ROOTED KNOWLEDGE

Sweet Potatoes from Slip to Storage

Johnny's Selected Seeds

Johnny's Research Farm

Located in Albion, Maine (USDA zone 5b)

- **200 Acres Managed**
- **11 Farm Sites**
- **80+ Acres Consisting of:**
  - **Trial Crops**
  - **Breeding & Seed Production**
  - **Cover Crops**

Johnny's Research Farm

Located in Albion, Maine (USDA zone 5b)

3,225 Varieties planted and evaluated at our farm

30 miles Bed feet sown for our trials

175+ New varieties selected for the 2026 season

Note: Additional trialing occurs on partner farms across the country. The varieties planted and miles of bed feet listed above only represent the portion of trialing conducted on our home farm.

OUR PRESENTERS

Daniel Yoder
Trial Technician

Benjamin Brown
Product Manager

What Are Sweet Potato Slips?

- Slips refer to the shoots that sprout from seed-stock sweet potato tubers.
- They are the planting material used to grow a new sweet potato crop.
- This means all commercial sweet potato slips are propagated.
    - In other words, NEW plants grown from existing plant material, not true seed.

Caring for Slips Prior to Planting

Caring for Slips Prior to Planting

- Remove from box immediately.
- Slips may LOOK rough – that's OK!
- Slips may have roots…or not – not to worry!

Caring for Slips Prior to Planting

- Plant as soon as possible, but if planting is delayed…

Caring for Slips Prior to Planting

- If planting is delayed 1-7 days; wrap and keep roots moist.

Caring for Slips Prior to Planting

- If delayed more than one week; plant loosely in a pot.

Bed Prep & Basic Fertility

Conditions That Should Be Met Before Planting

- Sweet potatoes are native to tropical climates and therefore require a **warm** environment, frost-free for at least 4 months
- Allow soil to warm to between 60-70°F/18-21°C before planting, cool temps can damage young plants & vines

Conditions That Should Be Met Before Planting

- Choose an area in your farm/garden that receives a minimum of 8-10 hours of sunlight per day
- Most varieties require 90-120 days to fully mature, so plan for long growing season by selecting varieties that will mature in this window

Soil & Bed Preparation for Incoming Slips

- Sweet Potatoes prefer warm, well-drained sandy loam soils for best growth.
- Cool or poorly drained soils can cause slips to rot.
- Raised beds improve soil warmth, drainage, and root development.
- Black plastic mulch is effective, especially in northern regions.

Soil & Bed Preparation for Incoming Slips

- Soil test ~6 months before planting
- Target soil pH ~6.5.
- High fertility isn’t necessary; loose sandy soils help produce uniform roots.
- Form and cover beds 2–3 weeks before planting to warm the soil sufficiently.

Planting Methods

Considerations

- Timing - ASAP
- Weather
- Bed prep
- Slip quality
- Roots & leaves, sanitation

Techniques

- Mechanized vs Hand
- Ideal Spacing
- Upright vs elbowed
- Row Covers
- Water at least 15 days


2
Radiance

Season-Long Care & Management

Cultivation
- 4-6 weeks until vine growth
- Soil towards rather than away

Fertility/Water
- Side dress better ~24-40 days, less especially un-mulched

Monitor
- 35-40 days root evaluations, quality and yield assessment

Water
- Drought tolerance

Other Considerations
- Vine Pruning?
- Pests

Common Problems & Troubleshooting

Pests & Insects

- Weeds!
- Wireworm
- Grubs
- Flea Beetles
- Sweet Potato Leaf Beetles
- Tortoise Beetles
- Saltmarsh Caterpillars
- Hornworms


