

# 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

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

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## Genetic profile

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| 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    |

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### 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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