Vineyards of the World

PFALZ, GERMANY

Peter Dry

▲ Vineyards in the Pfalz, Germany.

IN THE PFALZ, the impression is one of a carpet of vineyards, interspersed with picturesque villages. It is bounded by the Pfalz forest on the high ground to the west and the Rhine plain to the east. Wine and its culture are an integral part of the land and its people.

The total vineyard area of the Pfalz is around 23,000 hectares. Vineyards stretch along the Deutsche Weinstrasse, in a north-south strip 80 km long and up to 12 km wide. The northern extremity is close to Bockenheim, the southern at the French border; the town of Neustadt an der Weinstrasse is located in the middle. The southern half, known as the Südliche Weinstrasse, is largely occupied by vineyards, many of which were planted during the last 30 years, mainly for production of commercial grade wine. However, in recent times, wines from the villages of Siebeldingen, Burrweiler, Birkweiler and Schweigen have developed a good reputation. The internationally renowned Geilweilerhof Institute for Grapevine Breeding is located on the outskirts of Siebeldingen. The northern half, the Mittelhaardt/Deutsche Weinstrasse, is less extensively planted and has a higher proportion of well-known vineyards, particularly in the vicinity of Forst, Deidesheim, Wachenheim and Bad Durkheim.

The Pfalz is the warmest and sunniest of the German wine-producing regions. Almonds sometimes bloom as early as February, and figs and lemons can be found in some gardens. Site selection is less critical here than in other regions for this reason, but Riesling still needs the best sites to reach the highest quality. Topography generally ranges from gentle slopes to flat ground. The whole of the vineyard area lies in the lee of the Haardt mountains, which provide protection from cold westerly, rain-bearing winds thus creating a rain-shadow. Slopes with an easterly aspect also benefit from warming by the sun in the morning when temperatures are at their most limiting. Both climatically and viticulturally, there are many similarities with neighbouring Alsace (France).

Growing season day degrees for Bad Durkheim (130 metres altitude) are 1,155, with 1,351 sunshine hours. Based on these criteria, the most comparable region in Australia is Hobart (Tasmania) and, in France, Colmar (Alsace) and Auxerre (Chablis). Growing season rainfall (April to October) and annual rainfall are 370 mm and 572 mm respectively. On a good site, Riesling will ripen, on average, at the beginning of October.

For the Pfalz as a whole, white and red wine varieties make up 79% and 21% of the vineyard area respectively. The area of white varieties is slowly decreasing; the main varieties are Riesling (21% of total vineyard area), Müller Thurgau (19%) and Kerner (10%). The area of Riesling has increased from 3,000 hectares in 1980 to around 5,000 hectares in the late 1990s. It is the major variety of the best estates where it can reach very high quality. In recent times, the area of Pinot Blanc (=Weissburgunder) and Pinot Gris (=Ruländer) has increased as the reputation of their wines has grown, but they still only represent 4% of the area. Traminer has been a speciality of the Pfalz since the early 19th century but the area is relatively small (1.5%). There is increasing interest in Chardonnay.

For the reds, Portugeiser (11%) is used for light-bodied rose-style wines: the total of 2,500 ha constitutes half of the total German plantings of this variety. Dornfelder (5%) is an intraspecific vinifera hybrid producing red wines of good colour and tannin; it has doubled in area in the 1990s. Pinot Noir (4% = Spätburgunder) is rapidly increasing in importance and there are some excellent wines now available. Typical yield of Pinot Noir is 7 to 9 t/ha.

Early maturing varieties such as Müller Thurgau, Pinot Gris, Muskat Ottonel and Bacchus are planted on the poorest sites, whereas later-ripening Sylvaner, Traminer, Kerner, Scheurebe and Morio Muskat are found on better sites. There are 10,000 growers in the Pfalz: 60% supply grapes to a cooperative winery, producer's association or to merchants; the remaining 40% are wine producers. A family is said to be able to make a living from five hectares if they sell wine, but at least 10 hectares is required if only grapes are sold. In recent years, Riesling has sold for A$1,500/t, compared to Müller Thurgau at A$400/t .

Vines are mainly cane-pruned and canes are usually arched rather than flat. There is relatively little mechanical pruning. For top-quality wines, a pruning level of six to eight nodes per square metre would be used. A minimum number of vines per hectare is specified for each region in Germany: for example, in the Pfalz it is 2,200; the majority of vineyards, however, would have close to 4,000.

Neither the row spacing nor the vine spacing is controlled so that 3 m row × 1.5 m vine or 2.3 m row × 2 m vine spacing would be equally acceptable. In practice, row width tends to be no more than 2 m because of currently available machinery. Thus it is easier to change vine spacing, and there is a trend towards wider spacing, e.g. from 1.0 to 1.4 m, in order to decrease establishment costs (grafted vines are $2 to $2.50). If appropriate machinery

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was available, it is likely that some growers would prefer to have rows up to 3.0 m in order to decrease operating costs. The vineyards of the Pfalz are relatively flat by German standards: as a consequence, up to 65% of the area is said to be harvested by machine.

There is a trend to non-tillage systems, particularly mown sward. In many cases, this is volunteer growth to reduce cost. The sward is mown three to four times during the season. If the sward is sown, the main species used is rye and sowing is done before harvest. In many cases, mown sward is used in alternate rows with cultivation to avoid water stress (mown sward in every row may be too competitive for water). However, on steep slopes, with high erosion risk, mown sward may be used in every row.

The standard trellis system has vertical shoot positioning (VSP) with two sets of moveable foliage wires. Wire lifting/shoot positioning machines are becoming more common.

Shoot trimming/ hedging is essential with this trellis type in combination with 1.8 to 2.0 m wide rows: this is done on the top and sides of the canopy two to three times per season, starting just after flowering. For the traditional vineyard sites on gentle to steep slopes, the use of the VSP trellis results in moderately open canopies, particularly when leaf removal and/or shoot thinning is also used. However, in the 1950s and 1960s new vineyards were established on flat land which had been traditionally used for crops such as cereals and vegetables. On these sites the VSP appears to be inadequate to cope with the high vigour, leading to excessively dense canopies. Although such vines could benefit most from intensive remedial shoot thinning and leaf removal, this is least practised here because the low price of grapes cannot justify a significant labour input. The declining use of leaf removal and shoot thinning (which is done almost exclusively by hand), seems to be common throughout Germany.

It is only those growers who have a high return for their fruit (or, more commonly, their wine) who can justify this input. This will inevitably lead to greater incidence of bunch rot, but several growers told me that some yield loss due to botrytis may be economically acceptable because most vineyards can potentially produce more than the permitted yield.

Overall, it is a simple matter of the yield loss being more than offset by the cost savings (reduced labour and fungicide costs). The maximum permitted yield in the Pfalz is 15 t/ha for Tafelwein and 10.5 t/ha for higher quality ratings. There appears to be little interest in evaluation of new training systems such as Scott-Henry, lyre, etc. *wij*

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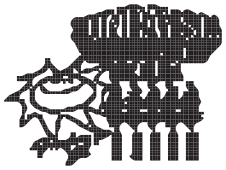

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