

Dehybridizing a Hybrid Pickle Variety- Conquest F₁

A Restoring Our Seed Project

<http://www.growseed.org/index.html>

The logo for Cornell University, featuring the word "CORNELL" in white capital letters on a red square background.

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Dehybridizing

How do we turn a hybrid into an OP?

- Conquest F_1 - nice variety but no longer available
- Self pollinate the hybrid to get an F_2 , and select from there; put in isolation, or
- Cross hybrid to an OP
 - how do you choose the right OP?
 - look for something similar in type, maturity, quality, disease resistance

Dehybridizing

How do we turn a hybrid into an OP?

- [Conquest F_1 x Clinton OP] F_1
 - Can do a controlled pollination
 - Can plant 2 varieties side by side
 - Save seed from many fruits and bulk.
- Why Clinton?
 - Clinton has the same disease resistances as Conquest.
 - Clinton's genes are in other pickle hybrids.

Dehybridizing

How do we turn a hybrid into an OP?

- Plant out F_1 seed
 - Grow in proper environment- need to breed in the environment where the crop will be grown.
 - Select for desirable traits in isolation from other cucumbers.
 - Plant Conquest out as a comparison- need to know what you're aiming for.

Dehybridizing

How do we turn a hybrid into an OP?

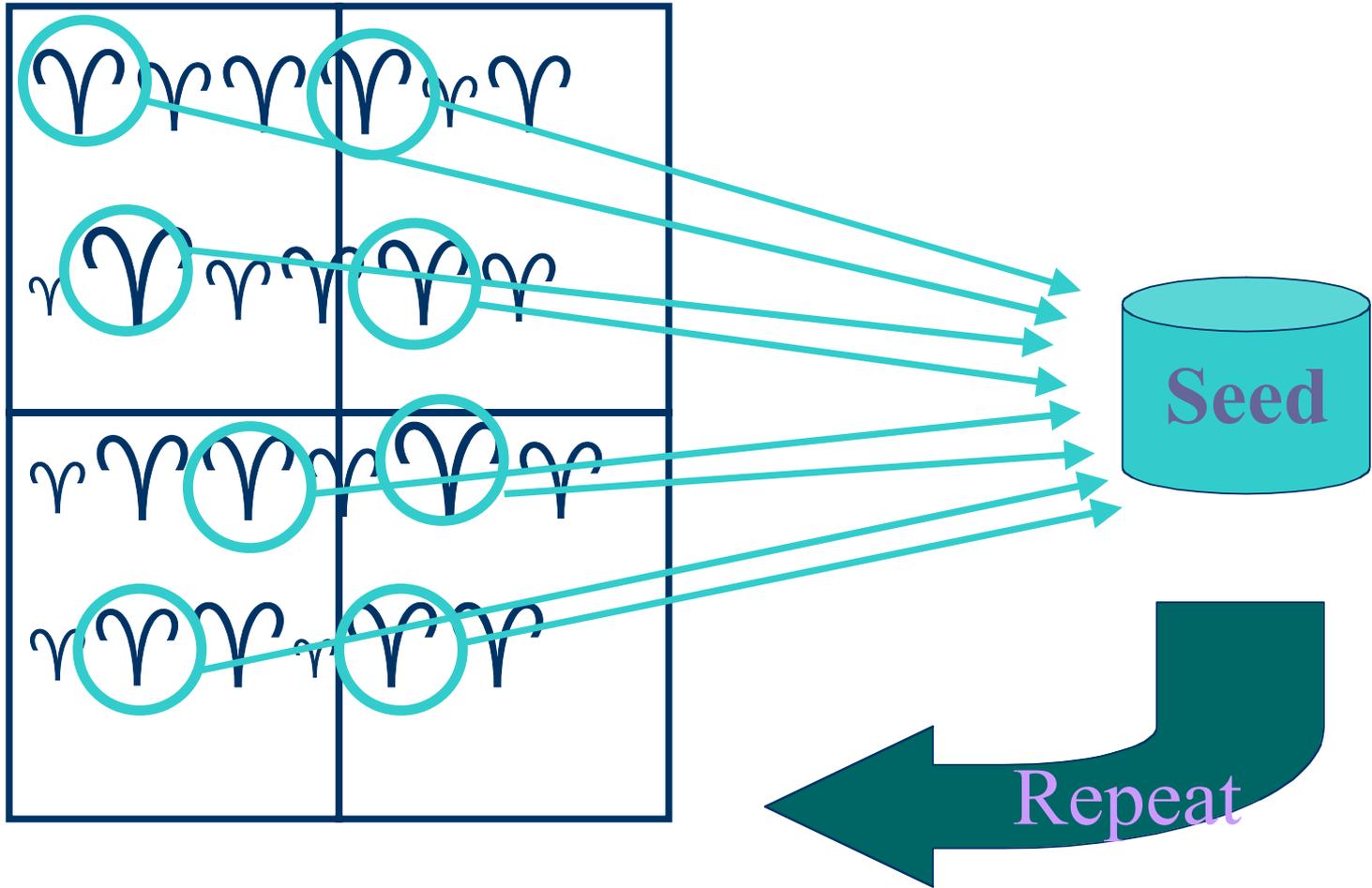
- Plant out F_1
 - Select plants with best characteristics: fruit shape, resistance, germination, earliness, flavor.
 - Rogue out unwanted plants.
 - Harvest fruit from selected plants and bulk seed.

Dehybridizing

How do we turn a hybrid into an OP?

- Plant out F_2 seed
- Repeat previous steps.
- Mass selection method.

Mass Selection





Conquest F₁

Clinton OP



[Conquest F_1 x Clinton] F_1

