

# What are New Plant Breeding Techniques (NPBTs)?

Innovative tools that enable plant breeders to develop novel plant varieties that can provide solutions for environmental and food quality as well as food supply challenges.

## What do we aim to do with NPBTs in the CHIC Project?

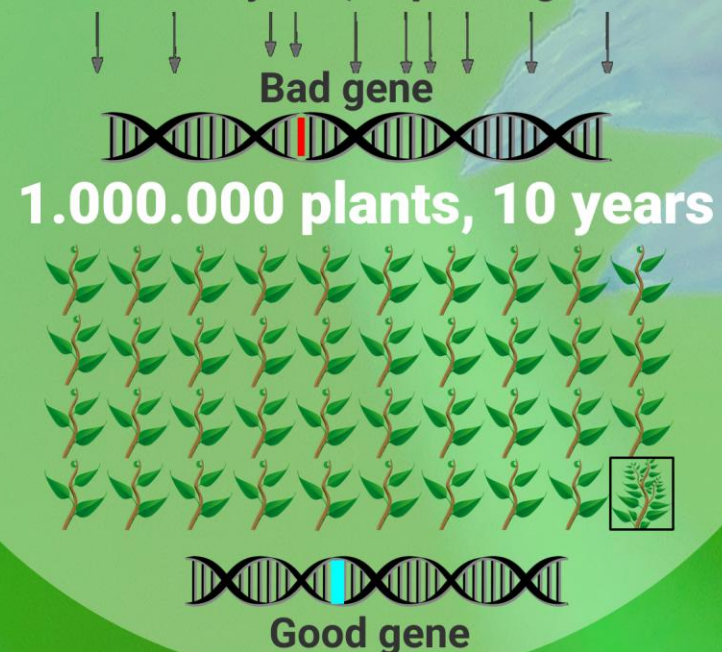
By developing and implementing a set of NPBTs, the CHIC project will adapt root chicory and strengthen it as a robust, low-input crop for the production of dietary fibres and terpenes with health benefits.

SPONTANEOUS EVOLUTION IN 'OLD' NATURAL PLANT BREEDING:  
**RANDOM MUTATIONS**

INTENDED EVOLUTION IN 'NEW' NATURAL PLANT BREEDING:  
**DIRECTED MUTATIONS**

### Conventional plant breeding

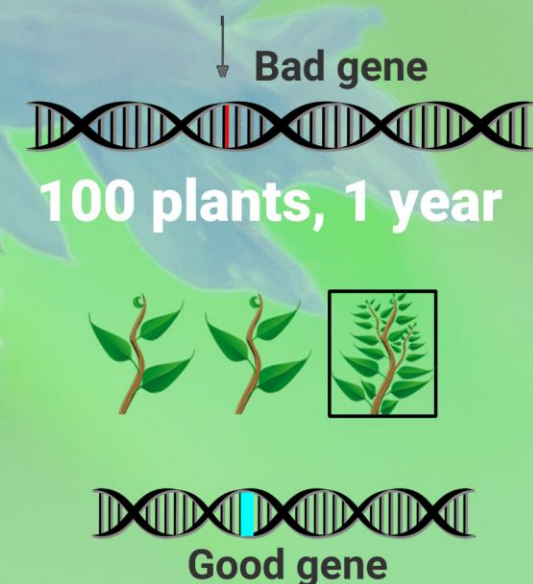
Generally relies on techniques where the outcome is difficult to predict and requires between 7 and 25 years, depending on the crop.



This is not compatible with the need to adapt plants to our rapidly changing environment and develop plant varieties that can feed the growing population and fulfil its demand for diverse and healthy diets.

### NPBTs

allow plant breeding to develop these improved plant varieties in a similar - but more precise - manner and in a significantly shorter timeframe.



CHIC

