

Supplementary data for the article:

Čolić, S. D.; Bakić, I. V.; Dabić Zagorac, D. Č.; Natić, M. M.; Smailagić, A. T.; Pergal, M. V.; Pešić, M. B.; Milinčić, D. D.; Rabrenović, B. B.; Fotirić Akšić, M. M. Chemical Fingerprint and Kernel Quality Assessment in Different Grafting Combinations of Almond Under Stress Condition. *Scientia Horticulturae* **2021**, 275, 109705. <https://doi.org/10.1016/j.scienta.2020.109705>

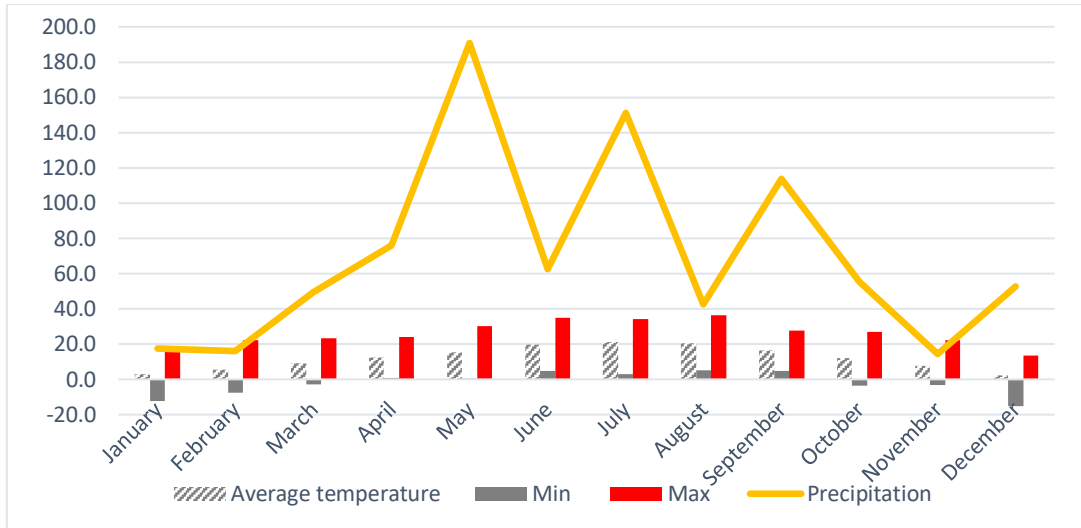


Figure S1. Monthly reference for rainfall and temperature (average) during 2014

Table S1. Oil content in almond samples and fatty acids composition of oil

Fatty Acid (%) m/m	MaGF4	MaGF5	MaMy4	MaMy5	TeGF4	TeGF5	TeMy4	TeMy5	TrGF4	TrGF5	TrMy4	TrMy5
Lauric acid C12:0	0.08 b*	<0.01	0.02 a	<0.01	<0.01	0.02 a	<0.01	<0.01	<0.01	0.03 a	<0.01	<0.01
Myristic acid C14:0	0.06 de	0.07 e	0.03 ab	0.05 cd	0.02 a	0.03 ab	0.04 bc	0.05 cd	0.02 a	0.03 ab	<0.01	<0.01
Pentadecanoic acid C15:0	0.07 c	0.03 a	0.11 e	0.05 b	0.09 d	0.10 de	0.13 f	0.09 d	0.03 a	0.07 c	0.09 d	0.13 f
Palmitic acid C16:0	6.86 e	6.42 c	6.66 d	7.18 g	5.92 a	6.61 d	6.20 b	6.94 f	6.38 c	6.97 f	7.19 g	7.33 h
Palmitoleic acid C16:1	0.65 h	0.66 h	0.61 g	0.69 i	0.42 b	0.45 c	0.41 b	0.42 b	0.53 f	0.49 d	0.37 a	0.51 e
Heptadecanoic acid C17:0	0.09 b	0.05 a	0.05 a	0.06 a	0.05 a	0.05 a	0.06 a	0.06 a	0.06 a	0.06 a	0.30 c	0.55 d
cis-10 Heptadecenoic acid C17:1	0.10 a	0.09 a	0.12 b	0.09 a	0.12 b	0.10 a	0.10 a	0.10 a	0.09 a	0.10 a	0.09 a	0.10 a
Stearic acid C18:0	1.80 e	1.48 cd	1.51 d	2.32 h	1.30 b	1.07 a	1.44 c	1.54 d	2.03 f	1.78 e	2.10 g	2.07 fg
Oleic acid C18:1 n9c	76.95 bc	68.57 a	75.30 bc	72.44 b	79.36 c	75.95 bc	79.35 c	72.13 b	74.84 bc	75.15 bc	76.85 bc	67.15 a
Linoleic acid C18:2 n6c	11.64 a	21.58 d	14.36 b	15.50 b	11.25 a	14.55 b	11.00 a	17.32 c	14.29 b	13.99 b	11.46 a	21.04 d
