

Agricultural Policy Forum 2022

Agriculture and Rural Development in the context of the Green Agenda for the Western Balkans: Overcoming the Impact of the Global Challenges

Working Group 1: Regional cooperation on legal harmonisation and market development in the wine sector

Virus free rootstocks and fungus tolerant grape varieties for the Western Balkans

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Tirana, Albania

Realisation period: 2022-2023

Planting period: 2023

1. Ordered rootstock varieties per country:

Rootstocks	Amount	Planting Distance	yield/cuttings
Teleki 8B	80 Plants	from 1,60 m	approx.6000 to 8000
420 A	80 Plants	from 1,60 m	approx.6000 to 8000
Paulsen 1103	80 Plants	from 1,60 m	approx.6000 to 8000
Richter 110	80 Plants	from 1,60 m	approx.6000 to 8000





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2. Engaged fungus tolerant varieties per country

Variety	Amount	Rootstock	Planting Distance	Required surface
Bronner	100	5BB	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²
Muscaris	100	SO4	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²
Souvignier gris	100	SO4	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²
Cabernet Cortis	100	SO4	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²
Prior	100	SO4	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²
Cabernet Cantor	100	5BB	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²
Calardis Blanc	100	5BB	0,6 to 1,5m -1,6 x 2,5 m	100-400m ²



3. Overall required planting area

Virus free rootstocks: Minimum 550 m²
 Fungus tolerant grapes: From 700 to 2800 m²
 Total approx.. From 1250 to 3350 m²

How much vines per 100m ²																			
Vines Line distance	Planting distance																		
	0,60	0,65	0,70	0,75	0,80	0,85	0,90	0,95	1,00	1,05	1,10	1,15	1,20	1,25	1,30	1,35	1,40	1,45	1,50
1,60	104	96	89	83	78	74	69	66	63	60	57	54	52	50	48	46	45	43	42
1,65	101	93	87	81	76	71	67	64	61	58	55	53	51	48	47	45	43	42	40
1,70	98	90	84	78	74	69	65	62	59	56	53	51	49	47	45	44	42	41	39
1,75	95	88	82	76	71	67	63	60	57	54	52	50	48	46	44	42	41	39	38
1,80	93	85	79	74	69	65	62	58	56	53	51	48	46	44	43	41	40	38	37
1,85	90	83	77	72	68	64	60	57	54	51	49	47	45	43	42	40	39	37	36
1,90	88	81	75	70	66	62	58	55	53	50	48	46	44	42	40	39	39	36	35
1,95	85	79	73	68	64	60	57	54	51	49	47	45	43	41	39	38	37	35	34
2,00	83	77	71	67	63	59	56	53	50	48	45	43	42	40	38	37	36	34	33
2,05	81	75	70	65	61	57	54	51	49	46	44	42	41	39	38	36	35	34	33
2,10	79	73	68	63	60	56	53	50	48	45	43	41	40	38	37	35	34	33	32
2,15	78	72	66	62	58	55	52	49	47	44	42	40	39	37	36	34	33	32	31
2,20	76	70	65	61	57	53	51	48	45	43	41	40	38	36	35	34	32	31	30
2,25	74	68	63	59	56	52	49	47	44	42	40	39	37	36	34	33	32	31	30
2,30	72	67	62	58	54	51	48	46	43	41	40	38	36	35	33	32	31	30	29
2,35	71	65	61	57	53	50	47	45	43	41	39	37	35	34	33	32	30	29	28
2,40	69	64	60	56	52	49	46	44	42	40	38	36	35	33	32	31	30	29	28
2,45	68	63	58	54	51	48	45	43	41	39	37	35	34	33	31	30	29	28	27
2,50	67	62	57	53	50	47	44	42	40	38	36	35	33	32	31	30	29	28	27



4. General Soil and land preparation

4.1 Recommendation

- Soil structure improvement
- Soil analyses
- Reduction of fungus and nematodes (virus- hosts)

4.2

Measures to redesign an area performed is to preserve the natural horizons of the soil. In no case, it is advisable to bury the humus-rich topsoil. Likewise loosening the soil with a deep-soiler, or in the case of turning (Plow), care must be taken that no plant or organic material is buried. Otherwise, rotting gases can develop and cause growth problems, iron deficiency and chlorosis. Existing plants should initially be worked in flat, e.g. with a tiller, in order to support the rotting process by aeration. To avoid soil compaction the best is a non-reversing deep loosening equipment, such as a deep cultivator, spade machine or para-plough. On Clay/lime or dry locations, trenching with an excavator supports the roots penetration into deeper soil layers. This improves the water and nutrient supply. Sowing of e.g. with winter cereals, before planting stabilizes the soil structure.

