

# The development of plant breeding and plant variety protection

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Symposium on plant breeding for the future

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## Development of plant breeding and plant variety protection

- The Neolithic Revolution and the domestication of crops.
- The selection of improved cultivars by farmers after domestication.
- The emergence of plant breeding and professional breeders.
- The protection of plant breeders' right and the 1961 UPOV Convention.
- Some achievements of plant breeding
- Evolution of plant breeding after 1961 and the need for a revision of the Convention.

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## Decrease of crop diversity during domestication

- 250 000 higher plant species
- 30 000 edible crops
- 7 000 species used for food on regular basis
- 300 species domesticated.

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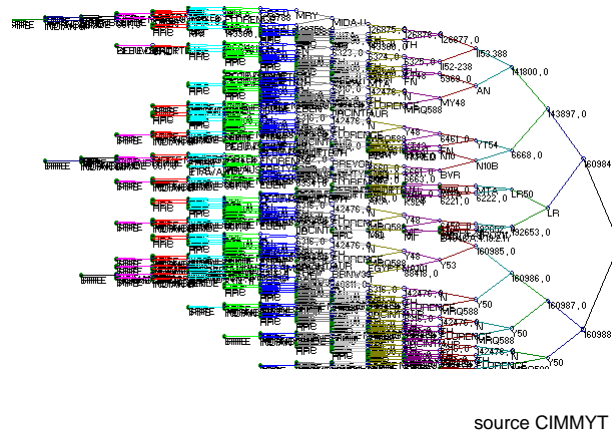
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## Preamble of the 1961 Act of the Convention

- The contracting parties “are convinced of the importance attaching to the protection of varieties of plants **not only for the development of agriculture in their territories** but also for the safeguarding of the interest of the breeders”.

## Pedigree of Sonalika wheat



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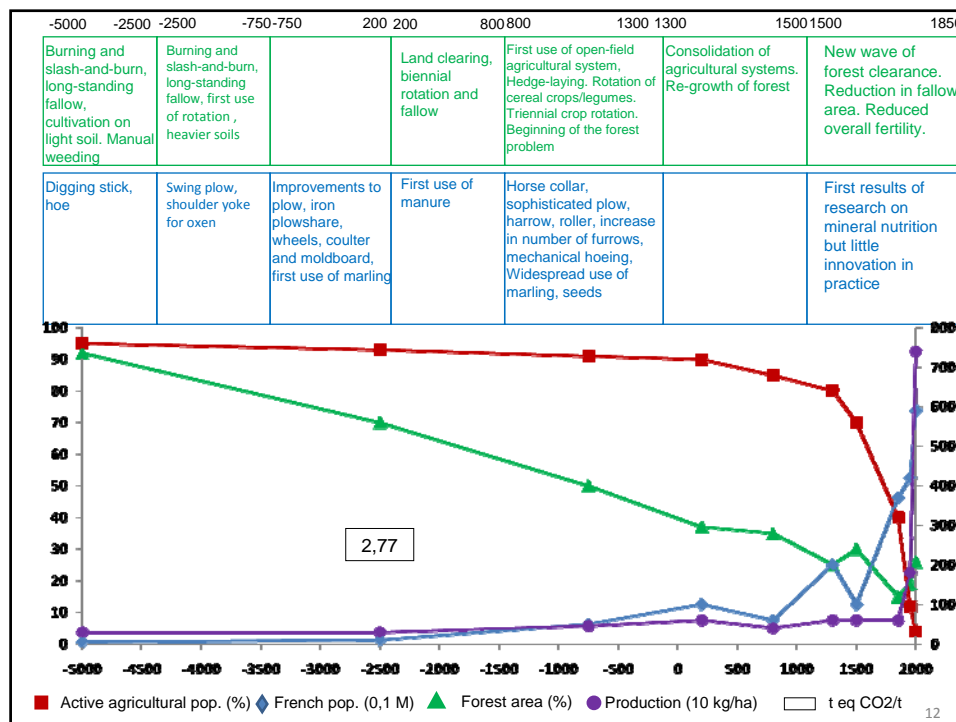
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## Some achievements of Plant Breeding

