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Introduction to Wine

Aims and learning outcomes

This chapter aims to provide an introduction to wine. On completion of this chapter the learner should be able to:

- Explain the major factors which influence the production of all wines.
- Describe the classification, main stages of production, labelling and appellations systems used in wine making.
- Recommend wines to ideally pair with all foods.
- Outline best practice techniques to taste, talk about and correctly store wines.

3.1 Introduction

The wine market in the bar today is extremely dynamic and has undergone huge growth since the early 1990s. Wine is now an everyday commodity enjoyed by many people regardless of their social status. Although wine education is now widely available, the majority of bar and hospitality staff have a limited but growing knowledge of wine. Nowadays the major reason for the bartender to share the knowledge of the sommelier is the current change of lifestyle, at least as we see it in the industrialised world. Fashion, health and lifestyle choices are helping to change drinking habits. Wine and its story are unique. Civilised consumption of this beverage has helped to promote its positive aspects, and today people might be drinking less but they are insisting on a better quality of wine.

3.2 The production of wine

Wine growing areas

Vines grow in the 30-50 degrees latitude band, in both the northern and southern hemispheres, which usually contain a temperate climate.

Two thirds of all wines are grown in Europe, one third are grown in the New World (Chile, Argentina, Australia, South Africa, United States and New Zealand).

Wine production

Vines must be at least 3½ years old before you can make wine from them in the EU. This is not the case in other wine growing countries of the world, but one fact is certain – wine production begins in the vineyard. The style, the colour, taste and nature of the drink all depend on what you do in the vineyard. The grape variety, soil and climate contribute to what you get in the glass; these factors plus others (listed below) influence the production of all wines.

- Climate
- Soil
- Grape
- Viticulture
- Vinification
- Luck of the year

Climate

The climatic conditions of a geographical region are a relatively constant factor, unlike changes in weather which can vary drastically on a day-to-day basis. Variations in climate seldom occur. The seasonal changes in the temperate climates of the vine growing regions provide the necessary sunlight, warmth and moisture for vines to flourish. Generally, all vines require an average annual temperature ranging from 10 to 14°C, sufficient moisture either in the form of rainfall or through irrigation, and an average of seven hours of sunshine daily during the ripening period.

Climate Zone System

In the past *Vitis Vinifera* wines grown in the New World, especially the United States, did not appeal to the European palate. During research into vines and micro climates to counteract this problem, the *Climate Zone or Degree Day System* was devised at the Oenological Faculty of the Davis Campus University in California and Roseworthy in Australia by Albert J Winkler.

The scale is based on the observation that vines grow when the temperature is above 50°F. The following calculations are done to find out how much the temperature is above this minimum during the growing season.

- 1 The temperature is monitored from 1st April to 31st October.
- 2 Each day, the temperature is taken at intervals and averaged calculated.
- 3 50°F is subtracted (the temperature at which the vine is activated)
- 4 The accumulated total is averaged over a number of years to give the regional classification.

Regional climates are ranged on a scale of I (the coolest) to V (the hottest). This system has been used to classify the grape varieties most suited to each zone. Zones I – III are most suited for producing premium wines. The five zones are:

- **Region I** Less than 2,500 degree days (Germany, Loire valley, Alsace)
Riesling, Chardonnay, Pinot Noir and Cabernet Sauvignon.
- **Region II** 2,501 – 3,000 degree days (Bordeaux, Barossa valley,
Douro valley, Burgundy, little of Loire valley, Northern Rhone valley)
Beaujolais, Syrah, Viognier, Marsanne, Rousanne.
- **Region III** 3,001 – 3,500 degree days (Rhone valley, Clare valley and
Adelaide) Semillion, Carignan, Zinfandel, Cabernet Sauvignon.
- **Region IV** 3,501 – 4,000 degree days (South Spain, Rutherglen, Great
Western) Barbera, Cabernet Sauvignon and Port grapes.
- **Region V** 4,001 upward degree days (North Africa, Swan valley, Jerez)
Port grapes, Dessert wines, Verdelho.

Soil

The deeper the roots go into the soil, the more constant is their environment, and so they are less subject to the ravages of floods or drought. Dr. Gerard Sequin's research study in Bordeaux, as cited in Johnson (2003), stated that that 'the nearer a vineyard is to effective drainage, gives drier subsoil roots which go deeper'. Old vines with deeper roots give better wines; clay or sand drains badly; gravel and larger stones are best. Stones store heat on surface and prevent rapid evaporation of moisture. Vines thrive where vegetables will not; with poor soil you will need good drainage. Vines with roots, for example 300 metres down gain, potassium and iron, which gives great complexity and quality to the wine.

Major soil types: Sandy - Colares (Portugal), gravel (left bank Bordeaux), limestone (all whites Burgundy – Chardonnay), slate (Mosel), chalk (Champagne), granite (Northern Rhone), stones pudding (Southern Rhone). A designated region is based on its soil, for example Chablis must not be grown beyond its soil designation (Kimmeridgen soil).

Grape

Vitis Vinifera (V.V.) vine has 3,000 noble grape varieties. V.V. is the only vine variety allowed to produce wines, which are sold in the E.U. New world countries wishing to trade in the E.U must plant the major grape varieties of the V.V known to Europe to gain legal permission to market their wines..

White grape varieties

Chardonnay: The grape of white Burgundy (Chablis, Montrachet, Meursault, Pouilly-Fuisse) and Champagne. It gives firm, full, strong wine with scent and character, on chalky soils becoming almost luscious without being sweet. Ages well, with or without oak, by fermentation and/or maturing in barrel. Planted uni-