



Recovering ancient grapevines varieties in the Spanish provinces of Alicante and Valencia

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Other researchers collaborating to reach this goal are from



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FEDER FUNDS



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



Instituto de Conservación y Mejora
de la Agrobiodiversidad Valenciana

Comunitat Valenciana



Alt de Benimaquia Denia



Wine elaboration VII bc

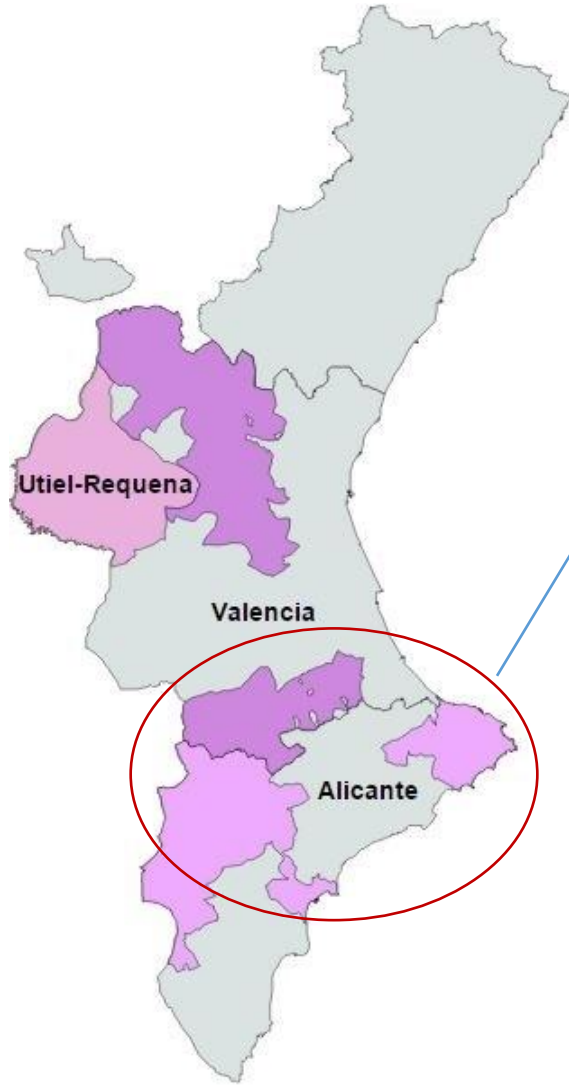
**PROTECTED DESIGNATION
OF ORIGIN (PDO)**



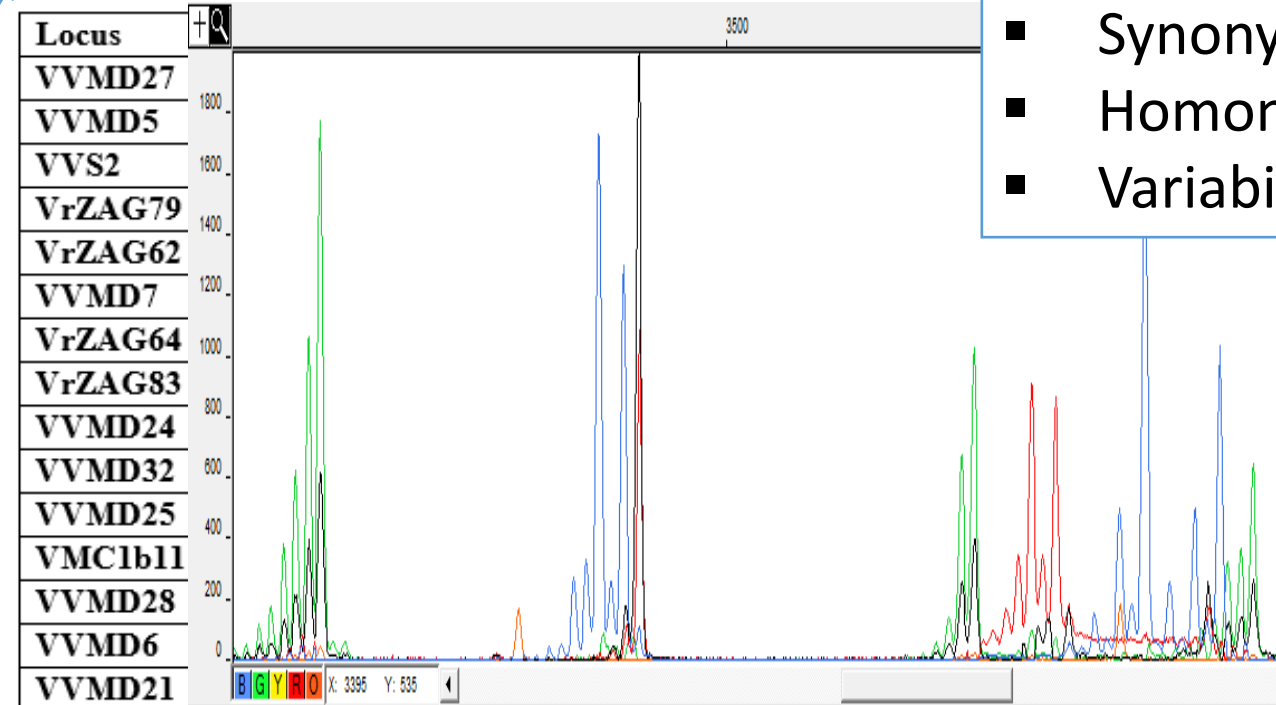
**Protected
Geographical
Indication
Castellón**