Photo: Colorado State University


Photo: UNH Extension


Photo: University of Georgia

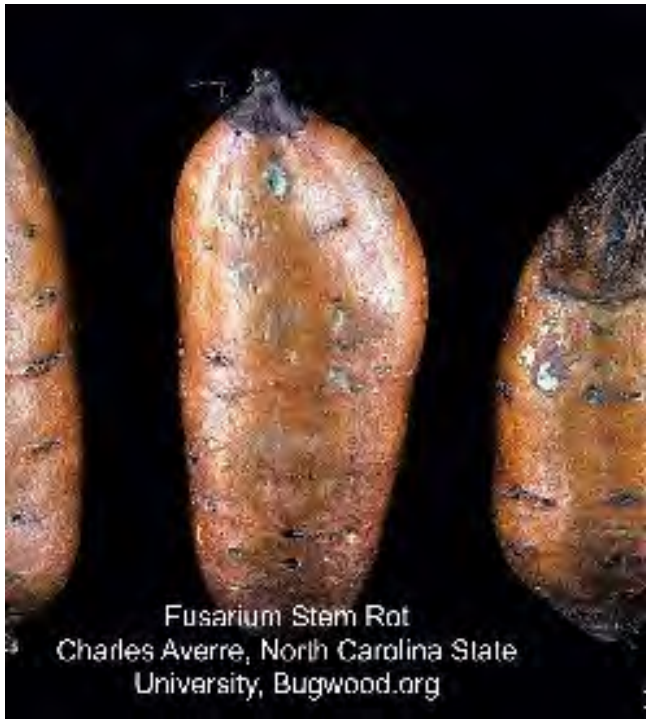

Photo: University of Georgia

Pests Controls

- Sound cultural practices
- Avoid fields that were grass the prior year
- Crop rotation
- Variety selection/reputable suppliers
- Insecticides (last resort)

Diseases

- Scurf (most common, especially in sweet potatoes produced from slips)
- Fusarium Stem rot (wilt)
- Black rot
- Soft rot
- Root-knot nematodes



Disease Controls

- Selecting resistant varieties
  - Trust your supplier
- Testing fields and selecting accordingly
  - Know your soil!
- Good Cultural practices
  - Crop rotation (3-5 years or less) ideally
  - Residue removal and destruction
  - Adequate Fertilization
  - Timely planting
  - Weed Management

