

Reduction Prone: frequent pumpovers or rack and return to introduce oxygen and avoid off flavors; battonage/lees stirring, frequent aeration

- Pinot Noir
- Chardonnay
- **Mouvedre**
- **Syrah**
- **Montepulciano**
- Trousseau
- Poulsard
- **Dolcetto**

Uneven ripening/millerandage

- Chardonnay
- Gamay
- Nebbiolo
- Zinfandel/primitivo
- Montepulciano
- Chenin Blanc
- Corvinone
- Nero d'Avola/Calabrese
- Bobal
- Tempranillo
- Nero/Uva di Troia

Oxidation

- Grenache
- Arneis
- Clairette
- Piquepoul Blanc - Picpoul de Pinet AOC
- Malvasia Bianca di Candia - Lazio

Disease

- all Marche grapes **resistant** except Verdicchio
- Passerina - **resistant**
- Malvasia Bianca di Candia
- **Primitivo - loose bunches (~Bourboulenc) with small berries better disease resistance than Zinfandel**

Drought

- Mouvedre - not drought resistant but requires small but regular amounts of water from deep calcareous soils that store water
- Merlot
- Corvina
- Primitivo
- Tempranillo - not resistant
- Verdejo - **resistant**
- Grenache - **resistant**
- Cinsault - **resistant**
- Greek varieties mostly resistant eg Savatiano - **resistant**
- **Greco - resistant**
- **Piedirosso - resistant**
- Inzolia or Ansonica - resistant
- Moscato - resistant
- Carignan - resistant
- Graciano - resistant
- Bobal - tolerant

- Monastrell - tolerant
- Antao Vaz - tolerant

#### Coulure (poor fruit set)

- Merlot
- Grenache
- Mouvedre
- Primitivo/Zinfandel
- Pousard - caused by very early budding
- Trousseau
- Chardonnay
- Roussanne
- Viognier
- Gewurztraminer
- Lagrein
- Moscato Rosa
- Nerello Mascalese

#### Powdery Mildew

- Montepulciano
- Verdicchio
- Cesanese - Lazio
- Chardonnay
- PN

#### Downy Mildew

- Corvina
- Montepulciano - resistant
- Verdicchio
- PN

#### Botrytis

- Merlot
- Corvina
- Montepulciano - resistant
- Verdicchio
- Chardonnay
- PN
- Trousseau

#### Prone to fungal diseases

- Graciano

#### Prone to oxidation

- Arneis
- Grenache
- Passerina - Marche, Offida
- Malvasia Bianca di Candia

Esca: rootstocks, avoid large cuts in old wood to reduce vine vulnerability, more skilled pruning methods

- Corvina
- Cab Sauv
- Cinsault
- Rondinella
- Sangiovese

## Eutypa - trunk disease

- Cab Sauv
- Cinsault
- Trebbiano Toscano

## Sterile buds - best trained long (Guyot, pergola)

- Verdicchio
- Percorino

## High yielding/vigorous

- Passerina
- Riesling?
- Chardonnay?
- Tempranillo
- Malvasia Bianca di Candia
- Trousseau

## Low yielding

- Malvasia di Lazio: Muscat of Alexandria X local cross
- Percorino

## Low vigor

- Dolcetto
- Greco
- Tempranillo - mildly productive

## Thin-skin

- Trousseau
- Welschriesling
- Cortese
- Sangiovese
- Pinot Noir
- Corvina

## Thick-skin

- Cab Sauv
- Bourboulenc (loose bunches)
- Trousseau
- Gruner Veltliner
- Blaufrankisch
- Chianti Classica clones: thicker skins, smaller berries, more open bunches, less vigor
- Grechetto (di Orvieto)
- Fiano
- Perdirosso

## Loses acidity and/or accumulates sugar quickly

- Mencia: early/mid ripening
- Grenache (and color loss) - great for VdN: late ripening
- Viognier:
- Arneis
- Maria Gomes (Fernao Pires):
- Bical
- Roupeiro - loses primary fruit quickly, retains acid
- Passerina - Marche: late ripening

- Malvasia di Lazio: Muscat of Alexandria X local cross
- PN in warm climates