PROJECT
CGL2015-70843-R



SSR profiles

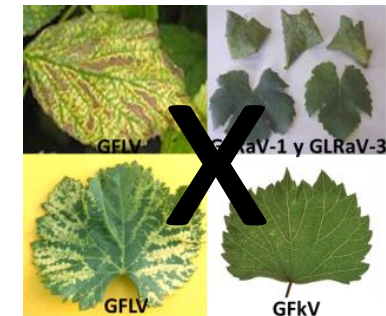


- Identity
- Synonymies
- Homonymies
- Variability

Germplasm bank

- In vitro storage
- Virus cleaning

Prospections



❑ Localization of varieties in risk of disappearance

Planta Mula, Valencí negre, Botó de Gall, Arcos, Forcallat, Verdilet, Mamella de vaca, Raïm del clotet, Esclafagerres, etc.

❑ Some of the synonymies found

**Grumer Moscatell
Moscatel del terreno
Moscatel d' Alfàbega
Gustico de Elche
Moscatel Dulce
Moscatel de Alicante**

**Muscat d'Istamboul (variety 17493 in VIVC)
(Valencí blanc x Muscat of Alexandria;
Lacombe et al. 2013 ; Mena et al. 2014)**

Botó de Gall accessions

Ahmeur bou Ahmeur (variety 140 in VIVC)

❑ New SSR profiles i.e.



Raïm del Clotet

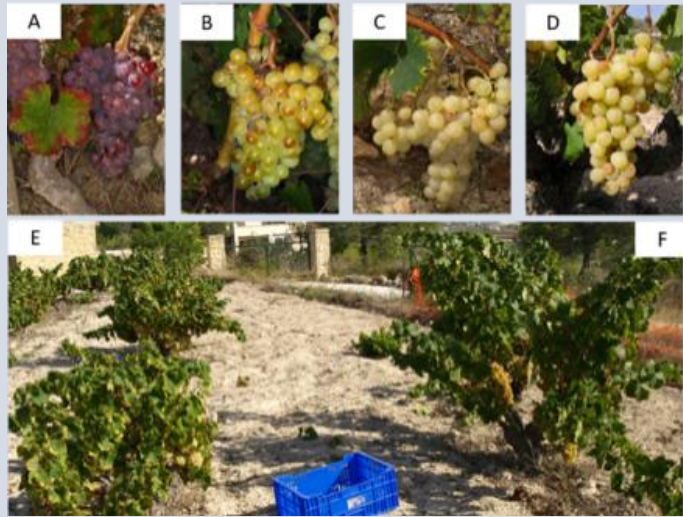
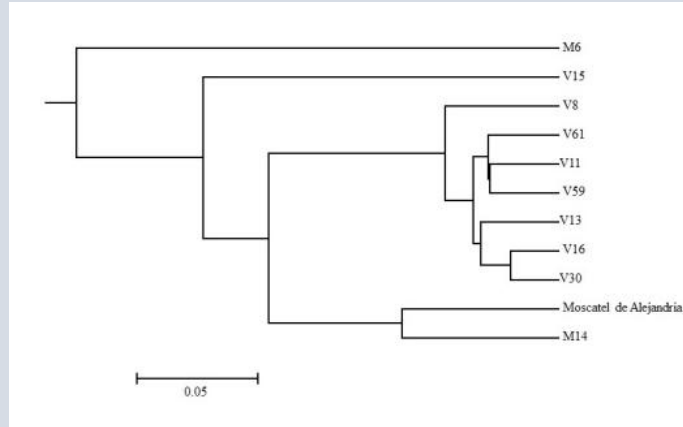