A green fallow improves the soil. The desired goals are here the rotting of the old grape roots, to stabilize the soil and promote soil structure and soil life. As a result, harmful fungi and virus-carrying nematodes can be defended. Deep loosening should only be carried out when the soil is sufficiently dry and then stabilized by sowing a one-year or multi-year fallow green cover, by rolling or mulching in the strips.

To take care of the beneficial insects a gentle preparation of the planting field is a good practise.

To avoid compaction before planting, the soil should not be treated by heavy machinery, In general as little as possible and gentle to support recovery process.

For planting, soil must get levelled, weed-free and finely crumbly. To obtain a crumbly soil structure, further processing with a rotary harrow (preferably) or Rotary cultivator may be necessary to promote rotting of the plant remains.

4.3

Virus free rootstocks for propagation should get planted preferable in areas where no grapes had been growing before or after a minimum fallow period of 3 years.



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5. Contracting

5.1 Rootstocks

All licence fees are payed. The plants can be propagated without any restrictions

5.2 Fungus tolerant varieties

I. Bronner, Muscaris, Sauvignier gries, Cabernet Cortis, Prior and Cabernet Cantor are breedings and selections from the Weinbauinstitut Freiburg, from Federal State Baden/Württemberg. For these varieties a combined growers licence contract must be signed with every Institution.

II. Calardis Blanc is a breeding from the Bundesanstalt für Züchtungsforschung JKI Geilweilerhof. For this variety single growers licence contract must be signed with every Institution.



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5.3 Sample contract form



Institut für Rebenzüchtung
Institute for Grapevine Breeding

JKI, Geilweilerhof, 74833 Sißfeldingen, Germany



Julius Kühn-Institut
Bundesforschungsinstitut für Kulturpflanzen
Federal Research Centre for Cultivated Plants

www.jki.bund.de

Bearbeiter/In: Dr. Oliver Trapp

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CONTRACT

to regulate the traffic of experimental grape varieties/original breeding material

Between the
Federal Research Centre for Cultivated Plants
INSTITUTE FOR GRAPEVINE BREEDING GEILWEILERHOF

and the
.....
.....
.....

(experimental grower) the following contract is made:

§ 1
The Institute for Grapevine Breeding gives to the experimental grower scions/graftable cuttings/
grafts/potted vines/cardboxed vines of the below mentioned variety/varieties/original breeding material:

Variety	number of plants
1)	
2)	
3)	
4)	
5)	
6)	

§ 2
The experimental grower covenants and agrees that this plant material will be used exclusively for
experimental plantings in (location). Planting in
another location or transfer of the material to third parties is forbidden.

Planned year of planting:
Variety/varieties used as comparison:
Rootstock(s) used:

The experimental grower guarantees to complete the evaluation sheets which are sent once a year and to
return them at his earliest convenience to the Institute for Grapevine Breeding.

§ 3
The experimental grower guarantees that the provided grapevine material will not be multiplied. Grown
prunings will be destroyed after pruning. Care will be taken to prevent third parties from securing any of
the canes or cane material of the provided material.

§ 4
All essentially derived varieties of the new varieties according to the principles of the UPOV Convention
(Revised on March 19, 1991) shall be the exclusive property of this mentioned Institute. This shall be
applied to protected varieties as well until introduction of a national variety protection right, basing upon
the principles of the UPOV Convention, with special regulations of the depending varietal protection rights.

§ 5
The experimental grower will permit representatives or employees of the Institute for Grapevine Breeding
access to all test plots and facilities which are connected with this experiment at any time.

