

Grape fungicide update for 2011

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Vivando (metrafenone)

- New and unique mode of action: first fungicide in its class (FRAC Code U8)
- Labeled for control of powdery mildew (excellent control in MI but also suppressed downy mildew and black rot)
- Stops infections, limits lesion growth, sporulation, and spore viability
- Does not have curative activity – always apply preventively
- Vivando will not eradicate or “burn out” existing infections



Vivando

- No cross-resistance known with other fungicides: specific biochemical mode of action not known
- May be applied anytime after bud break
- Normal disease pressure:
10 fl oz on 14-day schedule OR
15 fl oz on 21-day schedule
- Heavy disease pressure:
12.8 fl oz on 14-day schedule OR
15 fl oz on 17-day schedule



Vivando

- Silicone-based adjuvant recommended
- Rainfast in one hour
- Fungicide redistributes across plant surface; improved coverage of grape clusters
- Use in program with other fungicides: Max. 3 total and 2 consecutive applications
- PHI = 14 days; REI = 12 hours
- Use rate: 10-15 fl oz/acre
- Estimated cost: \$17-25/acre



Revus Top (difenoconazole [SI] + mandipropamid [CAA])



- Two systemic components: broad spectrum
- Has preventative, systemic and curative properties
- Labeled for control of powdery mildew, downy mildew, Phomopsis, black rot, anthracnose, and minor foliar diseases
- In Michigan provided excellent control of powdery mildew, downy mildew, and black rot; moderate control of Phomopsis.

Revus Top



- Use of a non-ionic surfactant or crop oil concentrate is recommended
- Do not apply to Concord, Concord Seedless or Thomcord grapes; use caution on other *V. labrusca* cultivars and *V. labrusca* hybrids or phytotoxicity (leaf burning) may result
- Risk of phytotoxicity on Concord and related cultivars enhanced during rapid growth which may result in a thin wax layer on leaves

Revus Top



- Rapidly bonds to wax layer of plant – rainfast as soon as droplets have dried
- Apply at 7 fl oz/acre at 10-14-day intervals
- No more than 2 sequential applications before alternating with another fungicide; apply no more than 4 total applications
- PHI = 14 days, REI = 12 hours
- Estimated cost: \$16/acre

Quadris Top (azoxystrobin [QoI] + difenoconazole [SI])



- Two systemic components
- Has preventative, systemic and curative properties
- Labeled for control of powdery mildew, downy mildew, black rot, anthracnose; Suppression of Botrytis bunch rot
- Will be evaluated in Michigan in 2011; efficacy expected to be excellent, but could erode where fungicide-resistant PM strains present

Quadris Top

- Apply no more than 2 consecutive sprays before switching to a fungicide with a different mode of action; max. 56 fl oz/acre/season
- Quadris Top is extremely phytotoxic to certain apple varieties
- PHI = 14 days, REI = 12 hours
- Apply at 10-14 fl oz on 10-14-day schedule
- Estimated cost: \$22-31/acre



Inspire Super (difenoconazole [SI] and cyprodinil [AP])



