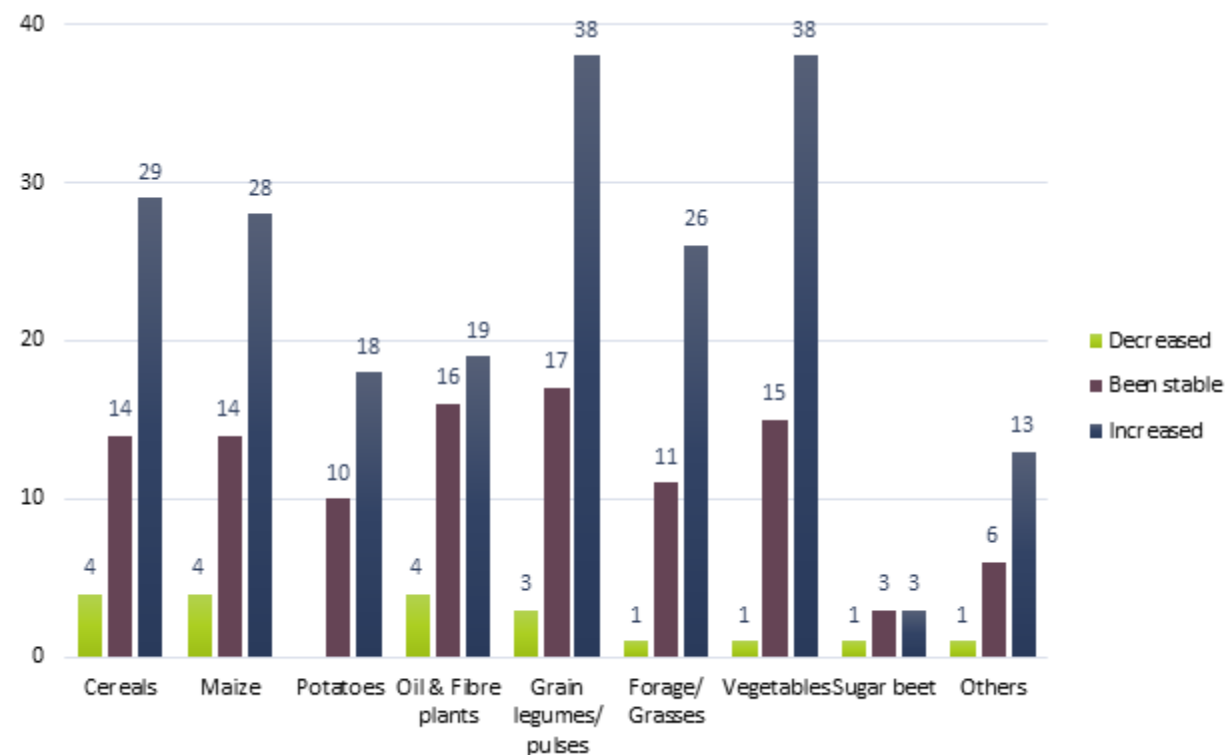
# Plant reproductive material in the market (I)

- Euroseeds data (84 replies across the EU)

