Top 10 Mediterranean Winegrape Cultivars To Consider for Foothills Vineyards

Glenn McGourty, Viticulture and Plant Science Advisor, UCCE Mendocino and Lake Counties
The International Varieties

- Cabernet Sauvignon
- Merlot
- Sauvignon Blanc
- Pinot Noir
- Chardonnay
Why International Varieties?

- Long modern history of export production
- Perceived quality
- Tradition
European Viticulture

- Climate is more continental—more rain, overall cooler in many areas compared to California
- Grapes are grown from 38-50th parallel
- Vintage years happen when grapes become fully ripe
California Has A Mediterranean Climate

- Most wine growing occurs between Latitude 33-38 degrees (vs. 41-50 degrees)
- Climate is characterized by warm dry summers and cool (but not freezing) winters
- One percent of the earth’s surface
- One of six areas on the planet
Why Consider Planting Something Different?

- Niche Market
- Vines adapted to your climate
- Wine Styles
- Direct Sales
Market Realities

- Wine drinkers are more adventurous than wine distributors!
- Many wine writers don’t understand lesser known varieties
- It is hard to sell wines with names that consumers can’t pronounce (Viognier, Montepulciano, Cieliegolo, etc.)
Other Considerations for Novel Varieties

- Not everyone likes what you like
- New wines require a hand sell
- You are pretty much on your own for information on how to grow things!
  (Could require extended trips to where the winegrape originated from)
The Mendocino and Lake County Mediterranean Winegrape Cultivar Trials

- UC Hopland Research and Extension Center, 1994-2004 (19 cultivars)
- Roumiguire Red Hills Trial, 1994-2000 (12 cultivars)
- Roumiguire Highland Springs Trial, 1994-2000 (12 cultivars)
- McDowell Valley Vineyards Syrah Clonal Trial, 1998-present (5 clones)
White Varieties Evaluated

- Arneis
- Cortese
- Fiano
- Marsanne
- Pinot gris
- Roussanne
- Viognier
Red Varieties Evaluated

- Aglianico
- Alicante Bouchet
- Canaiolo
- Cinsaut
- Corvina
- Dolcetto
- Freisa
- Grenache
- Montepulciano
- Mourvedre
- Nebbiolo
- Sangiovese
- Syrah
- Tempranillo
### Ripening Order, Whites

<table>
<thead>
<tr>
<th>Variety</th>
<th>Approximate Month</th>
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</thead>
<tbody>
<tr>
<td>Pinot gris</td>
<td>Late August, Early Sept.</td>
</tr>
<tr>
<td>Viognier</td>
<td>Mid-late September</td>
</tr>
<tr>
<td>Arneis</td>
<td>Mid-late September</td>
</tr>
<tr>
<td>Fiano</td>
<td>Late Sept.-Early October</td>
</tr>
<tr>
<td>Marsanne</td>
<td>Mid-late October</td>
</tr>
<tr>
<td>Cortese</td>
<td>Late October</td>
</tr>
</tbody>
</table>
# Ripening Order, Reds

<table>
<thead>
<tr>
<th>Variety</th>
<th>Approximate Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lemberger</td>
<td>Late August, Early Sept.</td>
</tr>
<tr>
<td>Pinotage</td>
<td>Mid-late September</td>
</tr>
<tr>
<td>Dolcetto</td>
<td>Late Sept.-Early October</td>
</tr>
<tr>
<td>Syrah</td>
<td>Early-mid October</td>
</tr>
<tr>
<td>Tempranillo</td>
<td>Early-mid October</td>
</tr>
<tr>
<td>Grenache</td>
<td>Mid-late October</td>
</tr>
<tr>
<td>Sangiovese</td>
<td>Mid-late October</td>
</tr>
<tr>
<td>Freisa</td>
<td>Mid-late October</td>
</tr>
</tbody>
</table>
### Ripening Order, Reds

<table>
<thead>
<tr>
<th>Variety</th>
<th>Approximate Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbera</td>
<td>Mid-late October</td>
</tr>
<tr>
<td>Corvina</td>
<td>Mid-late October</td>
</tr>
<tr>
<td>Touriga nacional</td>
<td>Late October</td>
</tr>
<tr>
<td>Cinsaut</td>
<td>Late October</td>
</tr>
<tr>
<td>Souzao</td>
<td>Late October</td>
</tr>
<tr>
<td>Canaiolo</td>
<td>Late October</td>
</tr>
<tr>
<td>Nebbiolo</td>
<td>Late October</td>
</tr>
<tr>
<td>Montepulciano</td>
<td>Early November</td>
</tr>
<tr>
<td>Mourvedre</td>
<td>Early November</td>
</tr>
<tr>
<td>Aglianico</td>
<td>Early November</td>
</tr>
</tbody>
</table>
Med II Trial :
Cultivars Being Tested:

Albarino    Sagrantino
Ciliegiolo  Tannat
Counoise    Teroldego
Graciano    Tinta Amarella
Greco di Tufo Tinta Francisca
Negro Amaro  Tocai Friulano
Periquita    Touriga Nacional

Vermintino

The Mediterranean Region

Diversity and

Warm Growing Conditions
Production of Winegrapes in Southern Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Acres</th>
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<tbody>
<tr>
<td>Greece</td>
<td>330,000</td>
</tr>
<tr>
<td>Italy</td>
<td>2,305,000</td>
</tr>
<tr>
<td>Spain</td>
<td>3,060,000</td>
</tr>
<tr>
<td>Portugal</td>
<td>647,500</td>
</tr>
</tbody>
</table>
Cultivars from Northern Italy