Preventing Low Yields & Plant Loss

- Water management at transplanting
- Irrigation options

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Harvesting Roots

Timing

- Young vines, root size

Manage

- Water
- Frost
- Vines

Harvest Day Considerations

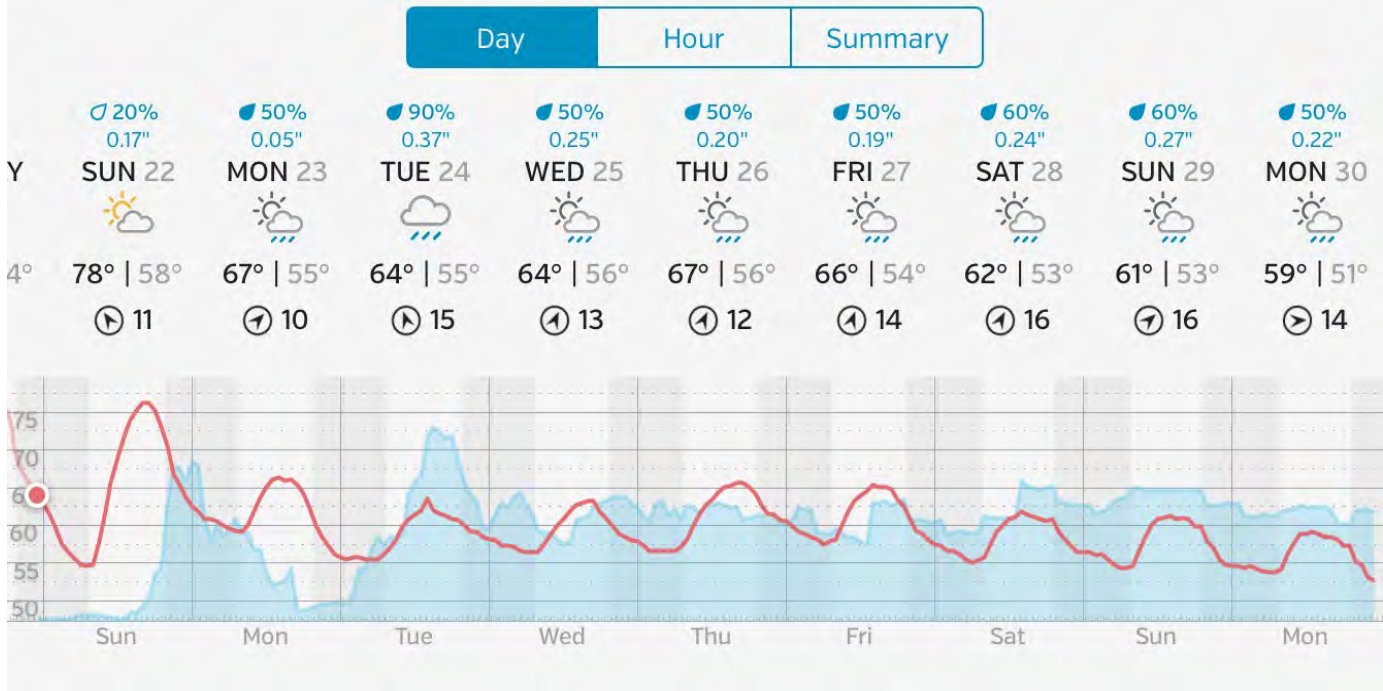
- Dry weather
- Moist for heavy soils

Technique

- Gentleness, dig farther away, slow-down