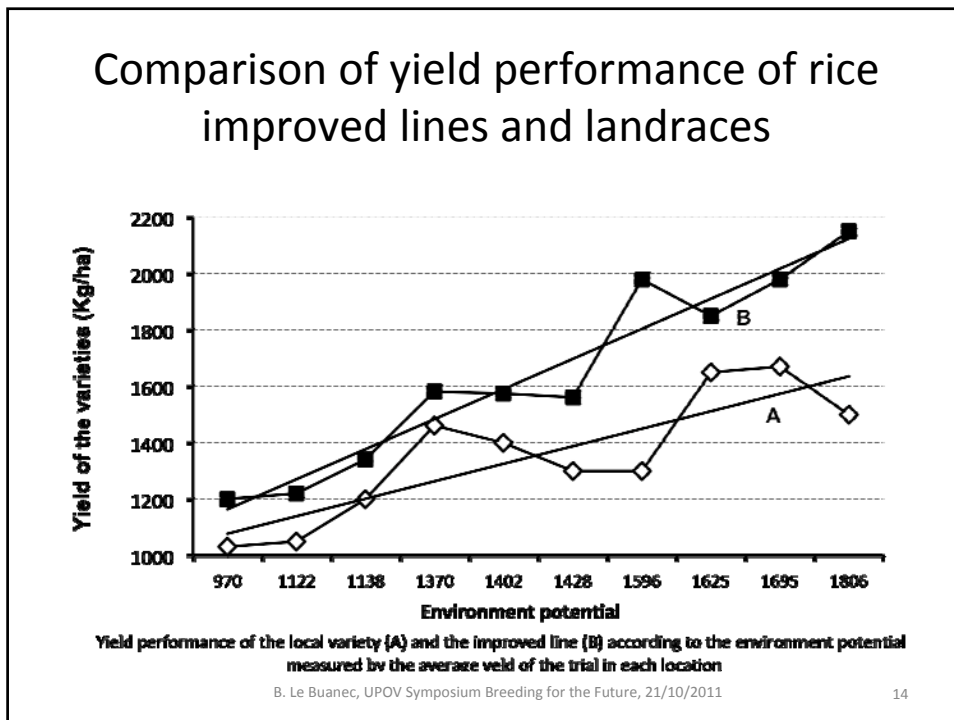
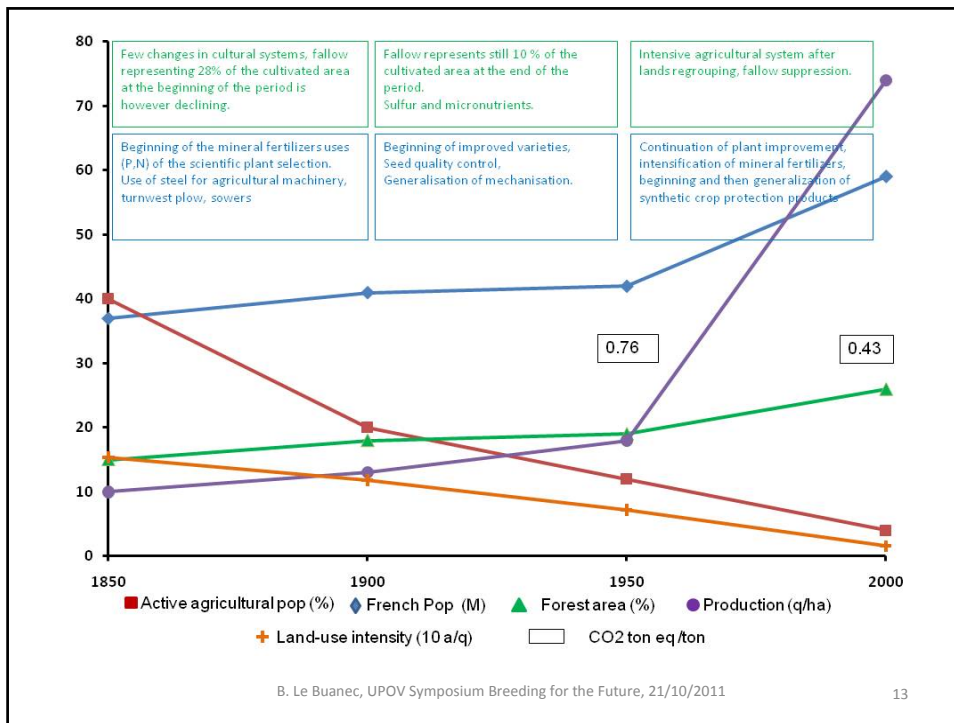
- . Yield improvement
- . Adaptation to new environments
  - maize in northern Europe
  - rapeseed in Australia
  - soybean in equatorial area
- . Development of new species: Triticale
- . Quality improvement: rapeseed

