



## 44-53 Malègue



### Name of variety in France (and usual designation)

44-53 Malègue (44-53 M)

### Breeder/selector and year of obtention

Victor Malègue, 1900.

### Genetic origin

This variety results from the crossbreeding of *Vitis riparia* cv. Grand glabre and 144 Malègue (*Vitis cordifolia* - *Vitis rupestris*).

### Evolution of mother vine surfaces

	1945	1955	1965	1975	1985	1995	2005	2015
ha	4	165	174	76	14	4	3	1.7

### Estimated surface area of French vines grafted with the rootstock, and main

2 000 ha. Languedoc-Roussillon Rhône-Alpes, Provence-Alpes-Côte d'Azur, Midi-Pyrénées.

### Descriptive elements

The identification is based on:

- the tip of the young shoot that is closed, with a low density of erect hairs and no prostate hairs,
- the slightly bronzed young leaves,
- the green shoots with an elliptic to circular section, no erect and prostate hairs,
- the small to medium, cordate, entire adult leaves, with an elongated main lobe, an open U-shaped petiole sinus, a smooth, shiny, involute, spoon-shaped leaf blade, a weak anthocyanin coloration of veins, teeth with straight sides, and on the lower side of the leaves, a low density of erect hairs and no prostate hairs,
- the male flowers,
- the brown woody shoots, with no erect and prostate hairs .

### Genetic profile

Microsatellite	VVS2	VVMD5	VVMD7	VVMD27	VRZAG62	VRZAG79	VVMD25	VVMD28	VVMD32
Allel 1	137	250	233	238	174	258	238	227	249

Microsatellite	VVS2	VVMD5	VVMD7	VVMD27	VRZAG62	VRZAG79	VVMD25	VVMD28	VVMD32
Allel 2	143	261	239	242	178	262	242	251	249

## Resistance to soil parasites

44-53 M is highly tolerant to the root form of phylloxera. It is however moderately resistant to *Meloidogyne arenaria* nematodes and is susceptible to *Meloidogyne incognita* nematodes.

## Adaptation to the environment

The tolerance of 44-53 M to chlorosis is low to moderate. It only resists up to 15% of "total" limestone, 10% of "active" limestone and an ICP of 10, but it is well adapted to drought. In terms of mineral input, 44-53 M does not absorb magnesium easily and it promotes the development of magnesium deficiency symptoms. 44-53 M is well adapted to fairly deep, hard limestone soils, that do not induce too much chlorosis.

## Interaction with grafts and production objectives

44-53 M has a good affinity with grafts and the plants development speed is moderate. It confers a low to moderate vigor and a balanced vegetative growth. The varieties grafted onto 44-53 M usually produce good quality fruits. This rootstock works well with Grenache and Gamay.

## Vegetative propagation aptitudes

44-53 M wood production is moderate (30 000 to 50 000 m/ha) and the canes easily lignify. This rootstock also shows good cuttings rooting and grafting capacities.

## Resistance to aerial parasites

This rootstock is not very susceptible to the gall form of phylloxera and is very highly resistant to downy mildew.

## Clonal selection in France

In France, the 4 certified 44-53 M clones carry the numbers 120, 755, 1104 and 1161. Among those, the clone 120 is multiplied on 1 ha and 60 ares of mother vines producing certified material, in 2017.

Datas are extracted from: Les chiffres de la pépinière viticole, 2017, Datas and assesment of FranceAgriMer, may 2018.



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