Targets

- 3 lbs per hill
- 50 lbs per 20 ft




JOHN DEERE
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Curing & Storage

Curing

- Optional but increases quality & storability
- Ideal 85/85, 5-7 days OR longer at lower (70F min)

Storage

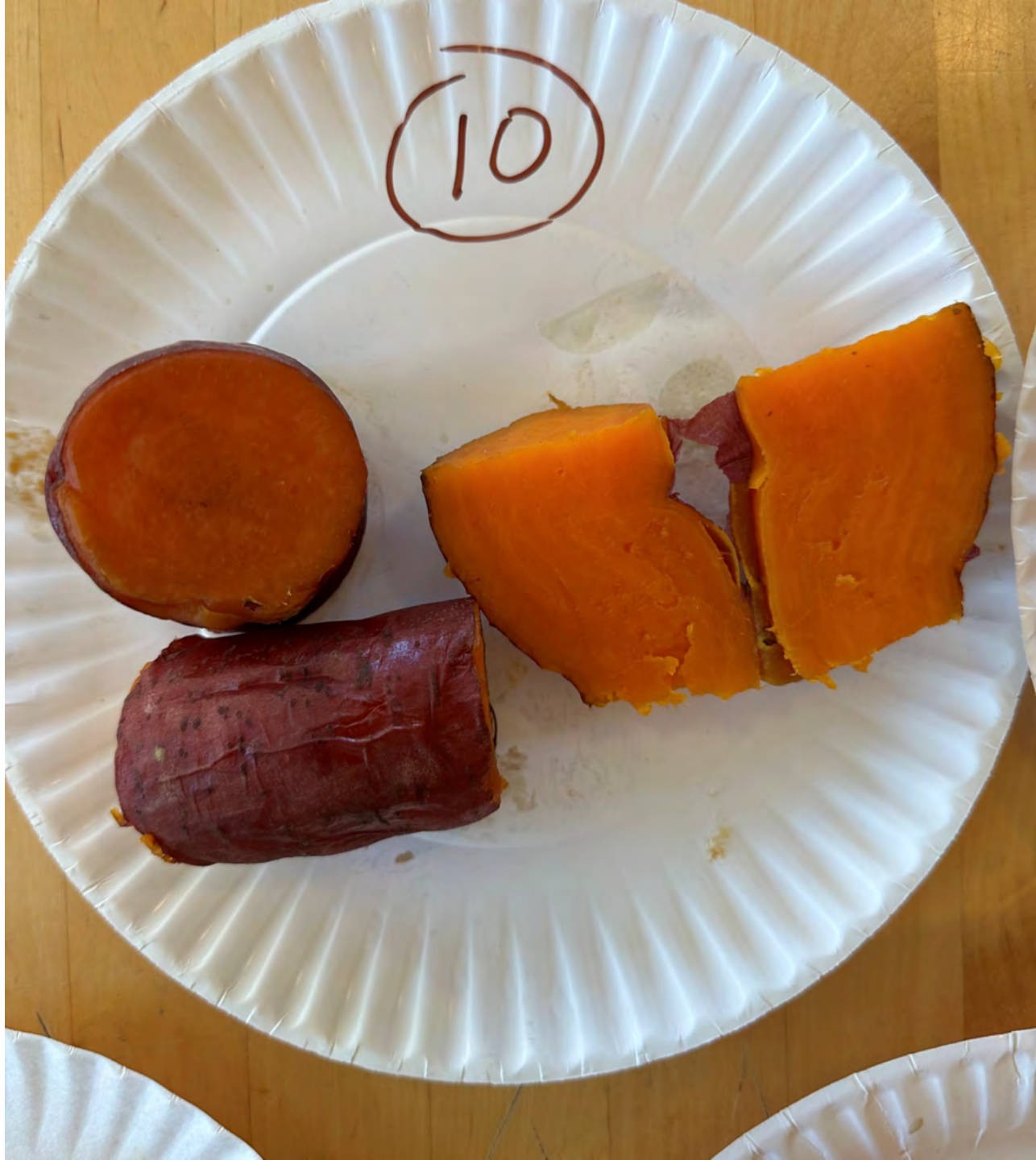
- No seconds
- Squash-like conditions: darkness, coolness, dryness
- Ethylene Effects


