

WHAT SEED TRAITS DO FARMERS NEED?

Based on 29 interviews with production vegetable farmers using organic practices in western WA in 2024, as part of an M.S. Thesis at the University of Washington School of Environmental and Forest Sciences



LETTUCE

- bolt resistance/heat tolerance
- stores well
- winter-hardy
- mold resistance
- cold tolerance
- lots of leaves for a fast harvest
- long harvest window



SQUASH

- stores well
- can be dry farmed
- matures in time (low DTM & can germinate in cold soil)
- heat tolerance
- medium size, good flavor
- productive



CARROTS

- Summer:
 - sweetness
 - short days to maturity
- Winter:
 - stores well
 - cold hardy
 - easy to bunch



BEANS & PEAS

- peas: resistance to pea enation virus
- green beans: productive, different colors, large bean pods
- long beans: productive
- pole beans: continuous harvest



KALE

- cold tolerance
- resistant to aphids & cabbage moths
- larger leaves
- can handle temperature swings
- visually interesting
- productive



CUCUMBERS

- spider-mite tolerance
- Persian cucumbers: easy to trellis
- continuous harvest
- productive and vigorous
- taste & texture
- visually interesting

For more detailed information, contact Masha Vernik at mvernik@uw.edu.

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CORN

- visually appealing
- can cure in a short season
- can germinate in cold soil



TOMATOES

- balance productivity vs. aesthetic appeal
- visually interesting & tastes good
- can be stored
- can be dry farmed
- low days to maturity
- resistance to blossom end rot, mold, tomato mosaic virus



BRASSICAS

- consistent head size + harvest window for CSA and wholesale
- continuous harvests for market farmers
- visually appealing & tastes good
- resistant to clubroot & aphids
- purple rain: cold tolerance
- cauliflower: wrapper leaves to protect from sun & frost
- cabbage: short DTM to minimize water stress from



LEEKS

- rust tolerance
- early season leeks: short DTM
- late season leeks: cold tolerance & bolt resistance

NEW CROPS

Due to climate change, farmers are growing and looking for more PNW-adapted:

- melons
- sweet potatoes
- field tomatoes, peppers, fennel & eggplant
- grapes
- okra (verticillium wilt resistant)

ORGANIC NEEDS

It can be difficult to find enough organic seed for:

- squash
- alliums: onions & leeks
- brassicas
- sugar snap peas
- cover crops
- flowers
- culturally relevant crops