Esclafagerres



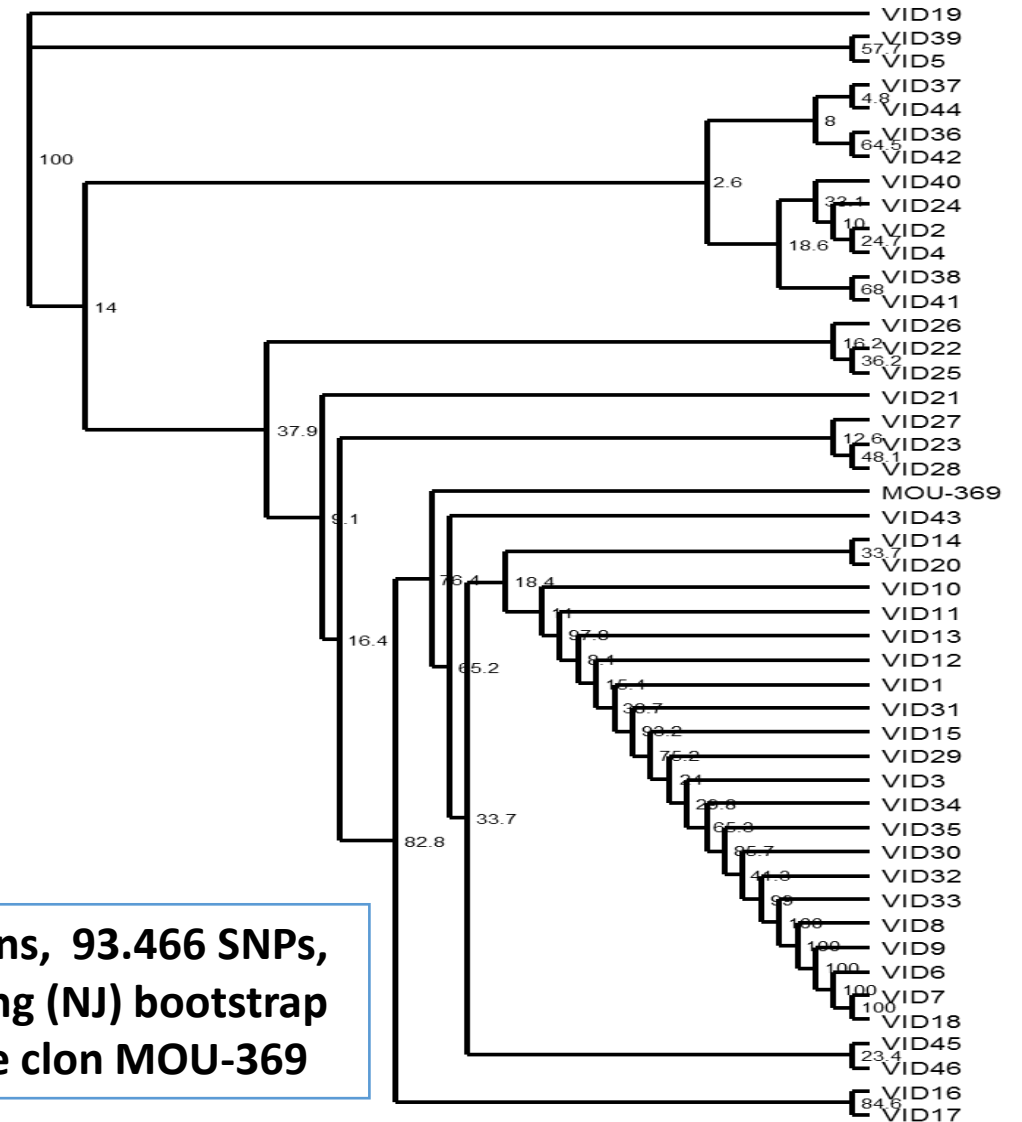
■ Analysis of variability

‘Moscatel de Alejandría’ (Muscat of Alexandria)