3 C

Culinary Uses

Common Preparations
All Types

- Baked & Roasted – whole, halved, or cubed
- Mashed / Whipped – simple or lightly seasoned
- Fried – fries, wedges, chips
- Grilled – sliced, foil-wrapped, or basketed
- Steamed or Boiled – plain or lightly sweetened
- Pureed – soups, sauces, baking ingredient
- Healthy substitute for white potatoes in meals



Where Types Shine
(Uses & Strengths)

Orange Types
(Beauregard, Covington, Mahon Yam)

- Sweet, moist flesh
- Best for mashing, baking, roasting, candied dishes
- Ideal for traditional sweet potato recipes

White Types
(White Bonita)

- Mild, sweet flavor
- Excellent for soups, stews, baking, and desserts
- Versatile for savory or lightly sweet dishes

Where Types Shine
(Uses & Strengths)

Japanese Types
(Murasaki, Luminance)

- Drier, starchier, “nutty” flavor
- Shine when roasted, grilled, fried, or used in curries
- Popular in grain bowls, fries, and Asian cuisine

Purple Types
(Purple Majesty)

- Mild, sweet flavor
- Excellent for soups, stews, baking, and desserts
- Versatile for savory or lightly sweet dishes

Variety Features

White Bonita Highlights

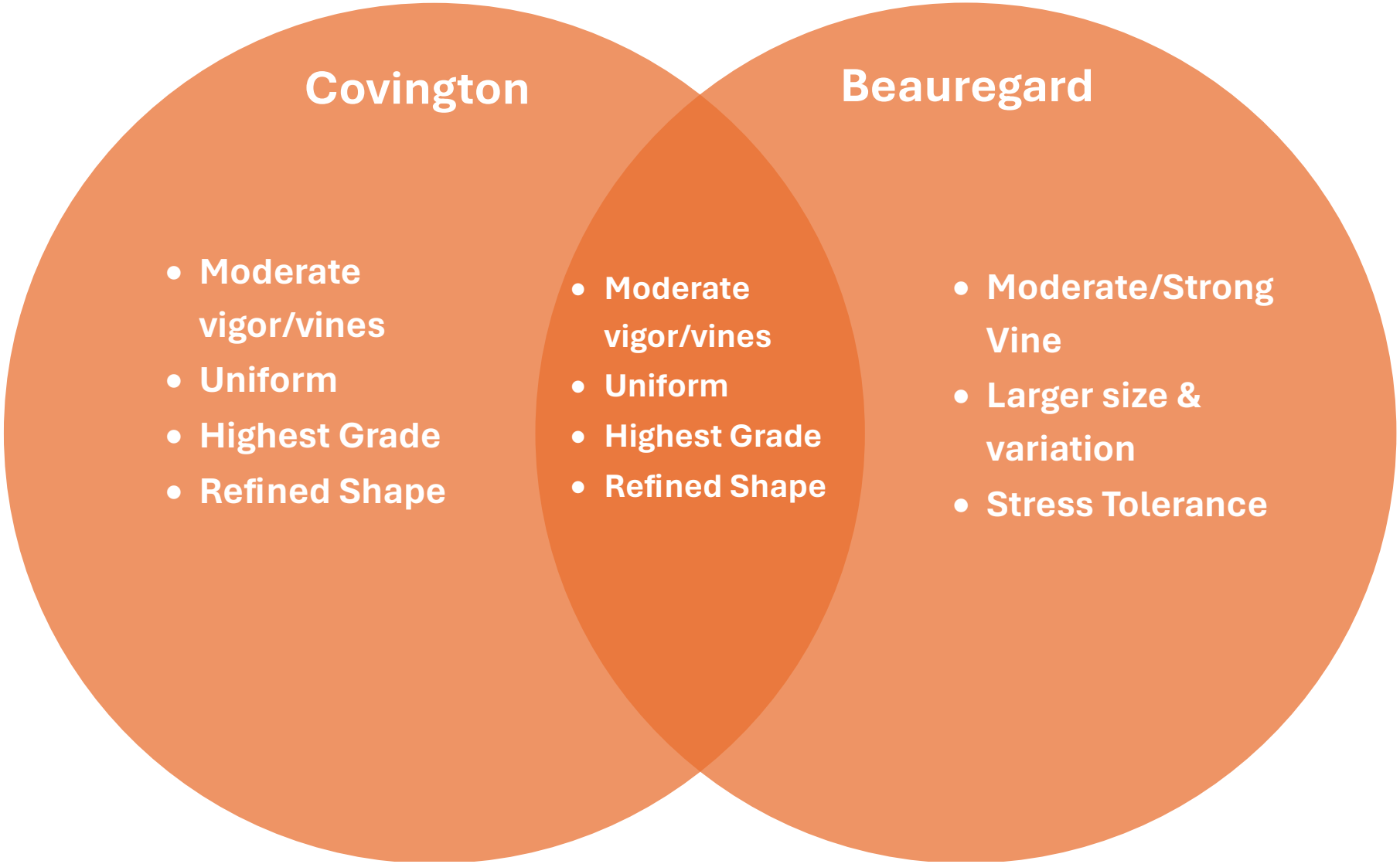
- R: Root-Knot Nematodes
- Whiter color
- Smooth
- Refined shape
- High output and marketability