- 337 production types (by crop and PRM)
- Qualitative data – General trends

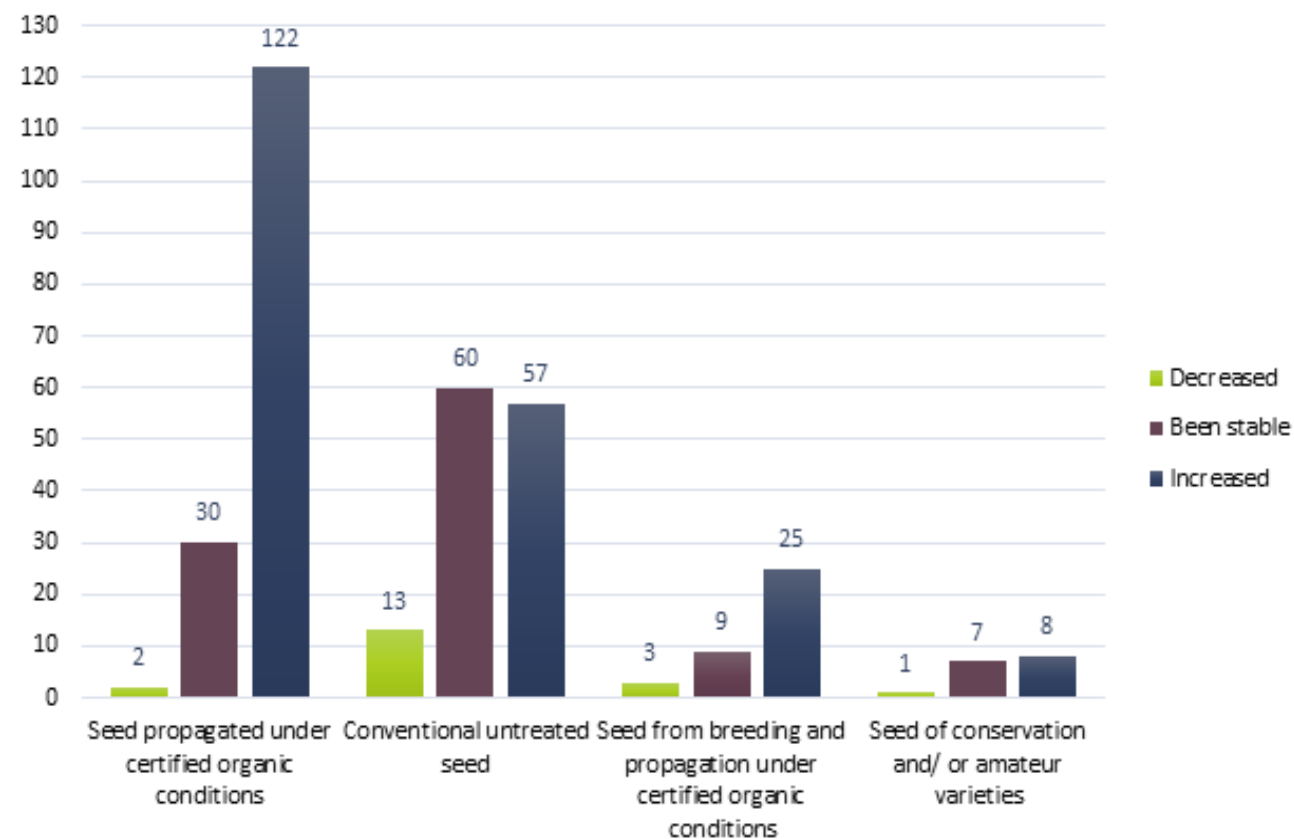
- Main results:

- Increased demand for seeds for organic farming (for almost all crops)
- Different demand depending on the crop (i.e. Oil & Fibre plants, sugar beet)
- The availability of varieties depends on the crop



## Plant reproductive material in the market (II)

- Demand of seeds for organic farming
- Main results:
  - Seed propagated under certified organic conditions shows the highest increase
  - Derogations are the second most common type of seeds for organic farming
  - Other types of plant reproductive material for organic farming show much lower demand and in some cases almost no increasing trend







# The way forward

Recommendations for performant plant reproductive material for organic farming



# Plant reproductive material for organic farming (I)

- Principle of “freedom of choice” – diversity of farmers with different needs and preferences
- Organic seed should not be established as a minor quality category of seed (i.e. identity, performance, reliability)
- In line with the EU robust regulatory system covering variety registration and seed marketing
- DUS applicable to all varieties (organic and non-organic) – adapted description methods for different species (VCU *vs* non-VCU)



## Plant reproductive material for organic farming (II)

- To ensure that a wide range of different breeding methods is available to the organic sector (excluding regulated GMOs)
- Private definitions and standards may be developed and used as marketing tools by operators in the organic market
- Exclusively organic breeding programmes would be much smaller, more expensive, riskier and lengthier





# Conclusions



# Conclusions

- Euroseeds is a key stakeholder in breeding for organic farming
- There are many challenges for the EU agriculture – organic and conventional agriculture should play a role to meet these challenges
- There is an important role for plant breeding in order to increase yields, quality and sustainability
- The demand of seed for organic farming is expected to keep the increased trend during the next years

## Conclusions

- There are different types of organic farmers which require different types of plant reproductive material (“freedom of choice”)
- There is a swift in the demand: from derogations to seed propagated under certified organic conditions
- DUS applicable to all varieties (organic and non-organic) – adapted description methods for different species (VCU *vs* non-VCU)





Avenue des Arts 52  
1000 Brussels

[www.euroseeds.eu](http://www.euroseeds.eu)

#EmbracingNature

