

Table S1. Meteorological data in the area of study

YEAR	2019	day	2020	day	2021	day	Standard dev
TEMPERATURE (°C)							
Annual average	15.3		15.4		15.3		15.3
Maximum (Tmax)	39.2	09-agosto	41.3	01-agosto	42.2	15-agosto	40.9
Average of Tmax	22.0		22		21.5		21.5
Minimum (T min)	-5.2	11-ene	-5.3	27-dic	-5	12-ene	-5.2
Average of Tmin	9.5		9.7		10.2		10.2
Days with Tmax > 32°C	43		43		39		39
Days with Tmin < 0°C	25		12		19		6,506
RELATIVE HUMIDITY (%)							
Annual average	66.2		69.8		71		71
Minimum	37	30-junio	41.7	09-agosto	34.4	23-julio	37.7
Maximum	94.2	20-abril	94.4	20-ene	93.3	08-ene	94.0
ATMOSPHERIC PRESSURE (hPa)							
Annual average	1,017,30		1,018,20		1,017,50		1017,5
Minimum	996,6	01-febrero	999,3		1,003,80	06-febrero	999,9
Maximum	1,034,10	31-diciembre	1,033,70		1,034,40	15-febrero	1034,1
WIND SPEED (Km/h)							
Annual average	5.5		4.5		4.6		4.6
maximum	86.9	20-abril	74		61.2	20-marzo	74.0
PRECIPITATION (mm)							
Annual accumulation	453.4		506.2		430.2		430.2
days with precipitation > 0.2 mm	51		70		72		72
Days with precipitation > 20.0 mm	7		6		4		4
Maximum precipitation	58.4	21-abril	56	20-ene	51.4	05-junio	55.3

Data from AVAMET (Beneixama)

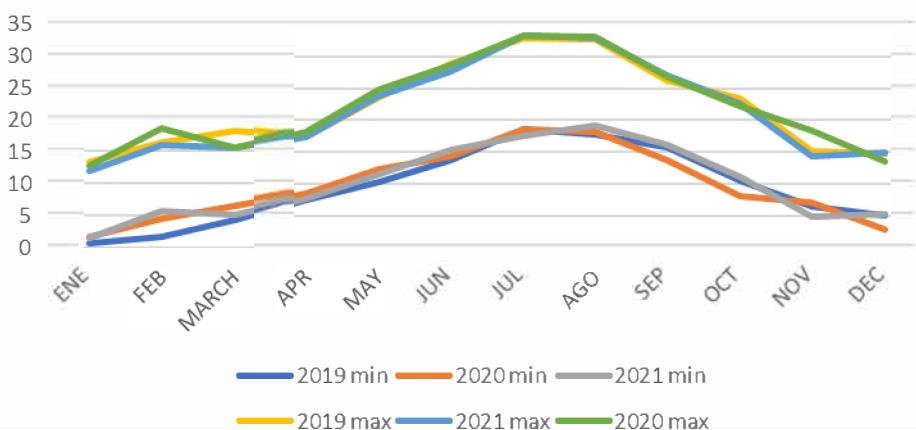
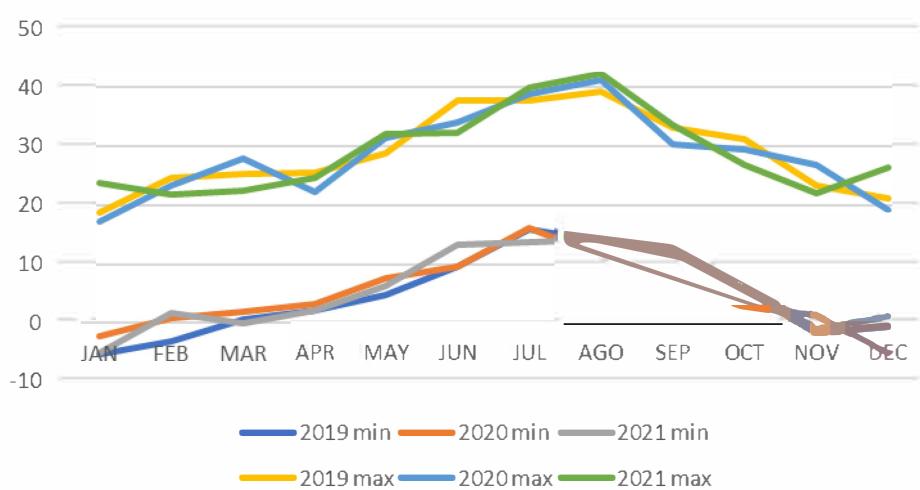
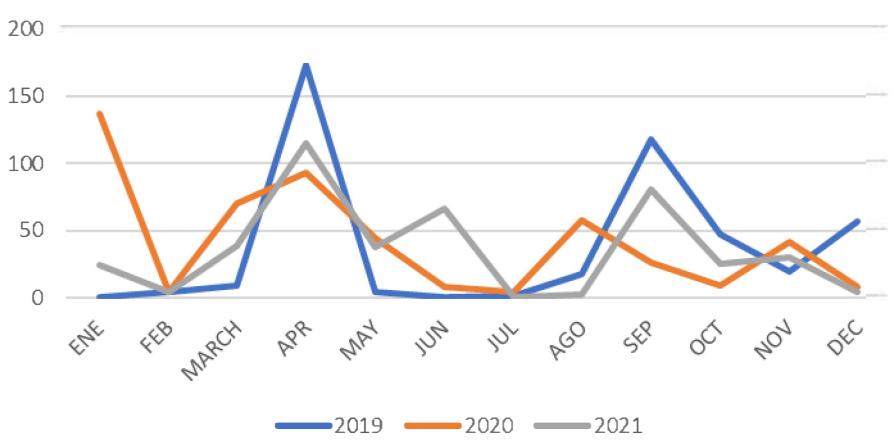
Table S2. Molecular profile of the grapevine varieties Arcos, Bobal, Forcallat, Garnacha, Monastrell and Veremeta clara analysed by the following 15 SSRs markers.

