



**ORGANIC
seed
ALLIANCE**

NOVIC: Winter Hardy Storage Carrot

John Navazio
Senior Scientist with Organic Seed Alliance
WSU Extension Specialist in Organic Seed

Supporting the ethical development and stewardship of seed. www.seedalliance.org


In the maritime PNW it is possible to produce carrots through the winter months




Supporting the ethical development and stewardship of seed. 

What are the characteristics for this system?

- Quality traits: Nantes w good flavor, sweetness, crisp texture/not brittle
- Tall tops to compete with weeds
- Strong tops withstand repeated freeze/thaw
- Cold resistance in roots?
- Late initiation of the reproductive stage of the life cycle



Supporting the ethical development and stewardship of seed. 

Tall tops for weed competitiveness




Supporting the ethical development and stewardship of seed.

ORGANIC seed ALLIANCE

Tall top varieties often have strong tops

- Carrots lose petioles in layers from the outer whorl to the inner in the basal rosette
- Multiple layers are lost with succeeding freeze thaw events
- By mid-February the plants may not have enough "top" to be pulled mechanically




Supporting the ethical development and stewardship of seed.

ORGANIC seed ALLIANCE

Nash identified three vars. for his system

- Root quality characters; shape, flavor, sweet, texture
- Adequate size and strength of tops to allow harvest into Feb.
- Can they be improved?



Supporting the ethical development and stewardship of seed.

ORGANIC seed ALLIANCE

A winter carrot from New Zealand

- Tall, robust tops
- Very late initiation of the reproductive stage of the life cycle, esp. as regards texture, flavor, and secondary roots
- But, not sweet in fall
 - too pointy
 - pale color



Supporting the ethical development and stewardship of seed.

ORGANIC seed ALLIANCE

'Spring Market' X 'Rumba' cross



Supporting the ethical development and stewardship of seed.

ORGANIC seed ALLIANCE

Have produced seed of F2 & F3 in the spring and summer in the GH

- Single roots of most vigorous families into individual pots for selfing and sibbing
- Seed harvested in Aug for planting into an outdoor nursery



Supporting the ethical development and stewardship of seed.

ORGANIC seed ALLIANCE

Select based on best family performance!



Supporting the ethical development and stewardship of seed.

ORGANIC
seed
ALLIANCE
