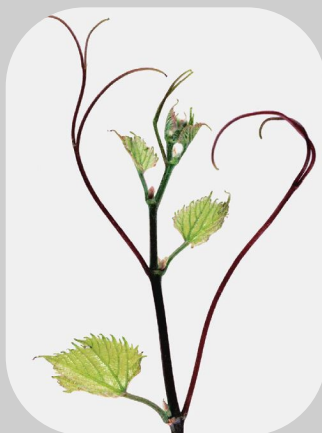


# 34 Ecole de Montpellier



## Genetic origin

This variety results from the crossbreeding of *Vitis berlandieri* cv. Ecole and *Vitis riparia*.

## Name of the variety in France (and usual name)

34 EM

## Breeder/breeder and year obtained

Gustave Foëx, 1890.

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

500 ha . Alsace, Champagne.

## Elements of ampelographic description

The identification is based on:

- the tip of the young shoot that is half open or closed, with a medium density of prostrate hairs,
- the slightly bronzed young leaves,
- the shoots with a slightly ribbed surface, a circular or slightly elliptic section, red internodes and nodes on the dorsal side and high density of erect hairs on the nodes and internodes,
- the revolute wedge-shaped adult leaves, with a very open U-shaped petiole sinus, teeth with straight sides, a weak to moderate anthocyanin coloration of veins, and on the lower side of the leaves, a low to medium density of erect hairs,
- the male flowers,
- the brownish grey, dull woody shoots, with a high density of erect hairs on the nodes and internodes.

## Evolution of mother vine surfaces

Year	1945	1955	1965	1975	1985	1995	2005	2015
ha	3	2	2	2	0.5	0.3	0.7	0.8

## Genetic profile

Microsatellite	VVS2	VVMD5	VVMD7	VVMD27	VRZAG62	VRZAG79	VVMD25	VVMD28	VVMD32
Allele 1	133	238	231	248	191	254	248	239	267
Allele 2	141	261	251	266	208	256	266	243	267

### Resistance to soil pests

34 EM is highly tolerant to the root form of phylloxera. Its resistance to *Meloidogyne incognita* nematodes is very good but is only moderate regarding to *Meloidogyne arenaria* nematodes.

### Aptitudes for vegetative multiplication

34 EM wood production is low to moderate (25 000 to 50 000 m/ha). 34 EM has a medium cutting capacity and a good grafting aptitude.

### Clonal selection in France

In France, the 2 certified clones of 34 EM carry the numbers 1032 and 1033. Among those, the clones multiplied are:

- clone No. 1032: 40 ares of mother vines producing certified material, in 2017,
- clone No. 1033: 40 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.

### 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

34 EM resists up to 20% of "active" limestone and to an ICP of 40. Its resistance to iron chlorosis can be considered to be moderate to good.

### Interaction with the graft and production objectives

34 EM influences the earliness of the growth cycle which can be interesting for the northern wine-growing region or for table grapes.



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