Variety/SSRs	ARCOS	BOBAL	FORCALLAT	GARNACHA TINTA	MONASTRELL	VEREMETA CLARA
VVS2A1	133	145	133	137	133	133
VVS2A2	145	147	145	145	151	151
VVMD5A1	228	230	224	228	228	228
VVMD5A2	236	236	236	242	242	242
VVMD7A1	243	239	239	239	249	249
VVMD7A2	249	243	243	243	249	249
VVMD25A1	241	241	241	241	241	241
VVMD25A2	241	267	255	255	263	263
VVMD27A1	180	182	180	195	180	180
VVMD27A2	195	190	182	195	190	190
VVMD28A1	234	234	228	244	244	244
VVMD28A2	258	260	258	244	258	258
VVMD32A1	256	250	240	240	240	240
VVMD32A2	262	272	256	250	256	256
VrZAG62A1	188	188	188	188	188	188
VrZAG62A2	204	188	188	188	204	204
VrZAG79A1	257	243	247	257	251	251
VrZAG79A2	261	247	261	257	261	261
VrZAG64A1	140	140	134	134	157	157
VrZAG64A2	157	157	140	140	157	157
VrZAG83A1	191	197	193	191	193	193
VrZAG83A2	193	197	203	193	203	203
VVMD24A1	208	206	208	208	206	206

VVMD24A2	215	208	215	215	215	215
VMC1b11A1	188	185	185	188	173	173
VMC1b11A2	188	188	188	194	188	188
VVMD6A1	208	191	208	208	208	208
VVMD6A2	208	191	210	208	210	210
VVMD21A1	242	242	242	242	242	242
VVMD21A2	248	242	242	248	248	248

Table S3. Cielab color parameters for leaves of Arcos, Bobal, Forcallat, Garnacha and Veremeta

September	Upperside			Underside		
	L*	a*	b*	L*	a*	a*
Arcos	32,84 ab	-9,21 cd	12,23 a	44,08 ab	-7,91 bc	14,53 b
Bobal	31,15 a	-8,43 d	11,48 a	45,18 bc	-7,13 c	13,55 a
Forcallat	38,76 c	-11,77 a	17,27 c	50,57 d	-8,37 b	16,39 d
Garnacha	33,18 ab	-10,07 bc	12,55 a	42,70 a	-10,73 a	15,70 cd
Monastrell	33,28 b	-10,54 b	14,07b	45,13 bc	-7,79 bc	14,90 bc
Veremeta	32,22 ab	-8,66 d	12,07 a	46,68 c	-7,94 bc	14,31 ab