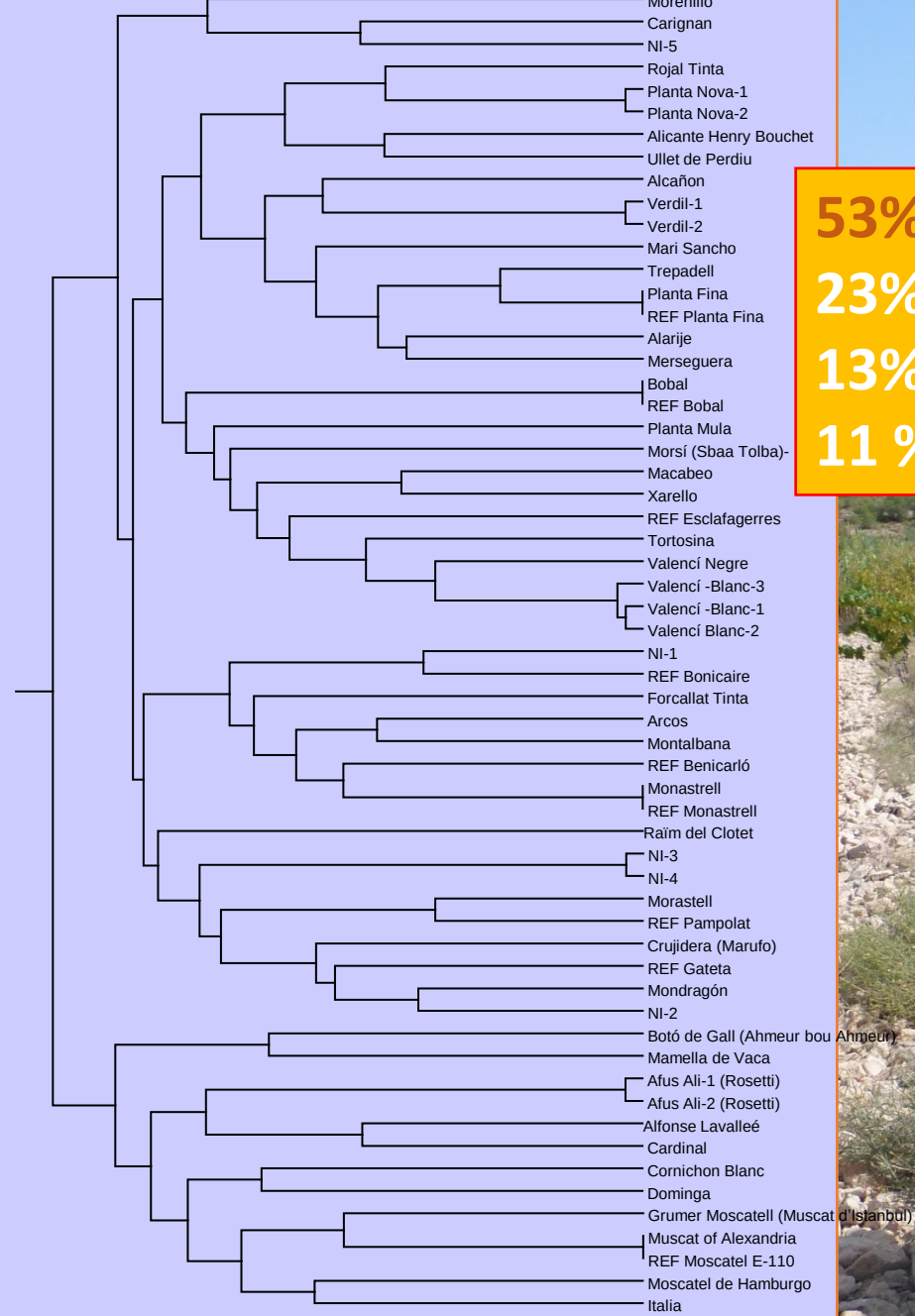


AFLPs/Peiró et al. 2018. Spanish Journal of Agricultural Research vol.56(2)

‘Monastrell’ (Mourvedre)



GBS/46 accessions, 93.466 SNPs, Neighbour-Joining (NJ) bootstrap 1000. Reference clon MOU-369