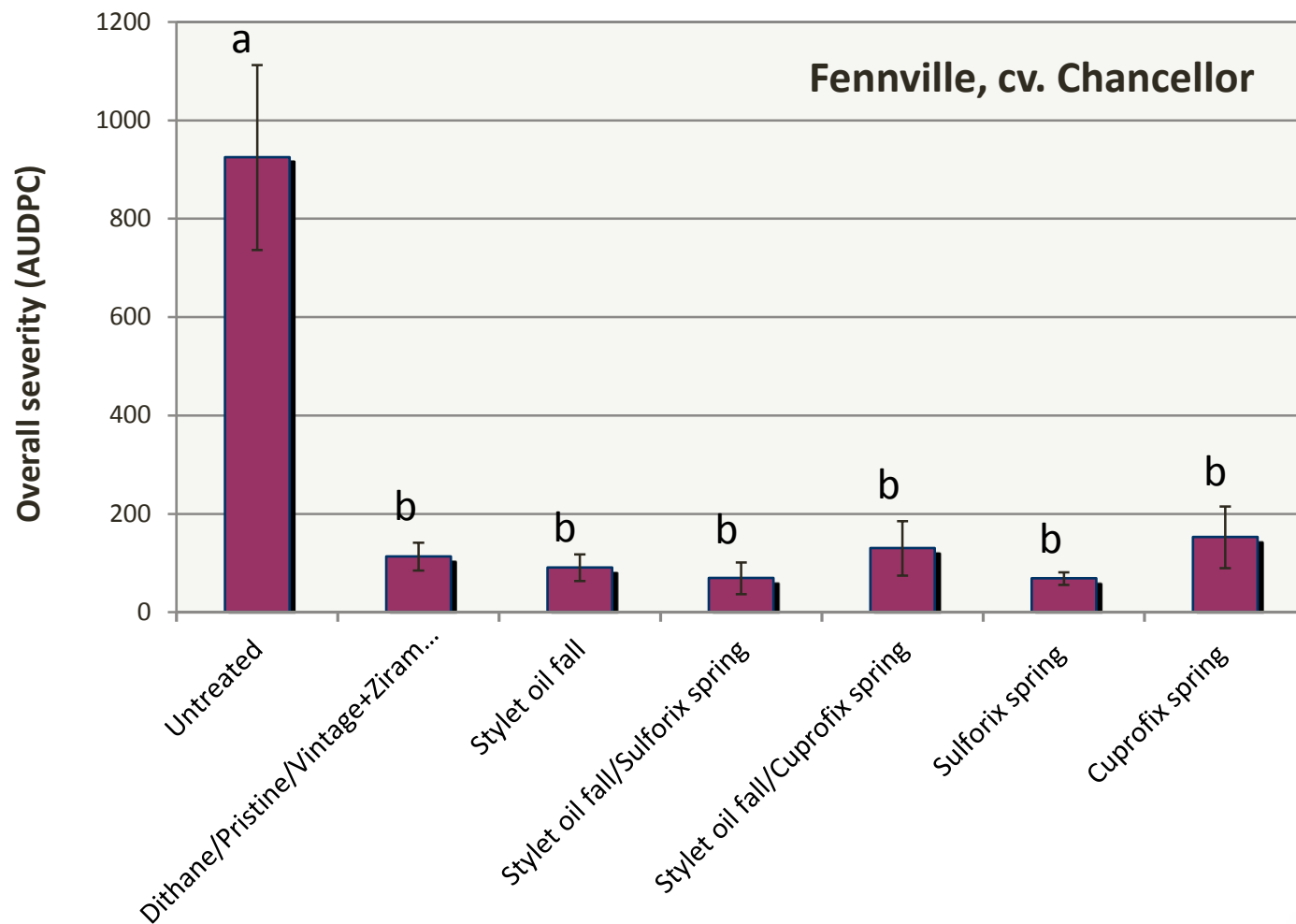
- Two systemic components
- Has preventative, systemic and curative properties
- Labeled for control of powdery mildew, and Botrytis bunch rot, black rot, anthracnose
- PHI = 14 days, REI = 12 hours
- Apply at 16-20 fl oz on 10-14-day schedule
- Estimated cost: \$22-27/acre

Dormant sprays



- Used to inactivate fungal disease inoculum overwintering on the vine (Phomopsis, powdery mildew, black rot, anthracnose)
- Lime Sulfur, Sulforix, Sulfur, Copper, Stylet Oil
- Apply before bud break to trunk and cordon
- Apply with hand-pump sprayer or if tractor-pulled sprayer, focus nozzles and use low volume (20-30 gpa) to get concentrated solution on vine without much run-off

Efficacy of dormant sprays applied in fall 2009 and/or spring 2010 on powdery mildew during 2010 season



For fungicide labels and
material safety data sheets
check out:

www.cdms.net