Mahon Yam Highlights

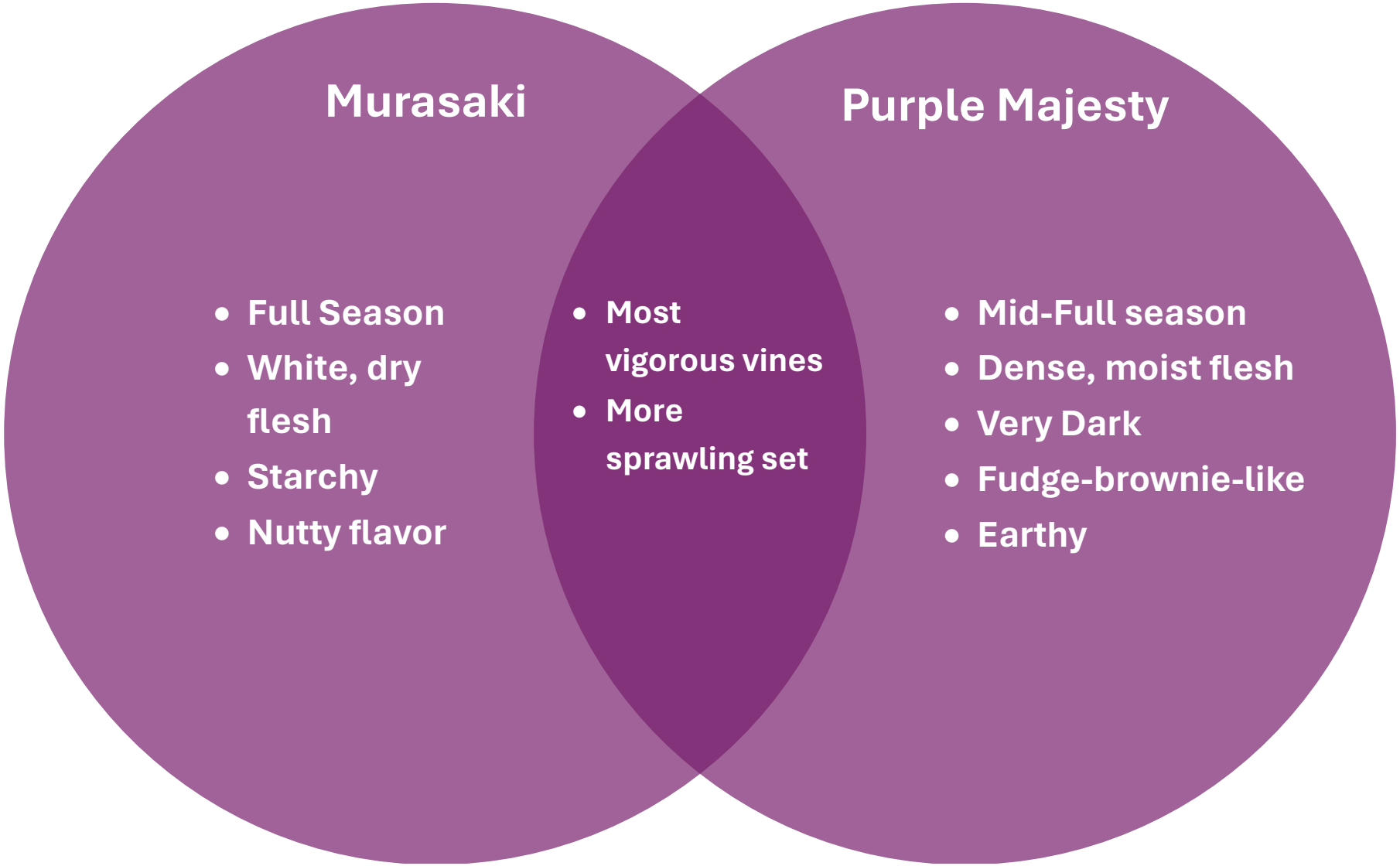
- JSS exclusive
- Very Early
- Fairly concentrated
- Unique leaf type
- Slightly unique color and shape– identifiable
- Fiberless & Full of Flavor

