

A photograph of several cucumbers hanging from a vine in a greenhouse. The cucumbers are dark green and elongated, with some yellow flowers still attached. The background is filled with green leaves and vines, creating a lush, natural setting.

Sharing a healthy future



Vegetable company strategies to address the challenge of producing more food under increasingly harsh conditions and how the PBR system can help breeders to cope with such challenges

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Contribution to food & nutrition security and climate-smart agriculture



Breeding is key to...

- increase yields in a sustainable way
- develop resistant varieties, allowing growers to use less pesticides
- find solutions to abiotic stress like heat, drought, salinity
- extend shelf life
- improve traditional varieties

Examples



- Strong focus on resistance breeding
 - against *aphids* > less use of chemicals
 - against *mosaic virus* > better quality/higher yield
 - against *leveillula taurica* > less chemicals, lower residue level
 - against *Fusarium oxysporum f. sp. Cucumerinum* > prevents loss of plants, better yield

Examples



Hydroponics

- Clean and soilless, water-based growing method
- Efficient use of nutrients and water
- No or limited use of crop protection agents
- Stable and higher yield, less dependent on natural climate

Examples



Delayed pinking of fresh cut lettuce (Leaf wound-induced discoloration)

- Extended shelf life
- Less waste
- Suitable for Food Service
- Stronger against cracking
- Less sensitive for leaking seals



Access to genetic variation
is essential for breeding



- Own collection
- In situ material (wild relatives)
- Ex situ material (genebanks, markets)
- Competitor varieties

The role of plant breeder's rights



- Return on investment is necessary to continue developing new varieties
- PBR is THE IP protection system: providing adequate protection, while others can continue to find solutions to today's challenges – Open Innovation



Sharing a healthy future



Closing remarks

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