A**Averaged temperature of mininum and maximum values (°C)****B****Minumum and maximum temperature values (°C)****C****Precipitation (mm)****Figure S1.** Metereological data in the area of study (AVAMET, Beneixama)

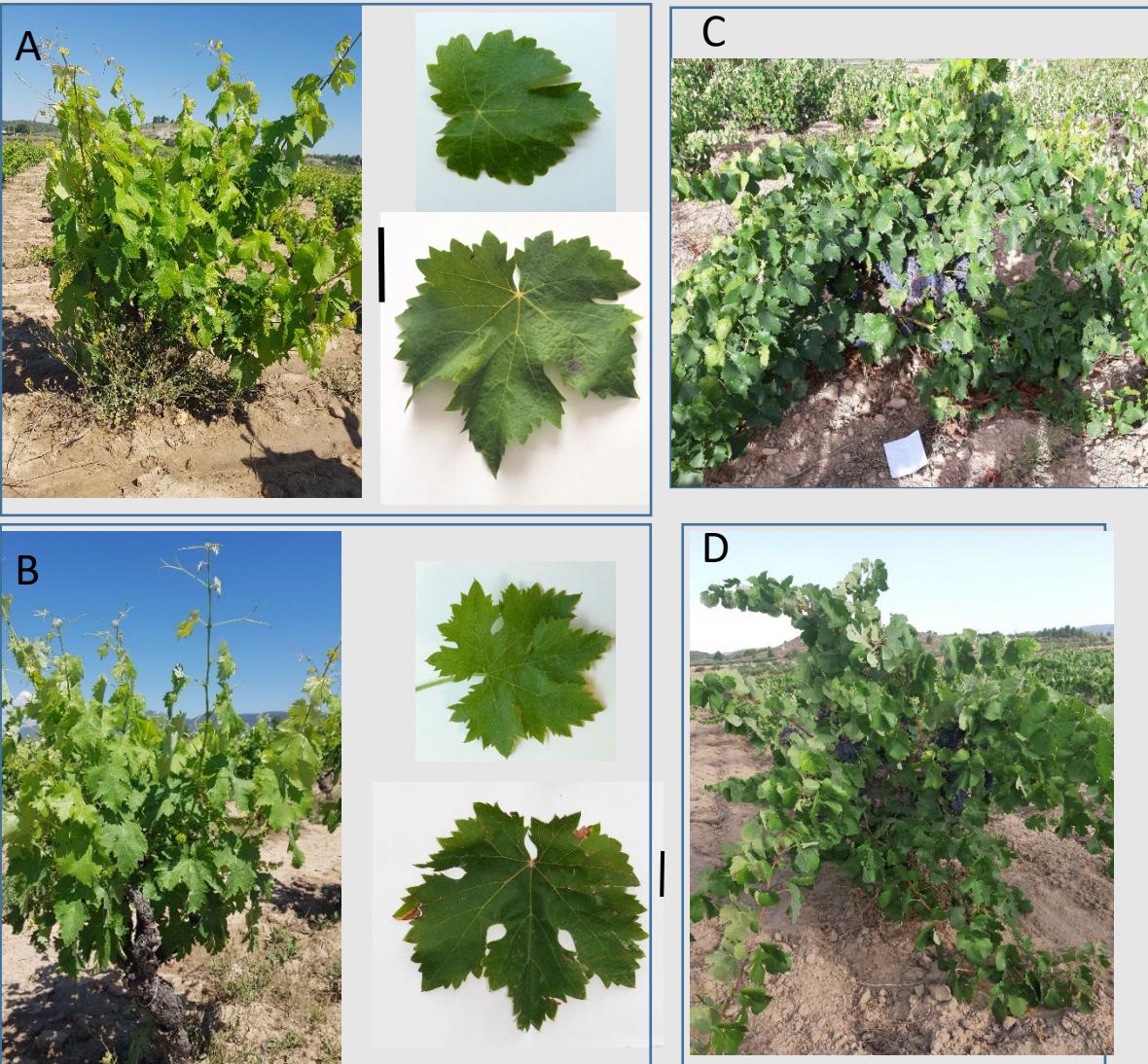


Figure S2. Growth of Arcos (A), Forcallat (B), Garnacha (C) and Bobal (D). In A and B details of leaves from Arcos and Forcallat.

