

Evaluation of new cherry varieties and rootstocks in France

Ctifl



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LA TAPY

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Variety & Rootstock evaluation in France

a network

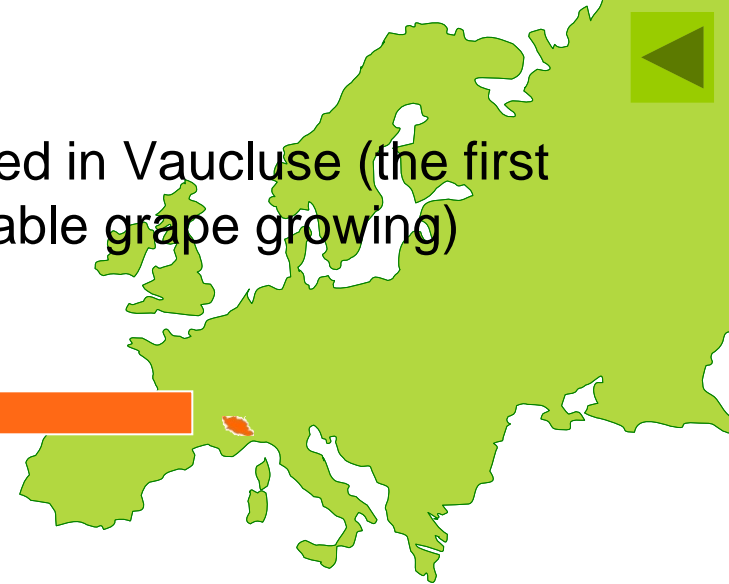
- Coordinated by [the Ctifl](#)
- Included several research stations
 - in which [La Tapy](#)
 - but also : Sefra, Cefel, Verexal, Inra
- 2 levels of evaluation
 - 1st level : study of the variety's potential
 - 2nd level : study of the regional adaptation



La Tapy, what's that?



- A experimental center located in Vaucluse (the first french area for cherry and table grape growing)



- **Working on cherry and table grap**
- Working on : varieties, rootstocks, training system, pest management, physiological troubles (rain cracking), harvest and post-harvest management, ...

Variety & Rootstock research network in France

- 6 research centers working on cherry varieties
 - 3 locations in the 1st level : Ctifl, Inra, La Tapy
 - 5 locations in the 2nd level : La Tapy, Sefra (Dr me), Sefra (Monts du Lyonnais), Cefel, Verexal

- 5 research centers working on cherry rootstocks
 - 3 locations in the 1st level : Ctifl, La Tapy, Sefra (Dr me)
 - 5 locations in the 2nd level : La Tapy, Sefra (Dr me), Sefra (Ard che), Cefel, Verexal

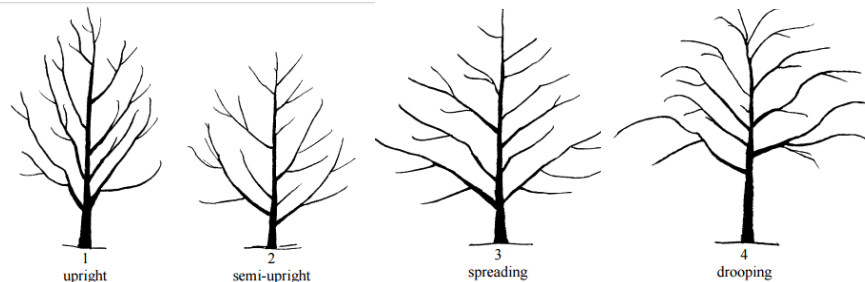


Variety : which objectives?

- Maturity period
 - One good variety per maturity period
 - Replace Burlat
 - Replace Summit
- Self-fertile
- Productive
 - Every year
 - **Little susceptible to mild winter**
- Easy to pick
- Good fruit quality
 - Little susceptible to double fruits
 - Firm
 - Large (> 28 mm)
 - Good taste
- Cracking : tolerance
- Rot : tolerance

Varieties evaluation

- Tree habit
- Flowering time
- Ripening time
- Production per tree



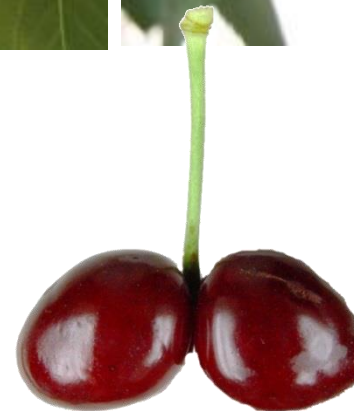
- Fruit quality :

- Fruit size
- Fruit shape / colour
- Firmness
- Acidity
- Sweetness
- Good taste
- Stalk thickness



- Sensibilities

- Rain cracking
- Mild winter
- Monilia
- Double fruit
- Pitting



Red cherry varieties studied in France

1st level : 71 varieties

2nd level : 21 varieties

- Poisdel
- V 3840
- V 3842
- Babelle
- Balrine
- Early Red
- Sabrina
- Tieton
- Rubilam
- Big Star
- Cx 12
- V 4168
- V 4169
- Royal Edie
- Royal Helen
- Frisco
- Rocket
- V 3963
- V 4166



Blush cherry varieties studied in France

1st level : 9 varieties

2nd level : 15 varieties

- V 2175
- Imperiale
- Cambrina
- Stardust
- V 3263
- Starletta
- V 3425
- V 3807
- Rosilam
- V 4351
- Rosie
- V 3490
- Starblush
- V 4172
- V 4269



Example of a blush variety : Rosie*



- Ripening time : Rainier -7/-14 days (not always the same ripening time, but always before Rainier)
- Very productive
- Good size of the fruit
- Good firmness
- Colored fruit
- Less sensitive to pitting than Rainier

Rootstock : which objectives?