§ 6
Publication of the test results on the original breeding material is not permitted without permission
the Institute for Grapevine Breeding, this with special regard to a possible detriment for novelities
Institute for Grapevine Breeding has the right to save all data important for the proper care an
evaluation of the experimental plantings on data storage mediums and process them.

§ 7
The experimental grower will not hold the Institute for Grapevine Breeding liable in case any da
occurs from this experimental planting. Claims against the Institute for Grapevine Breeding for a defic
of yield, loss of quality and other disadvantages compared to other varieties or any additional expens
the formation and maintenance of the experimental planting cannot be made.

§ 8
The rights and obligations of this contract are transferred to the new holder in case the rights c
"Sortenschutz" (plant patent) given by the Federal Republic of Germany have been transferred.

§ 9
This contract is in effect until clearance of the experimental planting and shall be binding on the
successors and assigns of the parties. This contract can be cancelled earlier, if done by both part
writing by 31st October and is effective by year end. The provided grape material and the propa
material grown from this have to be destroyed at the time this contract is cancelled, unless
instructions (or agreements) are given by the Institute for Grapevine Breeding and the test plot/s has
to be cleared. The Institute for Grapevine Breeding can release the experimental grower from indi
commitments in this contract. If the experimental grower contravenes the regulations in this contra
Institute for Grapevine Breeding can terminate the contract without previous notice. In this cas
experimental grower has to clear the experimental planting without delay.

For tester:	For the Institute for Grapevine Breeding
(location and date)	(location and date)
(signature)	(signature)



6. German export declarations and enclosed documents

In order to prevent the introduction and spread of plant pests, the EU is expanding the plant passport requirement: since December 14, 2019, all plants intended for planting must have an EU plant passport when transported. The plant passport is an official label for the movement of certain plants, plant products and seeds within the territory of the European Union. Find the exact regulations in the new Plant Health Regulation (2016/2031/EU).



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6.1 Rootstocks passport sample

Plant Passport/
Pflanzenpass

EG - Norm
VITIS L./ Unterlagen
Kennzeichen der Anerkennungsstelle: KS

Sorte: **Teleki 8 B**
Klon: **349-4 Gm**
Kategorie: **Basispflanzgut**

Seriennummer:
DE/KS-13993-2021

Name des Erzeugers:
HS-Geisenheim
65366 Geisenheim

Inhalt des Bündels: 200 Rizlen / Mindestlänge: 30 cm
Menge: **200**



Implemented by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GFA CONSULTING GROUP
General Agent: BMEL
Berlin Office





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6.2 Fungus tolerant varieties passport sample

 Pflanzenpass/
Plant Passport

EQ-Norm
Bot. Name: Vitis L.
Art des Pflanzguts: Pfropfreben

Edelreis: Sauvignac

Klon:

Unterlage: SO4

Klon: Op 31

Kategorie: PfZ

Erzeugerland: Bundesrep. Deutschland

Kennz. der Anerkennungsstelle: KH

Betriebs Nr. des Erzeugers: DE/KH-3-1283

Serien-Nr. 910321

Menge: 25



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7. Legal custom clearance

To avoid long custom conducted phytosanitary checks, stretching importing process, the responsible persons of the importing Institutions shall get in contact with the customs authorities of the different 6 WB countries right in advance to clarify all necessary requirements. REWAG members of the different countries shall support the process with their expertise. For example declaration “Plant for scientific usage only”.

8. Transport storage requirements

The cuttings and root stocks are packed in plastic bags to keep them moist. 300-400 are packed in one transport carton box. Approx. 2 boxes per country. Optimal storage temperature +2° and 10°. Time of transport should not exceed 2 weeks. Every country will get a separate consignment.

9. Planting techniques

Before planting, water cuttings for a few hours (overnight to max. a week). Before planting the roots should get shortened to length of 4-6 cm. The size of planting hole should be chosen that roots bend not upwards. Planting tool preferable in dry soils is a water drill, spade or planting sword. Drilling planting holes with motor drill is not advisable causing unnecessary compression of the soil.

10. Establishment of a responsibility list

- Receiving institutions
- Responsible heads of the institutions
- Authorized person signing growers contract
- commissioned person for phytosanitary import declaration and custom clearance