Upper side (1X) Lower side (1X) Lower side (3X)

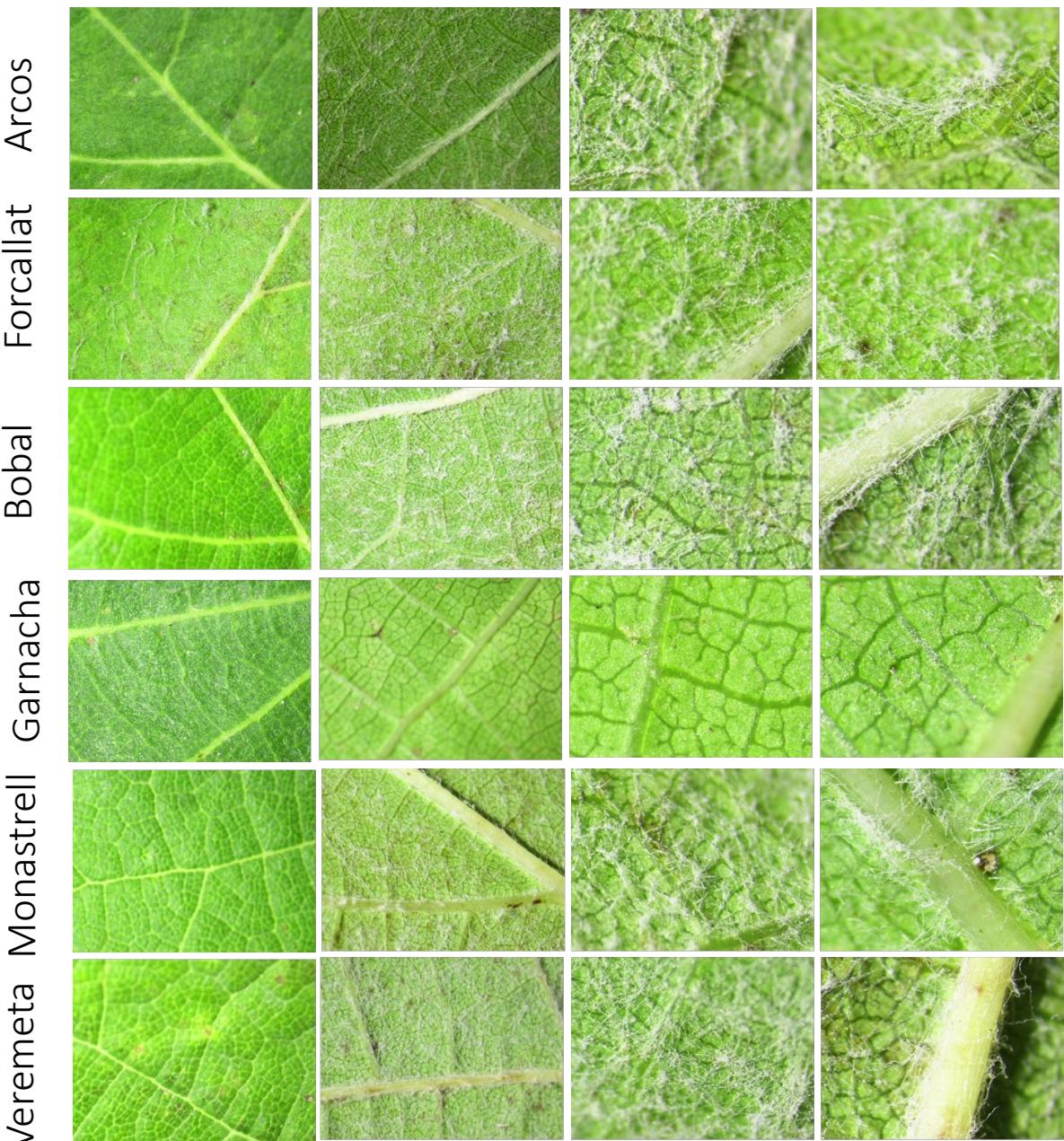


Figure S3. Upper side and Lower side of leaves from Arcos, Forcallat, Bobal, Garnacha, Monastrell and Vermeta.