a-Linolenic acid C18:3n3	0.10 c	0.29 f	0.02 a	0.10 c	0.40 g	0.02 a	0.04 b	0.15 d	0.21 e	0.04 b	0.04 b	0.10 c
Arachidic acid C20:0	0.17 e	0.06 a	0.08 b	0.13 cd	0.08 b	0.08 b	0.12 c	0.13 cd	0.14 d	0.12 c	0.17 e	0.09 b
cis-11-Eicosenoic acid C20:1	0.13 h	0.06 cd	0.05 bc	0.09 fg	0.07 de	0.07 de	0.08 ef	0.09 fg	0.10 g	0.08 ef	0.04 a	0.08 ef
Behenic acid C22:0	0.31 h	0.16 cd	0.17 de	0.20 f	0.15 bc	0.12 a	0.18 e	0.16 cd	0.26 g	0.26 g	0.31 h	0.21 f
Erucic acid C22:1	0.71 g	0.28 a	0.75 h	0.83 i	0.63 de	0.65 ef	0.61 d	0.67 f	0.66 ef	0.57 c	0.55 c	0.41 b
Lignoceric acid C24:0	0.28 e	0.20 c	0.16 b	0.27 e	0.14 ab	0.13 a	0.24 de	0.15 b	0.36 f	0.26 e	0.44 g	0.23 d
ΣSFA	9.72 e	8.47 bc	10.26 fg	8.79 cd	7.75 a	8.21 b	8.41 b	9.12 d	9.28 d	9.58 de	10.60 g	10.61 g
ΣMUFA	78.54 d	69.66 a	76.83 c	74.14 b	80.60 e	77.22 c	80.55 e	73.41 b	76.22 c	76.39 c	77.90 cd	68.25 a
ΣPUFA	11.74 a	21.87 d	14.38 b	15.60 b	11.65 a	14.57 b	11.04 a	17.47 c	14.50 b	14.03 b	11.50 a	21.14 d
O/L	6.61 d	3.18 a	5.24 c	4.67 b	7.05 e	5.22 c	7.21 e	4.16 b	5.24 c	5.37 c	6.71 de	3.19 a
Oil content (%)	56.29 c	49.11 a	52.00 b	55.95 c	57.00 cd	56.67 c	60.04 e	58.71 d	57.00 cd	56.48 c	57.58 cd	50.11 ab

*Means in columns with the same letter do not differ according to Tukey's test at P<0.05. Abbreviation: MW – molecular weight; Abbreviation 'Marcona'/'GF 677'/2014 - MaGF4; 'Marcona'/'GF 677'/2015 - MaGF5; 'Marcona'/Myrobalan plum /2014 - MaMy4; 'Marcona'/Myrobalan plum /2015 - MaMy5; 'Texas'/'GF 677'/2014 - TeGF4; 'Texas'/'GF 677'/2015 - TeGF5; 'Texas'/Myrobalan plum/2014 - TeMy4; 'Texas'/Myrobalan plum/2015 - TeMy5; 'Troito'/'GF 677'/2014 - TrGF4; 'Troito'/'GF 677'/2015 - TrGF5; 'Troito'/Myrobalan plum/2014 - TrMy4; 'Troito'/Myrobalan plum/2015 - TrMy5. SFA-saturated fatty acids; MUFA-monounsaturated fatty acids; PUFA- polyunsaturated fatty acids.

