Towards resilient crops: breeding for resistant vegetable seeds

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Phytopathology at RZ

- Diagnostics on material from diseased plants.
- Develop protocols for disease testing.





Resistant

Susceptible



- Tests developed on a wide range of pathogens and pests.
- Test new resistances in the field.
- Lab, greenhouse, field.

Product offer:

- 30+ vegetable and fruit crops
- Crops include, cucumber, lettuce, spinach, tomato, among others.
 1800+ commercial varieties.

Resistance Examples

- Lettuce-Fusarium oxysporum FOL 4
- Cucumber-Fusarium resistance



From diagnostics to resistance breeding:

- Determine cause of disease.
- Generate bio-

bank repository.
Develop relevant disease/pest tests.
Select plants with desirable trait.
Marker

development and gene discovery. Breeding for resilience.