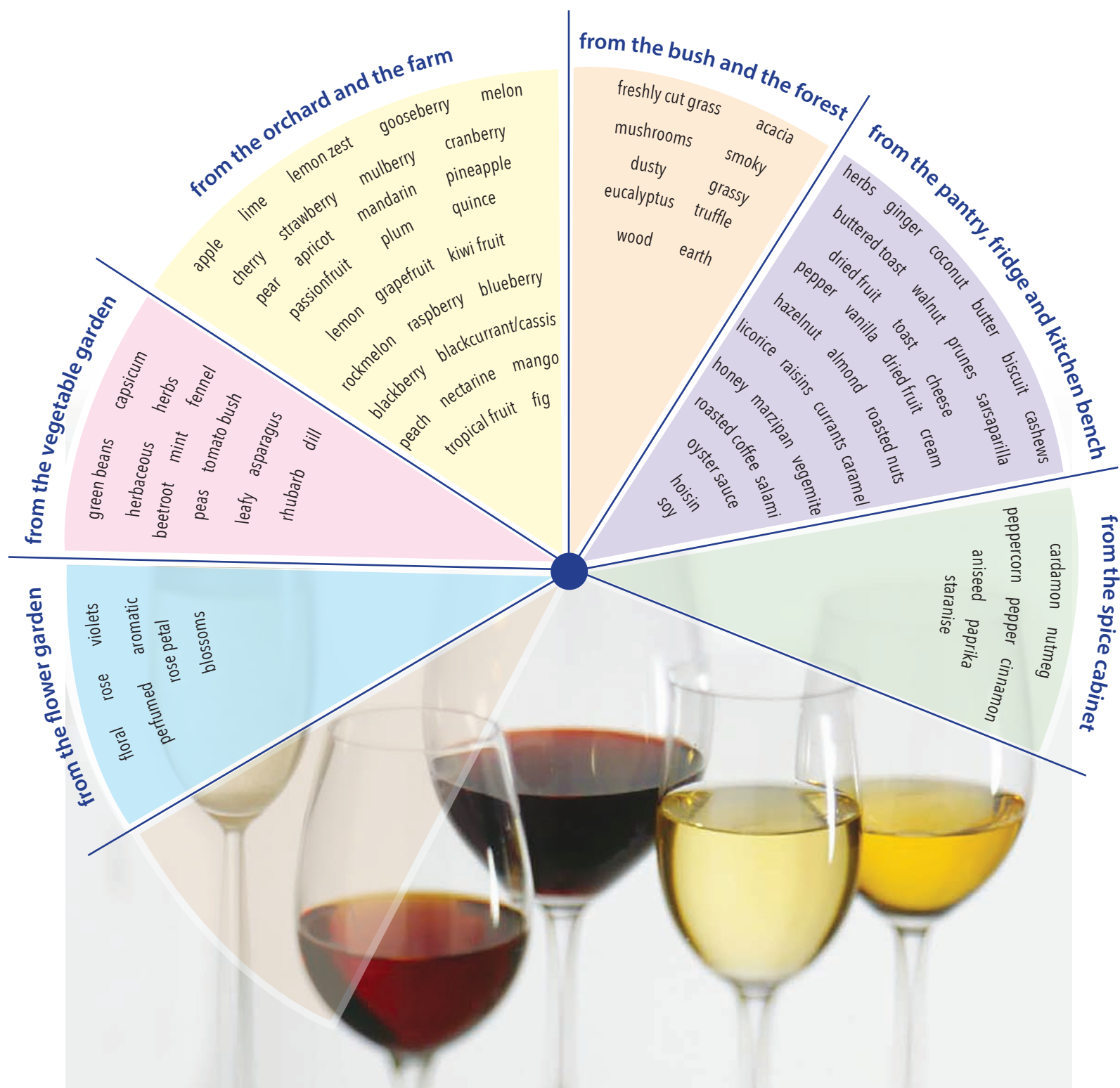


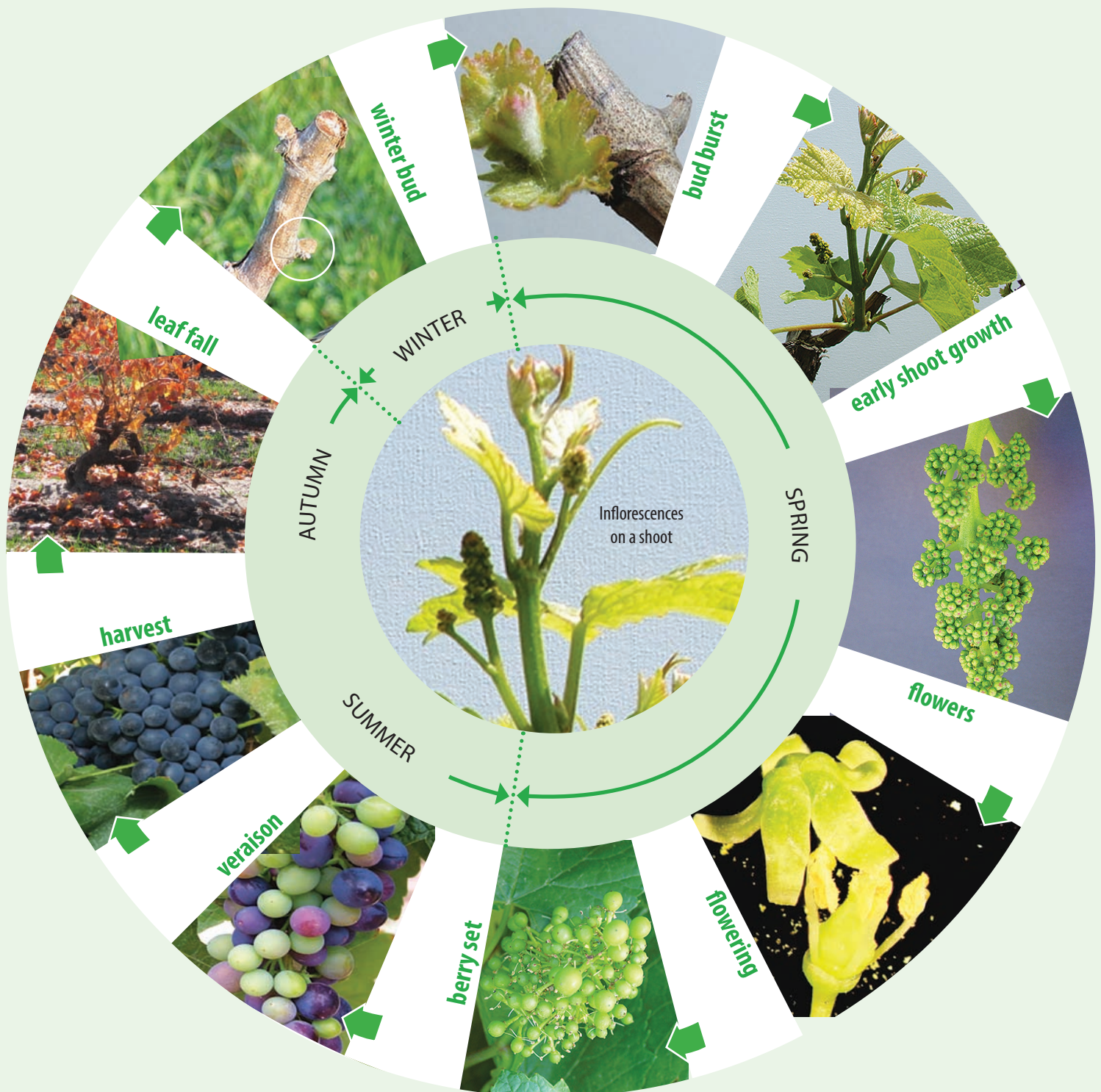
Some words to describe the aroma of a wine

The aroma profile of a wine can be described using words that we are familiar with from everyday experiences, including those sensed when we smell leaves, flowers, herbs, vegetables, fresh or dried fruits, nuts, toast and products such as honey or caramel. A useful reference is the 'Aroma

Wheel', developed by Professor Ann Noble of the University of California, Davis, USA (see references). Here we group many of the words used in the 'Aroma Wheel' into categories relating to the situations where they are experienced in everyday life.