■ Nurseries

- Easy to propagate (cuttings, in vitro)
- Tolerance to crown gall
- Good anchorage
- Well adapted to different kind of soils

■ Growers

- Different kind of objectives per vigor :
 - Dwarfing rootstocks : vigor close to Tabel® Edabriz or between Tabel® Edabriz and Maxma® 14
 - Semi-vigorous rootstocks : more productive than Maxma 14
 - Vigorous rootstocks : more productive than SL 64
- Good productivity and precocious
- Good anchorage (open vase)
- Suckers : none or little
- Tolerance to hot temperatures in summer
- Tolerance to bacterial canker
- Asphyxia and drought tolerance

Rootstocks evaluation

- Vigor (trunk section area)
- Graft union
- Root suckering
- Anchorage
- Foliage
- Precocity
- Productivity
- Fruit size
- Sensibilities
 - Root asphyxia
 - Drought
 - Bacterial canker
 - Armillaria root rot
 - Black cherry aphid
 - Vole



  La Tapy

Example of Gisela 6 : difference between the area of the rootstock and the area of the variety



  La Tapy

Measure of the circumference, before to estimate the trunk section area



  La Pug re

A vole

Cherry rootstocks studied in France

1st level : 8 rootstocks

- Krimsk® 5
- Krimsk® 6
- Krimsk® 7
- Gisela 11
- Gisela 12
- Sto 1
- Sto 2
- Sto 3

2nd level : 10 rootstocks

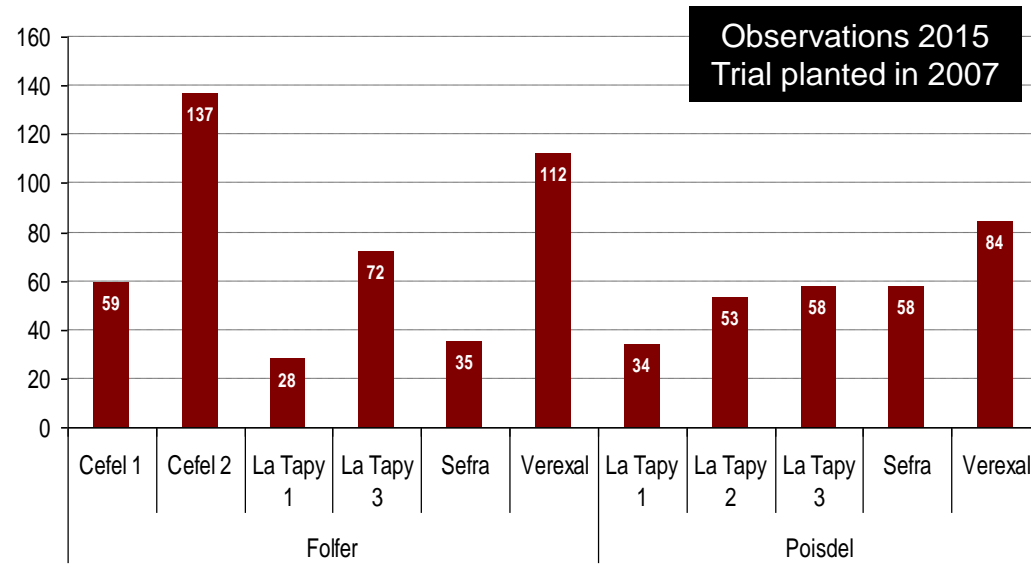
- Avima
- Furtos
- Gisela 6
- Monrepos
- PHL-A
- Piku 1
- Piku 3
- Pontaris
- Pontavium
- Weiroot 158

Example of a rootstock tested : Furtos

Sour cherry variety named Ujfehertoi F rt s, identified by Ujfeherto station, Hungary

1st level from 1991 to 2003 / 2nd level since 2003

- Vigor between Tabel  Edabriz and Maxma 14 (50 to 100% of Maxma  14, depending on soil and varieties) : more vigorous in good soils (near to Maxma 14), less vigourous in bad soil.
- Even when Furtos is less vigorous, its vegetation remains very healthy.
- Most of the time, the productivity is higher than Maxma14 (7 times out of 14), and the average fruit weight is the same or higher than Maxma 14.
- Low to moderate level of root suckering (less sensitive than Gisela 6 and PHL-A, but more than Gisela 6).
- Good anchorage.
- Good graft union.



Interesting in bad soil condition, in order to reduce vigor and keep an healthy vegetation

Contact for more informations

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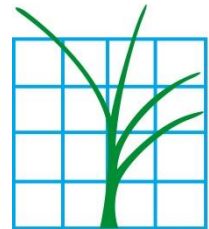
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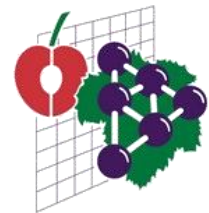
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