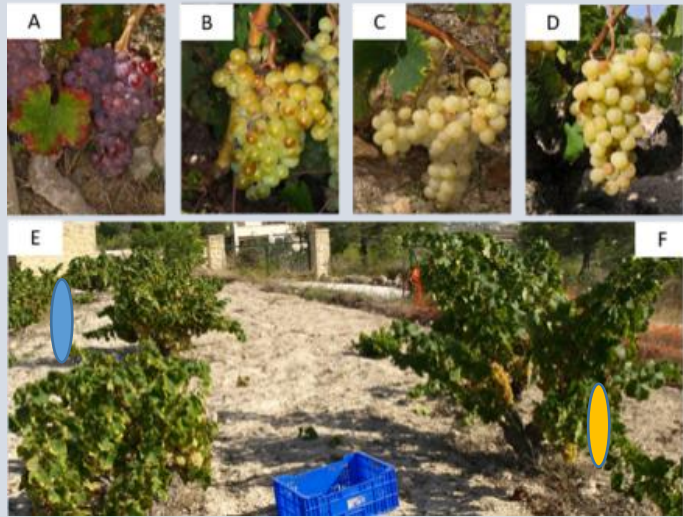
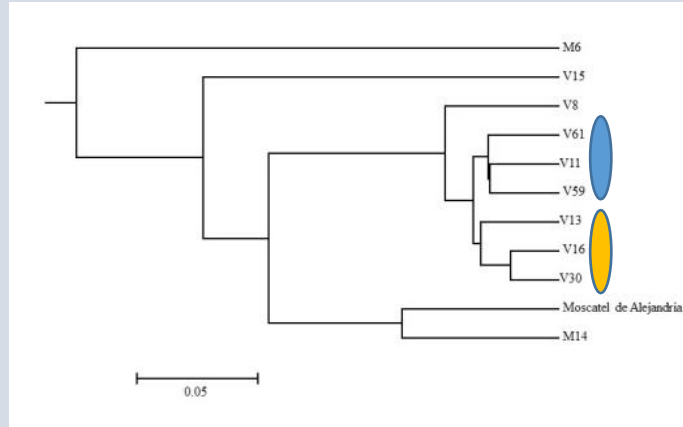
SSRs/Jiménez et al. 2018/9