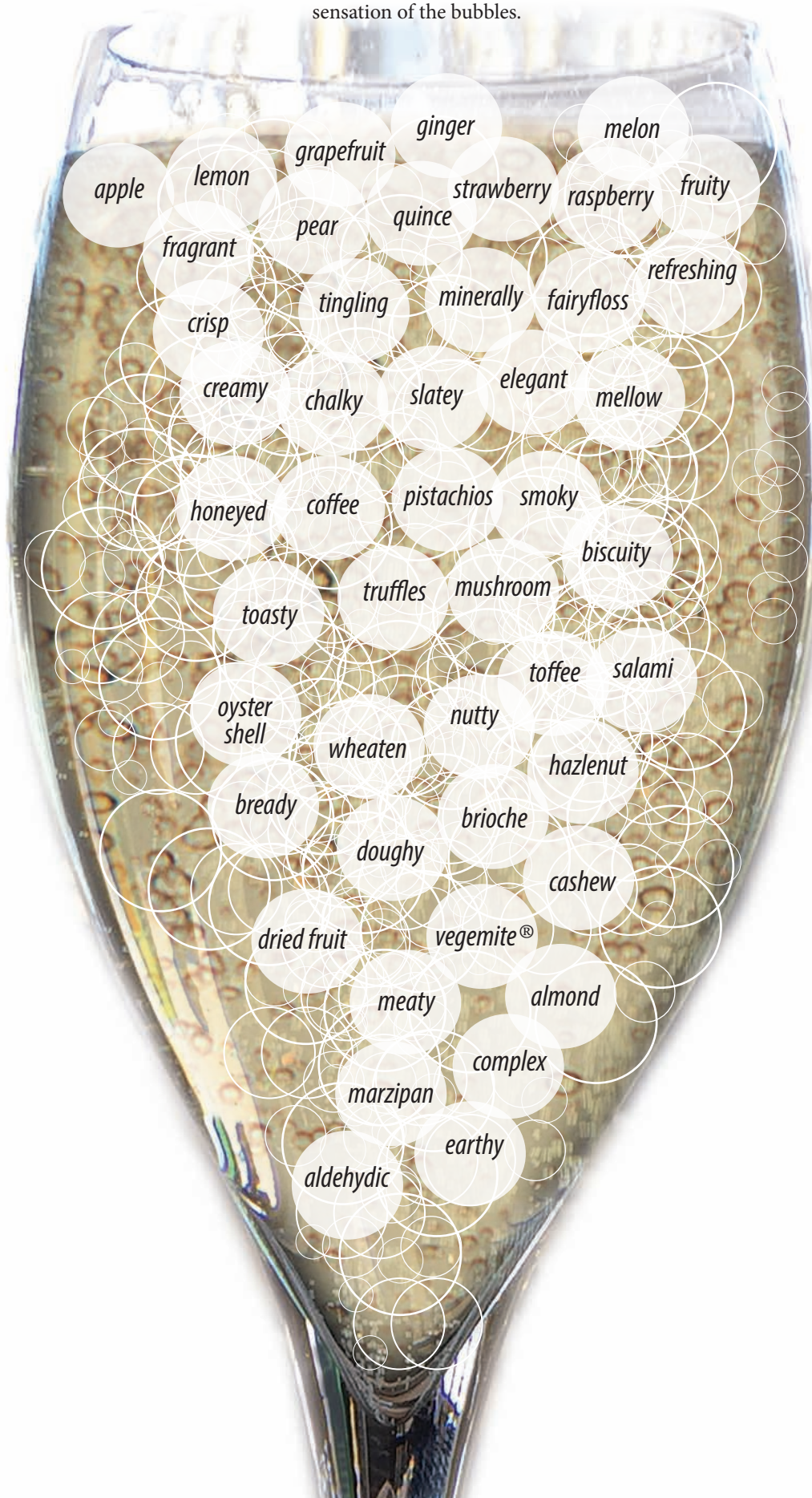


The annual growth cycle of the grapevine



Words to describe aromas and textures

A sparkling wine displays a mix of aromas derived from primary fruit, yeast autolysis and aged characters and textures derived from mainly acidity, yeast autolysis and the tingling sensation of the bubbles.



