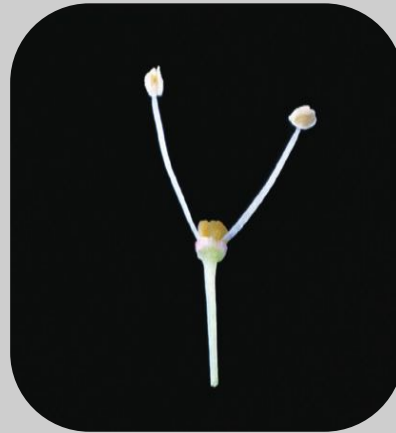
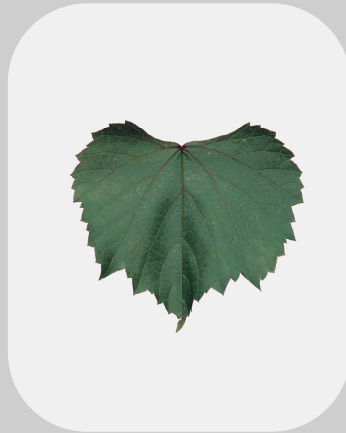


99 Richter



Genetic origin

This variety results from the crossbreeding between *Vitis berlandieri* cv. Las Sorres and *Vitis rupestris* cv. Lot.

Name of the variety in France (and usual name)

99 R

Breeder/breeder and year obtained

Franz Richter, 1902.

Estimated surface area of the French vineyard grafted with this rootstock and main regions of use

5 000 ha . Languedoc-Roussillon, Provence-Alpes-Côte d'Azur, Rhône-Alpes, Corsica.

Elements of ampelographic description

The identification is based on:

- the tip of the young shoot that is half open, with a low density of prostrate hairs,
- the red young leaves,
- the shoots with a bushy and erect bearing, a ribbed surface, a circular or slightly elliptic section, a strong anthocyanin coloration, and no erect and prostrate hairs,
- the small, kidney-shaped, dissymmetric, light green, mate, entire adult leaves, with an involute and twisted leaf blade, an open V-shaped petiole sinus, a strong nathocyanin coloration of veins, teeth with straigh sides, and on the lower side of the leaves, no or a very low density of erect and prostrate hairs,
- the male flowers,
- the brownly grey woody shoots, with a striated surface.

Evolution of mother vine surfaces

Year	1945	1955	1965	1975	1985	1995	2005	2015
ha	55	223	430	179	26	3	3	0.04

Genetic profile

Microsatellite	VVS2	VVMD5	VVMD7	VVMD27	VRZAG62	VRZAG79	VVMD25	VVMD28	VVMD32
Allele 1	135	234	231	236	196	252	236	218	259
Allele 2	147	234	260	246	210	264	246	235	259

Resistance to soil pests

99 R is highly tolerant to the root form of phylloxera. Its resistance to *Meloidogyne hapla* nematodes is good but is only average regarding to *Meloidogyne incognita* and *Meloidogyne arenaria* nematodes.

Aptitudes for vegetative multiplication

The length of the internodes is average and the diameter is medium to large. The growth of lateral shoot buds is widespread. 99 R wood production is moderate (30 000 to 40 000 m³/ha) and has moderate cuttings rooting and grafting capacities.

Clonal selection in France

In France, the 7 certified 99 R clones carry the numbers 96, 150, 162, 178, 179, 223 and 754.

Bibliographic references

- Catalogue des variétés et clones de vigne cultivés en France. Collectif, 2007, Ed. IFV, Le Grau-du-Roi, France.
- Documentary collections of the Centre de Ressources Biologiques de la Vigne de Vassal-Montpellier, INRAE - Montpellier SupAgro, Marseillan, France.
- Cépages et vignobles de France, tome 1. P. Galet, 1988, Ed. Dehan, Montpellier, France.

Adaptation to the environment

99 R resists up to 25% of "total" limestone, 14% of "active" limestone and an ICP of 20. Its resistance to drought is moderate to high. It seems to be sensitive to soil acidity and chloride excess.

Interaction with the graft and production objectives

99 R has a good affinity to grafts. This rootstock confers a high vigor to the grafts. It tends to delay the growth cycle of the grafts and sometimes promotes coulure. The first plant development is rather slow. In addition, the risk of degeneration is increased with Syrah.



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