53% chlorotype A
23% chlorotype D
13% chlorotype B
11 % chlorotype C

**Inter-
and
Intra-
varietal
variability**

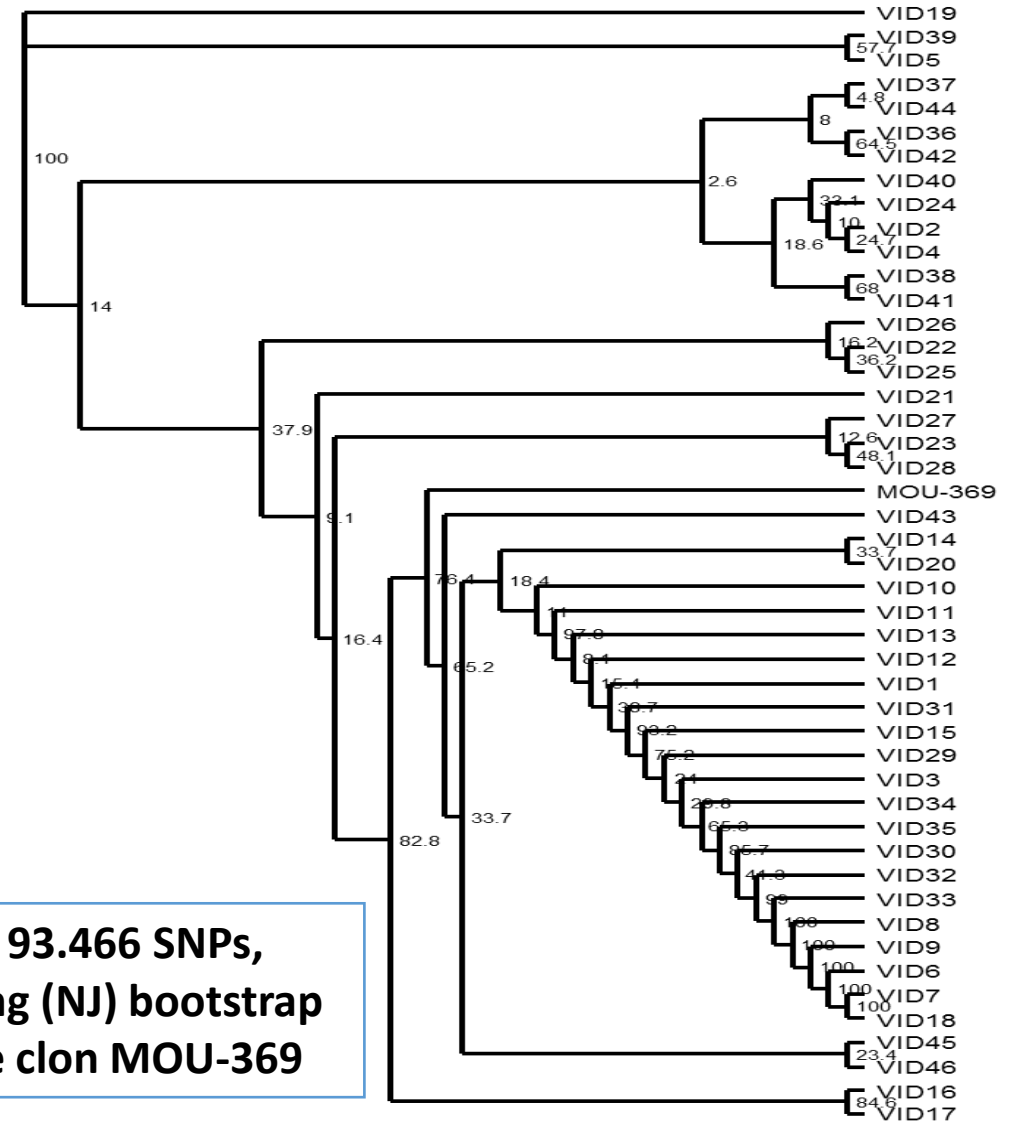
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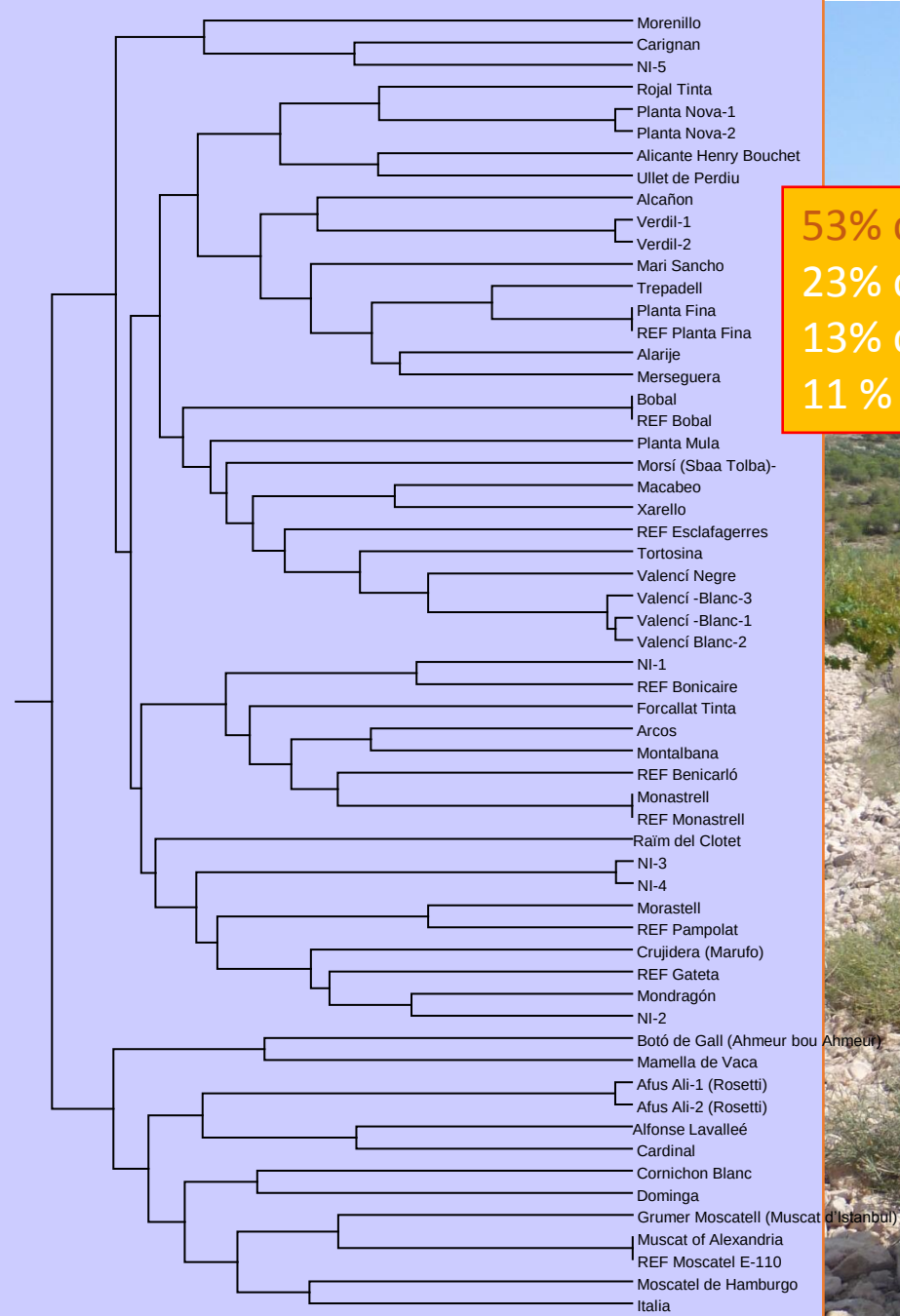