Mahon Yam harvest at Brookdale Farm

Two ‘Golden’ Standards

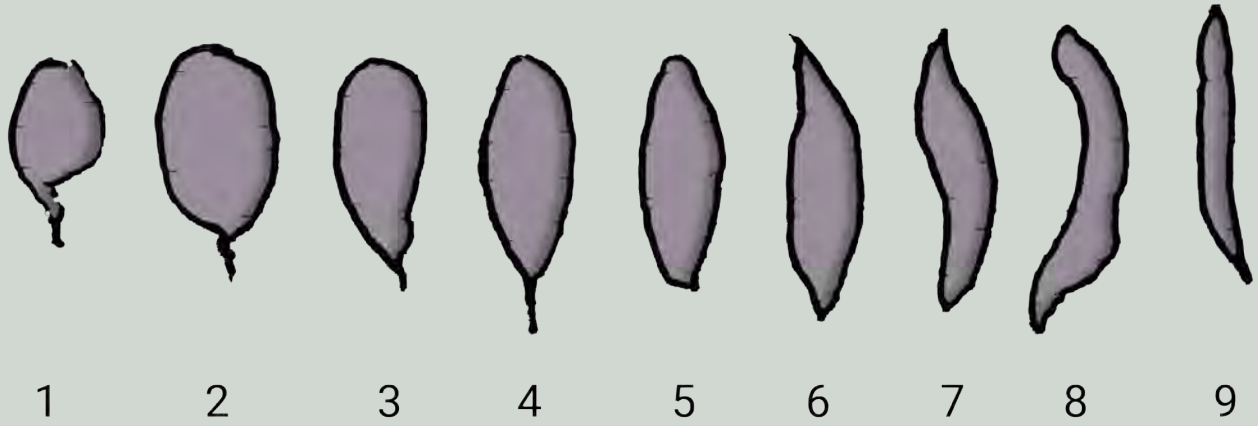


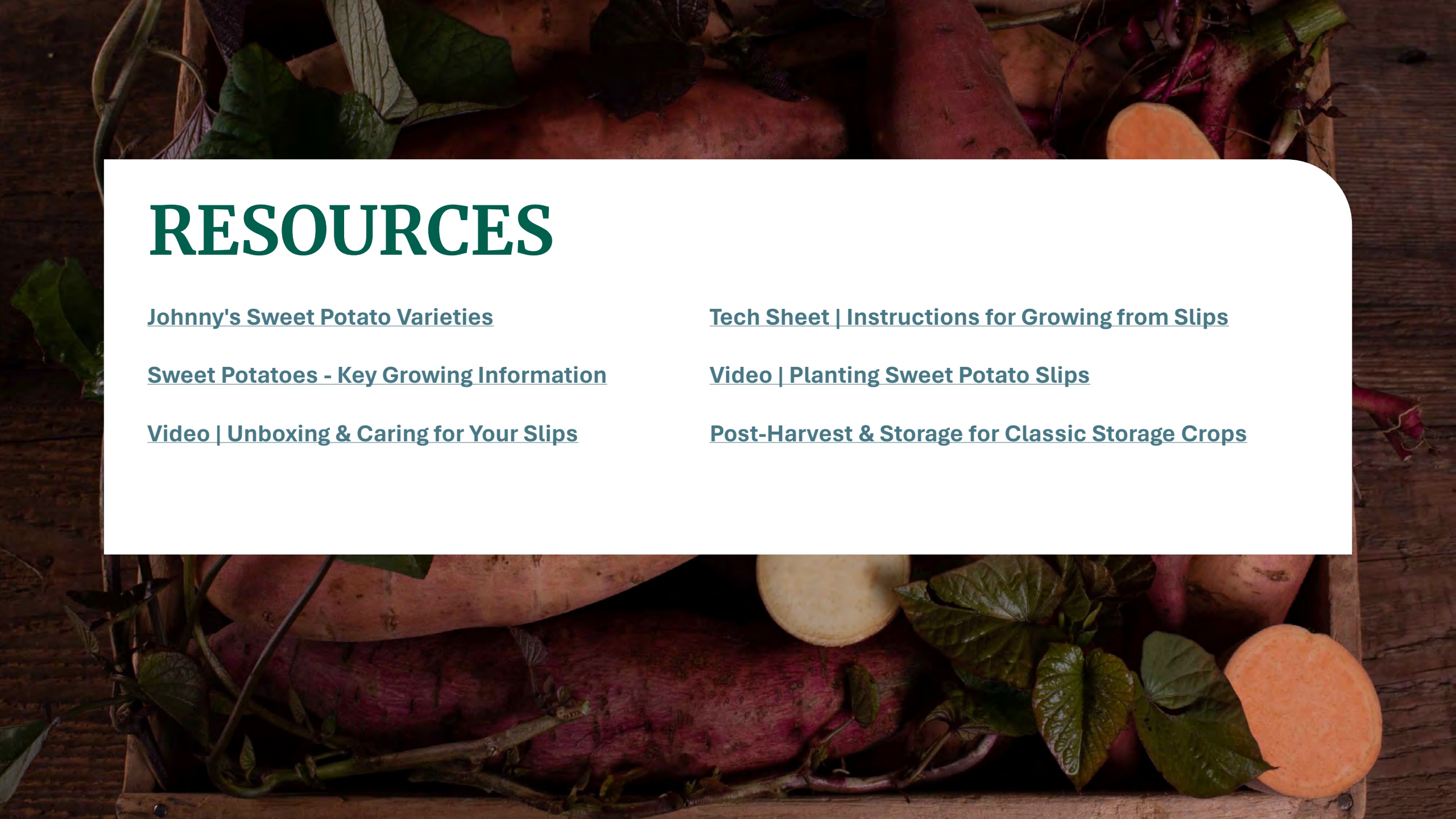
Variety Highlights *Continued*




Luminance
Murasaki

Root Shapes





RESOURCES

Johnny's Sweet Potato Varieties

Sweet Potatoes - Key Growing Information

Video | Unboxing & Caring for Your Slips

Tech Sheet | Instructions for Growing from Slips

Video | Planting Sweet Potato Slips

Post-Harvest & Storage for Classic Storage Crops

Thank You

We hope you enjoyed our presentation

Johnny's Selected Seeds