The evolution of the glass

Legend has it that the Champagne coupe, a saucer-shaped glass, was modelled on Queen Marie Antoinette's left breast, but history suggests that this type of glass was designed as far back as in the 1600s. For well over 300 years, this was the fashionable way of enjoying Champagne.

By the 1960s Champagne houses began promoting the narrow-shaped Champagne flute as a better way of appreciating sparkling wines. The bubbles dissipate quickly in the coupe because of its large surface area. The tall, straight, or narrow-shaped flute allows the bubbles in Champagne and sparkling wine to rise in fine beaded lines giving a much greater visual effect. The aromas are also directed to the narrow opening of the glass, increasing the intensity and enjoyment of sparkling style wines.



By the early 2000s the Champagne/sparkling wine glass had become an art form. Some would argue a science too! Glass manufacturers, aside from promoting their own unique designs, were responding to the question "What shape of glass is best suited for the enjoyment of Champagne / sparkling wines?" Many glass designers refined the flute shape to further enhance the sensory and visual experience. Nowadays there are two types of Champagne glasses that are in fashion; the tulip-shaped glass and a version of a white wine glass with a tapered opening.



The tulip shaped glass, in its various forms, retains the narrow fluted look, but is wider in its body. The shape helps direct and intensify aromas while maintaining persistency of bubbles.



The modified white wine glass provides an even larger opening than the tulip shaped glass. Many consumers prefer it because the increased surface area and tapered opening enhances the perception of the aroma, without impacting too greatly on the way the bubbles rise to the surface.

The choice between these two glass types is a personal preference. Some people argue that the distinctive tulip shaped glass adds atmosphere to the occasion and gives an extra feeling of difference between the sensory experience of tasting a sparkling wine and a white wine. Others argue that this distinction is not necessary and that it is the sensory experience that should drive the choice of glass. They say that the new philosophy is to treat Champagne/sparkling wine as a 'real wine'.

Glass manufacturers make both shaped glasses in various forms. Like winemaking, the crafting of wine glasses has become an art and a science.

Dry red wines

The winemaking pathway

With red wines you experience characters that are derived from the grape and, as well, others that are derived from the winemaking pathway and age.



Harvesting the grapes

Crushing

Mixture of juice,
skins and seeds

Fermentation

Addition of yeasts.

During the fermentation period of 'time on skins' colour, aroma, tannins and other compounds are extracted from the flesh, seeds and skins of berries.

Fermentation options

time on skins

extraction method

temperature

type of
fermentation vessel

type of yeasts

malolactic
fermentation

The way in which the wine is fermented modifies the colour, aroma and texture.

*A short time on skins
produces light-bodied
styles, eg rosé or
light reds*

Free-run

Pressing

Pressed fractions

Clarification & Stabilisation

Storage

Changes that take place during barrel fermentation/barrel storage add complexity to the aroma and texture of the wine.



Stainless steel tanks

Preparation for bottling

Bottling

Maturation in the bottle



Oak barrels



*As the wine ages in the bottle further changes occur in its taste.
With time, complexity builds, astringency decreases
and the mouthfeel becomes more supple.*

Styles and tastes

Flor styles

*delicate, aldehyde, salty,
nutty, tangy, fresh, dry
light- to medium-bodied*

The colour of the wine can vary from pale to deeper shades of straw. Some can have a green tinge.

The aroma should express youthfulness and freshness; maturation character is not a part of this style. Some words used to describe the characters that come from the growth of flor yeasts and yeast autolysis include aldehyde, marzipan, green apple, salty, sea salt, sea spray, bready, nutty and almond.

Compared with other apera styles, the dry styles are the lightest in body and have the driest finish. They are vibrant, tangy, delicate, gently textured and should have a dry, lingering, fresh finish.



A cask with indication that the flor yeast culture has been added to the wine.