Peiró et al. 2018. Spanish Journal of Agricultural Research vol.56(2)

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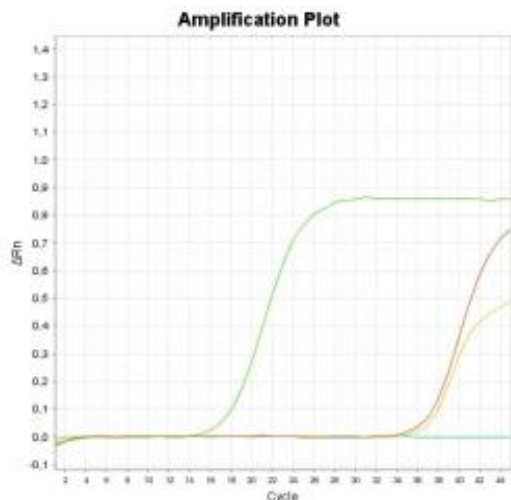
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11 % chlorotype C

Inter-
and
Intra-
varietal
variability

□ Virus analysis

XII International Conference on Grapevine Breeding and Genetics, Bordeaux, 2018

UE2002/11/CE



Grapevine fanleaf virus (GFLV)

Grapevine leafroll associated virus 1 (GLRaV-1)

Grapevine leafroll associated virus 3 (GLRaV-3)

Grapevine fleck virus (GFkV)

Arabis mosaic virus (ArMV) x

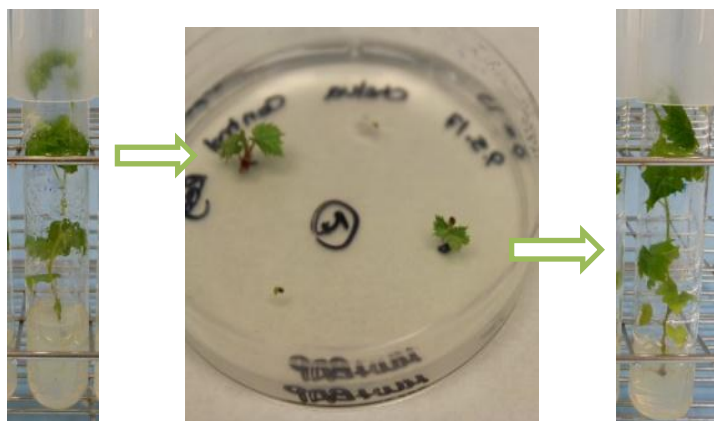
High incidence

35% simple

37% double

23% triple

□ Development of protocols for virus cleaning



Meristem culture



Somatic embryogenesis

San Pedro et al. BMC Plant Biology (2017) 17:226
DOI 10.1186/s12870-017-1159-3

BMC Plant Biology

RESEARCH ARTICLE

Open Access



Somatic embryogenesis from seeds in a broad range of *Vitis vinifera* L. varieties: rescue of true-to-type virus-free plants