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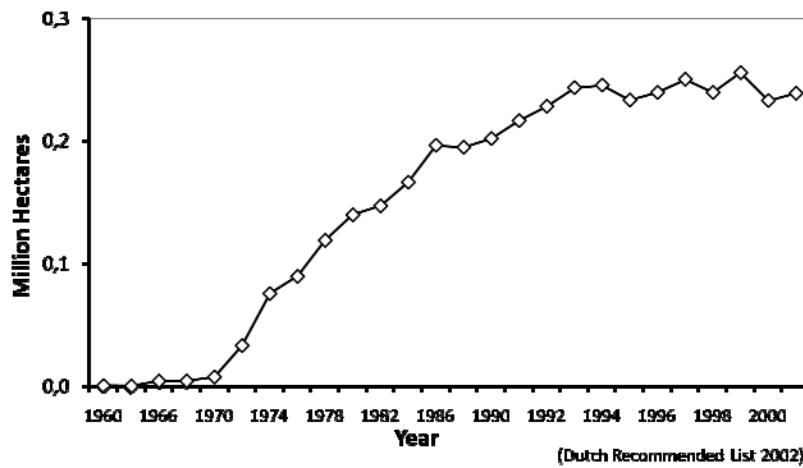
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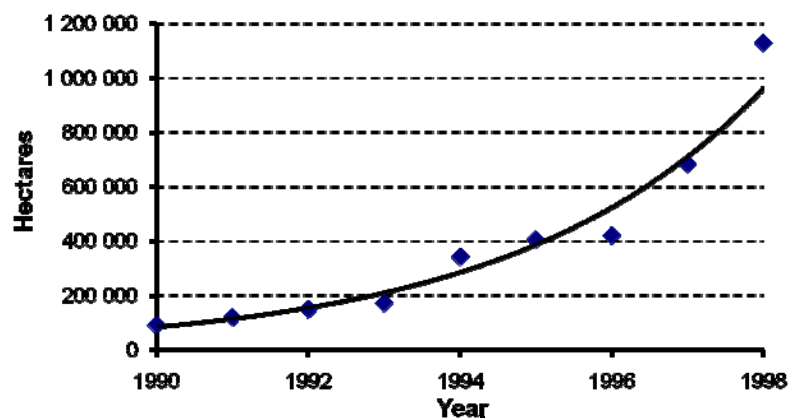
## Evolution of Maize acreage in the Netherlands



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## Evolution of Rape Seed Acreage in Australia

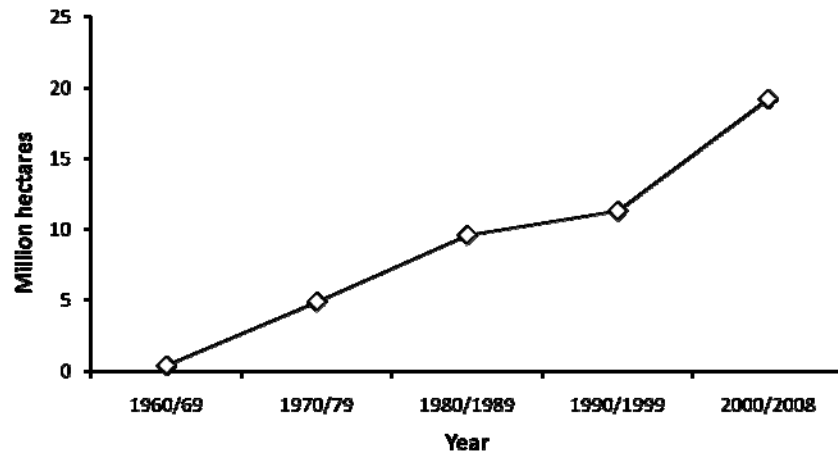


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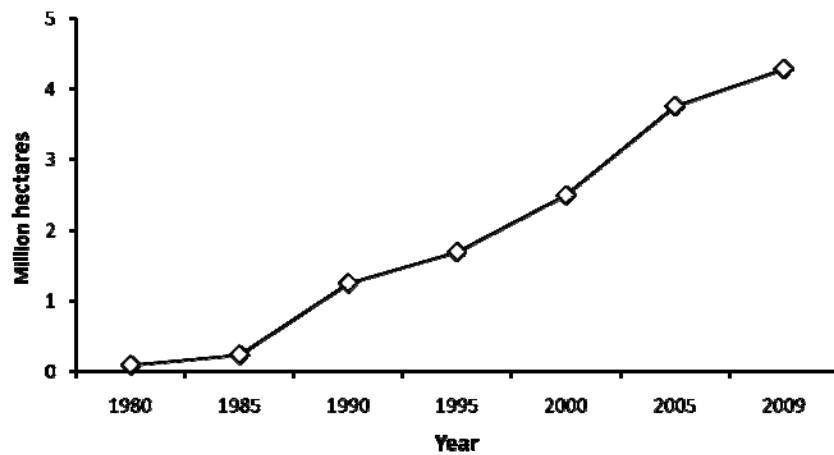
## Evolution of soybean acreage in Brazil



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## Evolution of Triticale acreage at world level



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## Objectives of the revision of the Convention

- To strengthen the right of the breeder;
- To extend the practical scope of application of the plant variety protection system;
- To clarify, on the basis of experience, a number of provisions, [...], and to adapt them to the recent and prospective developments.

## Main changes in the 1991 Act

- More detailed description of a variety.
- Extension of the protection to all genera and species.
- Extension of the scope of protection.
- Clarification on the use of farm saved seed.
- Introduction of the concept of essential derivation and dependency from an initial variety.

## Evolution of the number of species with protected varieties

1981: 80 species

1988: 350 species

2011: 3045 species

# Conclusion

Thank you for your  
Attention