Figure S4. Images of bunches from the grapevine varieties Arcos, Bobal, Forcallat, Garnacha, Monastrell and Veremeta on 10th August and 24th September 2021.

Arcos



Bobal



Forcallat



Garnacha



Monastrell



Veremeta



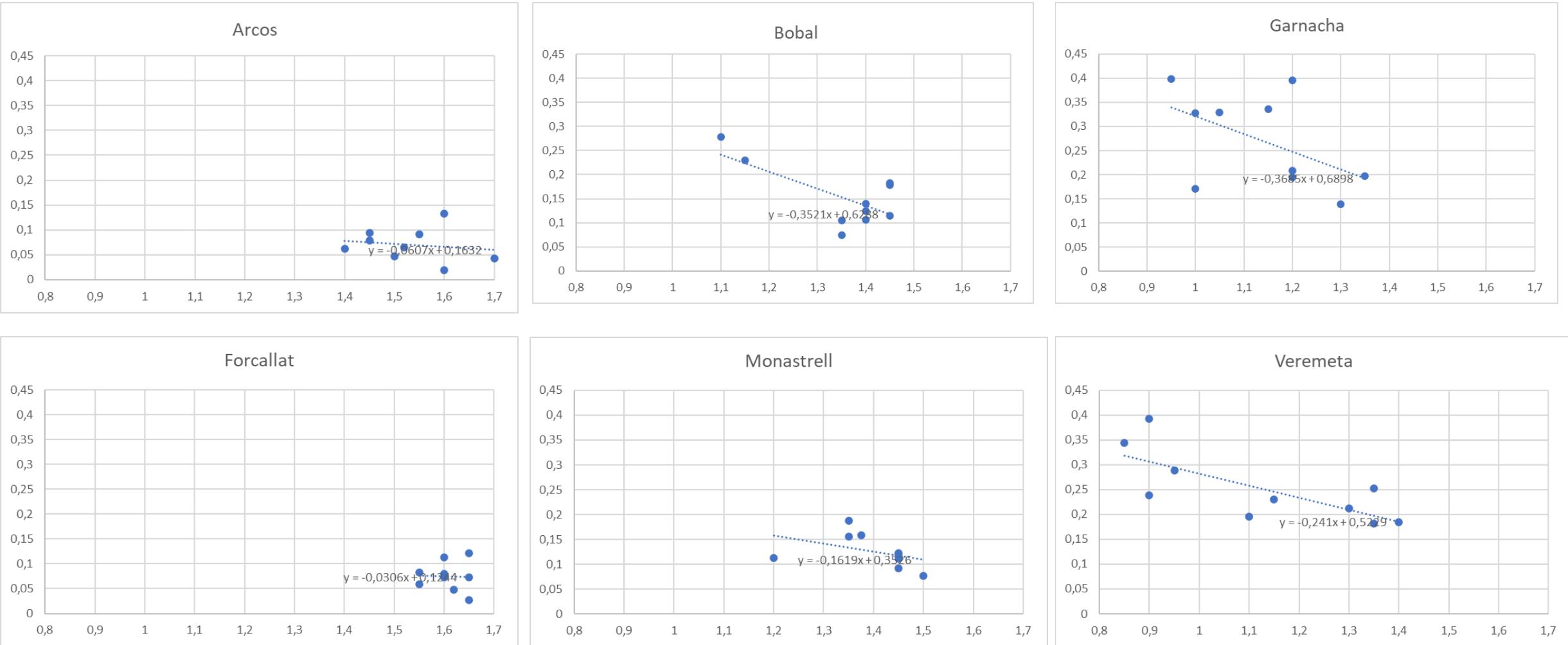


Figure S5. Correlation of stomatal conductance (g_s) and stem water potential (Ψ_{stem}) of grapevine varieties Arcos, Bobal, Garnacha, Forcallat, Monastrell and Veremeta on 20th August 2021.