Tània San Pedro¹, Najet Gammoudi², Rosa Peiró³, Antonio Olmos¹ and Carmina Gisbert^{1*}



□ Development of protocols for in vitro storage

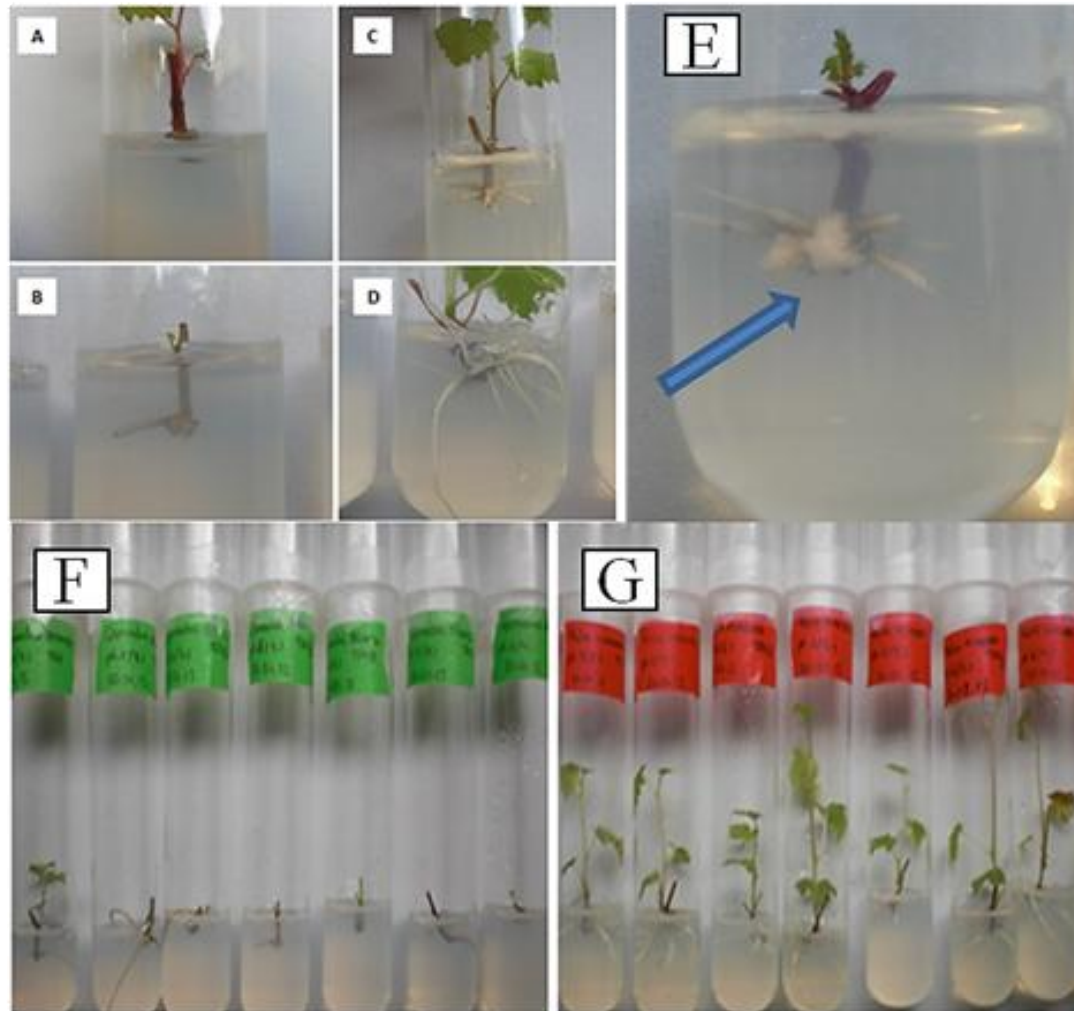


Figure 1. A) Root development stage 0, B) stage 1, C) stage 2, D) and stage 3. E) Root with callus (arrow). F and G) Development of the cultivars 'Gamacha Blanca' (left) and 'Pedro Ximénez' (right) at 30 days of culture in MW.



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Evaluation of conditions for in vitro storage of commercial and minor grapevine (*Vitis vinifera* L.) cultivars

Tania San Pedro, Rosa Peiró, Carles Jiménez, Antonio Olmos & Carmina Gisbert



Thank you/Merci

