

## The production process

The grape harvest (vintage) normally starts around mid-September. It is carried out by hand.

In the traditional method of making Port, still followed on many estates belonging to the top Port houses, the grapes are placed in wide granite tanks called 'lagares'. Here they are trodden by foot.

The first phase of the treading is designed to crush the grapes to release their juice and allow the fermentation to start.

Fermentation is the process whereby grape juice is turned into wine. Micro-organisms called yeasts turn the natural sugar in the grape juice into alcohol. During fermentation the skins of the grapes release aromatic compounds, natural colouring matter and tannins into the wine.

Once the grapes have been crushed, the second phase of treading keeps the skins in constant contact with the fermenting wine so that the required amount of flavour, colour and tannin is extracted. On some estates, robotic technology is used to replace or complement the treading.

When about half of the natural sugar of the juice has been turned into alcohol, the treading stops and the wine is transferred from the 'lagar' into a vat. At this point, a neutral grape spirit (young brandy) is added. For most styles of Port, the proportion is about 100 litres of spirit to 450 litres of wine. This process, known as 'fortification', raises the alcohol content of the wine and stops the fermentation. Because 'fortification' takes place before all the sugar in the juice has been turned into alcohol, much of the natural sweetness of the grape remains in the wine. This is why Port is sweeter and slightly stronger than most other wines.

After the wine has been fortified, it is left for a few months at the 'quinta' (estate) in the Douro Valley. In Spring, the wine is transported to the 'lodges' (warehouses) in Vila Nova de Gaia, to be aged, blended and bottled.

The ageing of Port can take place in wood (normally oak) or in bottle. Unlike wines which have not been fortified, Port can mature in wood for very long periods, over a century in some cases. A few styles of Port, such as Vintage Port, can also age for many decades in bottle.

By choosing different ageing methods and periods of ageing, it is possible to create many distinct styles of Port, each with its own specific character. Ports arguably presents a richer diversity of styles and flavours than any other wine.