- Barbera
- Dolcetto
- Arneis
Italy: Land of Diversity!
Arneis
Arneis Characteristics

- Early bud break (like Chardonnay)
- Early ripening (mid-September), around 2900 degree hours
- Sprawling growth, vigorous
- Small clusters
- Cane pruned
- Low-moderate yield potential
- Moderate-low acid, good aromatics
Barbera
Barbera Characteristics

- Mid-season bud break
- Mid-season ripening, around 3050 hours
- Medium-sized clusters
- Vigorous
- Good yield potential
- Spur pruned
- Good acidity and color
Dolcetto
Dolcetto Characteristics

- Mid season bud break
- Mid-season ripening (early October), around 3000 degree hours
- Compact growth
- Medium-large clusters
- Moderate yield potential
- Good color and tannins
*Abruzzo
Varieties from Central Italy:
Montepulciano
Montepulciano Characteristics

- Late season bud break
- Late season ripening (early November), around 3200 degree hours
- Moderate growth
- Medium-large clusters
- High yield potential
- Spur pruning
- Good color and soft tannins
Abruzzo Region, Italy
Montepulciano vines on a tendone trellis, Abruzzo
Beneath the tendone
Campagna
Fiano
Fiano Characteristics

- Mid season bud break
- Mid-season ripening (early October), around 3000 degree hours
- Vigorous growth
- Small clusters
- Low- Moderate yield potential
- Good acidity
Fiano Vineyard
Aglianico
Aglianico Characteristics

- Late season bud break
- Very late season ripening (early November), around 3200 degree hours
- Compact growth
- Small-medium-large clusters
- Low-moderate yield potential
- Spur pruning
- Good color and tannins
Traditional Aglianico Trellis, Campagna
Southern France
Varieties from Southern France

- Syrah
- Grenache
- Viognier
Châteauneuf du Pape
Syrah
Hermitage – Rhone region
Syrah Characteristics

- Late season bud break
- Late season ripening (mid-October), around 3100 degree hours
- Moderate-vigorous growth
- Small-medium-large clusters
- Moderate to high yield potential
- Spur pruning
- Excellent color and tannins
Syrah Clonal Trial

McDowell Valley Vineyards
Hopland, California
McDowell Valley Vineyards
Syrah Clonal Trial

- 6 Clones
- RCB ANOVA Design
- 5 vines per rep, 8 reps, 40 vines total
- 9 foot wide rows, 6 feet apart in row
- Planted spring, 2000 as green growers
- Rootstock: 101-14
- VSP Trellis System
- Drip Irrigated
CTPS (ENTAV) Clones

- Selected primarily to ensure ripening under French conditions
- Selected initially for plant health, but may not be completely virus free
- Smaller clusters and berries than UC Shiraz clones (which are pre-phylloxera Syrah clones from Australia)
- Ripen earlier in France than older selections
Syrah Harvest

- Vine yield, cluster number, average cluster weight, berry size
- Fruit Chemistry: pH, TA, % Brix
- Harvested October 5, 2007
Syrah Clones Evaluated:

- CTPS 100
- CTPS 174
- CTPS 308
- CTPS 383
- CTPS 474
- CTPS 877
McDowell Valley Vineyards Syrah Clonal Trial
2004 - 2007
Average Vine Yield (Kg)

<table>
<thead>
<tr>
<th>Year</th>
<th>Yield (Kg)</th>
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<tbody>
<tr>
<td>2004</td>
<td>2.06</td>
</tr>
<tr>
<td>2005</td>
<td>4.18</td>
</tr>
<tr>
<td>2006</td>
<td>3.76</td>
</tr>
<tr>
<td>2007</td>
<td>4.86</td>
</tr>
</tbody>
</table>
McDowell Valley Vineyards Syrah Clonal Trial
2004 - 2007
Average Cluster Weight (g)

Year

Cluster Wt. (g)

2004: 141.95
2005: 150.13
2006: 82.70
2007: 144.67
McDowell Syrah Clonal Trial 2007
Average Yield per Vine (5 kg = 4.5 t/a)
Summary of McDowell Syrah Clonal Trial

- Vines are maturing, but still young
- Clones were chosen for early ripening, and these selections are certainly meeting that objective
- High pH fruit may be a problem some years, but trial is young, fruit was very ripe. This seems to be consistent in this trial.
Grenache
Grenache
Grenache Characteristics

- Early season bud break
- Mid- late season ripening (mid-October), around 3100 degree hours
- Moderate-vigorous growth
- Small-medium-large clusters
- Moderate to high yield potential
- Spur pruning
- Good color and tannins
Viognier
Grapes – North Rhone
Viognier Characteristics

- Early bud break (like Chardonnay)
- Early ripening (mid-September), around 2900 degree hours
- Sprawling growth, vigorous
- Small clusters
- Cane or pruned
- Low-moderate yield potential
- Moderate-low acid, very aromatic
- Likes and needs heat—pick ripe
Spain, the World’s Biggest Vineyard
Tempranillo
Tempranillo Characteristics

- Mid season bud break
- Mid season ripening (mid-October), around 3100 degree hours
- Moderate-vigorous growth
- Small-medium clusters
- Moderate yield potential
- Spur pruning
- Good color and tannins
- Great taste in warm climates
Thanks for your attention!