Aged flor styles

*nutty, walnut, orange-peel,
marmalade, complex, refreshing, dry
to medium sweet, medium-bodied*

The colour can be yellow gold to amber. Some can be olive green.

Aged flor styles are weightier (medium- to full-bodied) and richer and show more maturation character than flor styles. They can be made in a dry or sweet style.

As well as the characters sensed in dry fresh styles, additional characters develop due to the longer maturation period off flor. Aromas of olive, raisin, fig, walnut, hazelnut, citrus-peel, orange-peel, marmalade, butter, honey, caramel and toffee slowly evolve.

Although some wines may have been sweetened prior to bottling, the impression on the finish should be refreshing, lingering and drying.



Flor styles

Apera flor styles were previously called Fino sherry. The main grape variety for all flor styles is Palomino.



A view through the barrel's bung hole showing the growth of the flor yeast.

The grapes are harvested early, between 10 and 12°Baumé, to conserve natural acidity. Wines are made from the juice obtained by gently pressing the crushed grapes. The clarified juice is processed into a dry wine using standard white winemaking procedures. Spirit is added to the finished wine to increase the alcohol content to between 14.7 and 15.5% v/v. The wines are transferred to casks, where they are kept in batches according to their vintage. Each cask is only partly filled with wine, normally to about 80%. The wine in each cask is seeded with special yeasts (flor yeasts) and stored for one to two years.

Because the casks are only partly filled, the upper surface of the wine is exposed to air, providing conditions that are conducive to

Apera

"The French say apéritif ... the Italians say aperitivo ... Australians say apera. These are wines that you can enjoy at the end of the day or before a meal."

Chris Pfeiffer, Pfeiffer Wines

the growth of the flor yeasts, which grows over the surface of the wine forming a film. During this stage (and the following stages), even though the wine is exposed to air, there is little oxidation as the growth of the flor yeast cells utilises the oxygen. Throughout its life, initially as a base wine, then as part of the nursery and the solero, as long as there is continued yeast growth, the wine retains its greenish colour and freshness, and at the same time develops its characteristic nutty aroma.



Flor yeast growing on the surface of the wine.



South Australia



Victoria



Growing vines and making wine, especially fine wine, can often go beyond traditional methods of agriculture and scientific knowledge. Over the centuries 'an art of science' has developed where philosophies, craftsmanship and gestures bring an extra dimension to the enjoyment and understanding of wine.

The taste of wine is influenced by many physical factors; the importance of each is dependent on where and how the vines grow, the way the grapes are vinified and the winemaker's approach to maturation and bottling. All of these things can be arranged and conceptualised in the form of a 'taste of a wine' triangle.

This triangle visualizes a complex pattern of components and elements that influence the taste of wine.

Variety, rootstock, clone, trellising systems and management practices need to be matched to climate and soil.

Seasonal climatic conditions — temperature, rain, humidity and wind — predominantly determine the quality of each vintage.

The grower's touch will vary according to personal outlook, experience and knowledge. After pruning, some vineyard sites may require little input; others might need irrigation, leaf removal, bunch removal or other management practices.

The winemaker's touch is largely driven by grape variety and wine style. For Riesling the maker usually takes a minimal input approach — while for Chardonnay a whole range of techniques can be employed, including whole bunch pressing, solids, tank or barrel ferment, yeast lees contact and degree of stirring and oak storage.

Sometimes the storage time in bottle (the age of the wine) may override all other factors. Aged characters may dominate the taste of the wine.

Scientists may be able to name each of the elements that influence the taste of a wine, but it is more difficult to explain the exact importance of each element and their interactions!

The mystery and magic of wine are further compounded by the individual perceptions, experiences and references of the taster. We may never fully understand 'what exactly shapes the taste of wine'. Perhaps that is what makes the enjoyment of wine endlessly fascinating.

The 'taste of a wine' triangle

Many factors influence the taste of a wine — variety, rootstock, clone, vineyard design, site, season, the grower's touch, the maker's touch, time, the taster and the occasion.

The size of the different sections of the triangle will vary for each site and wine style.

