Organic and Biodynamic Wines

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Terminology overview

• Organic viticulture: no synthetic chemicals; requires registration

• Organic winemaking: restrictions on some practices, especially limited use of sulfur dioxide

• Biodynamic: a viticulture practice based on principles of Rudolf Steiner; requires registration
Conventional

Organic/Biological

Biodynamic

Natural
Organic viticulture

• No synthetic herbicides, fungicides, pesticides, fertilisers
• Can use copper sulfate and elemental sulfur – natural (?)
  • Assists in controlling downy and powdery mildew
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France’s wine industry can become “the first in the world without glyphosate”, President Emmanuel Macron said Saturday at the Paris Agriculture Fair.

Source: France 24
Organic winemaking

• Wine from Organic Grapes versus Organic Wine

• Limits use of major manipulation: dealcoholisation, electrodialysis

• Long list of approved additives – no GMO material

• Limited sulfur dioxide used
Organic viticulture

Organic

Conventional
Organic viticulture
Biodynamic viticulture

• Based on the principles set out by Rudolf Steiner in 1924

• Complex management linked to phases of the moon/cosmos

• Natural fertilisers – 500 is the best known
  • Cow manure placed in female cow horns over winter
  • Used to make a spray for the soil in spring and summer

• Herbal extracts – chamomile, dandelion, valerian...

• Intensive management with significant cost
Biodynamic viticulture

Maria Thun calendar

‘Besides the lunar phases, the calendar also considers the effect of other celestial bodies moving in front of the zodiac background. By knowing and taking into account the calendar, work becomes easier’.
Biodynamic viticulture

Fertiliser 500
SUMMARY

Biodynamic and Organic

• Better soil health
• Disease pressure can be high (site selection critical)
• Crop losses can be high, partly due to downy and powdery Mildew

• Management costs are high
• Reflected in market price point
• But obvious market demand
Resources

• Hugh Johnson’s Pocket Wine Book 2019

• Henschke Vineyard Management

• Rudolf Steiner (https://www.biodynamics.com/steiner.html )
Jancis Robinson

(\textit{Financial Times Weekend, 29/30 Sept 2019, p. 19})

‘Anyone who has visited a wine region and seen chemicals being sprayed that are so potent that the vineyard workers are clad as if they are investigating a Novichok incident is likely to find organically grown grapes an attractive proposition’