

New Genomic techniques

WHAT ARE NEW GENOMIC TECHNIQUES?

NGTs are techniques of genetic modification that can help breed new plant varieties faster, and with higher precision than conventional breeding techniques.

NGTs can produce a wide diversity of plant products. These plants may have only small changes that might also occur in nature or through conventional breeding or they may have more complex modifications.



Objectives of the proposal

- High level of protection of health and environment
- Developments to contribute to sustainability and climate adaptation in a wide range of plant species, especially for the agri-food system
- Opportunities for research and innovation, including for SMEs

Examples of NGT plants



Bruise-resistant bananas



Drought-tolerant maize varieties



Mustard greens with reduced bitter flavours



Poplar with favourable wood properties



Pathogen-resistant potato



PATHOGEN-RESISTANT POTATO

50-80% REDUCTION OF PESTICIDE USE



Reduction in development time



from **10-12 years** to **4 years**

from **EUR 2.5 million** to **EUR 0.5 million**



Reduction in cost



LOW GLUTEN WHEAT



Alternative to costly gluten free diets



Reduced need for post-diagnosis medical care and lost productivity days

No increased agronomic management - comparable yields



30% increase farm gross margin/ha

Category 1 – NGT plants equivalent to conventional

Verification procedure based on objective criteria

Subject to the rules applicable to conventionally bred plants

Seeds labelled as NGT

Information available in a public database and variety catalogues

Category 2 – NGT plants not equivalent to conventional

Authorisation procedure with adapted risk assessment and detection method requirements

Traceability and labelling as GMO.
Voluntary statement on purpose of modification

Regulatory incentives for NGT plants with desirable traits

Mandatory coexistence measures



Monitoring and reporting

Prohibition in organic production

