Improved planter guidance systems
Improved planter guidance systems
Post-plant Hill Up
Poor site prep leads to difficult planting and hill-up
Fertilizing Newly Planted Vines

- Provide nitrogen and potassium
  - Other nutrients and amendments should have been applied before planting
- Apply nitrogen in a circle near plants
- Potassium can be band applied
NITROGEN application to new vines

Apply 30# actual N per acre

= ~ 2 oz of ammonium nitrate/vine
= ~ 1.5 oz of urea/vine
POTASSIUM application to new vines

As recommended by previous soil test.

Banded application in the vine rows.
Now, at last, you can sit back and watch them grow...
Well, you can,

but this is what you’ll get.
Early Care Topics

• Weed control

• Vine maintenance

• Row middle seeding
Weed Control in New Vineyards

- Critical to early vine growth
- Long lasting impacts on vine performance
COMPARISON OF THE INFLUENCE OF VARYING WIDTHS OF THE WEED-FREE AREA (WFA) ON THE GROWTH OF NEWLY-PLANTED NIAGARA VINES

SWMREC 7/31/96
Management of Early Vine Growth
Year 1 – Maximize leaf area!!

- Do not remove shoots to “neaten” up the vine
- It’s OK to have shoots in all directions
- Shoots = leaves = root growth
Year 1 – Maximize leaf area!!

• This looks nice but more shoots and more leaf area would be better!
Year 1 – Maximize leaf area!!

- Protect vines from leaf loss due to
  - Defoliating insects
  - Foliar diseases
Year 2 – Maximize leaf area and begin developing vine structure

- Select upright shoots to establish trunks
- Provide support and guidance
- Continue to keep many shoots and protect foliage from insects and diseases
- Remove clusters
Support and guidance options

- Install posts and wires
- Twine supports
- Stakes for each plant
Year 2 – support of growth

- Select upright shoots to establish trunks
- Provide support and guidance
- Continue to protect foliage
- Remove clusters

**Diagram:**
- Twine tied to top wire
- Loose twist ties
- Loose twine around all shoots
- Twine looped around lower wire
- Loose twist tie
- Twine tied on shootless spur
What about “grow tubes”?

• Select upright shoots to establish trunks
• Provide support and guidance
Yes, shoot growth can be rapid
Cost Estimate for Using Grow Tubes

(1) Cost of tubes ...............  800 x .30 = $240
(2) Labor to install tubes ..... 800 x .30 = $240
(3) Labor to remove tubes ... 800 x .05 = $ 40

Cost per acre = $520
However, the benefit to vine establishment was minimal in MSU research plots

- No significant difference in dry weight of shoots and roots at end of project
- Shoot growth too vigorous—less cold hardy
- Problems with foliar diseases inside tubes
Row Middle Seeding
THANK YOU FOR YOUR ATTENTION