Table S2. The content of total and extractable proteins (g/100g DM) and polypeptide composition (%) of extractable proteins in almond samples

	MW (kDa)	MaGF4	MaGF5	MaMy4	MaMy5	TeGF4	TeGF5	TeMy4	TeMy5	TrGF4	TrGF5	TrMy4	TrMy5
Protein content (%)		25.00 h	26.69 i	20.22 f	16.49 c	21.18 g	18.31 e	15.43 b	14.55 a	21.18 g	25.11 h	18.16d	27.63j
Content of extractable proteins g/100g DM		27.69 f	25.72 e	23.69 c	21.59 ab	23.89 cd	24.14 d	27.75 f	20.31 a	25.03 e	23.38 c	21.91b	25.52e
Polypeptide composition													
No. of band													
1	99.7	0.144 f	0.080 ge	0.499 d	0.090 e	n.d.	n.d.	0.056 ag	n.d.	0.044 a	0.115 c	n.d.	0.183 b
2	81.2	n.d.	0.140 g	0.158 f	0.090 c	0.116 a	0.087 c	0.130 ag	0.044 b	0.241 e	0.162 f	0.131 ag	0.284 d
3	67.3	7.691 f	10.184 g	6.413 b	5.717 be	6.413 b	6.348 b	8.908 a	5.697 be	5.136 ed	8.472 af	3.463 c	4.568 d
4	62.0	0.082 h	0.100 g	0.053 df	0.112 g	0.139 c	0.044 d	0.205 a	0.460 b	n.d.	0.069 eh	0.066 ef	0.041 d
5	59.7	1.155 eh	1.218 e	0.736 a	0.717 a	0.697 a	0.524 c	0.783 ab	1.052 bh	0.988 bf	1.916 g	0.877 df	1.218 e
6	56.3	0.619 h	0.240 i	0.710 e	0.359 b	0.279 c	0.109 d	0.671 a	0.372 b	0.307 c	0.185 g	0.723 e	0.528 f
7	50.1	0.289 d	0.659 g	0.604 g	1.300 h	0.953 b	1.047 c	0.745 a	0.964 b	0.176 f	0.300 d	0.285 d	0.061 e
8	48.2	0.351 b	0.220 g	0.237 g	0.381 b	0.302 c	0.109 d	0.037 a	0.372 b	0.351 b	1.408 f	0.285 c	0.528 e
9	45.3	0.082 f	0.140 e	0.210 d	0.135 e	n.d.	n.d.	n.d.	n.d.	0.461 b	0.323 c	n.d.	0.041 a
Sum	99.7-45.3	10.41 g	12.98 e	9.62 fg	8.90 bf	8.90 bf	8.27 bd	11.54 a	8.96 bf	7.70 d	12.95 e	5.83c	7.45d
10	41.6	22.165 abc	20.587 ab	21.261 ab	22.870 bc	20.795 ab	20.899 ab	20.425 ab	21.845 abc	23.068 bc	24.100 c	20.140 a	22.046 abc
11	40.0	3.381 c	4.473 d	6.570 f	3.430 c	2.904 c	4.123 d	5.535 a	2.038 b	2.919 c	3.255 c	1.315 e	1.543 be
12	38.4	15.340 bd	14.856 ab	13.141 a	15.336 bd	13.267 a	13.525 ad	13.399 ad	14.833 ab	16.023 bc	14.428 ab	16.261 bc	17.783 c
Sum of acid subunits of amandin	41.6-38.4	40.89 cd	39.92 bc	40.97 cd	41.64 de	36.97 a	38.55 b	39.36 bc	38.72 b	42.01 e	41.78 de	37.72ab	41.37de
13	36.8	0.124 i	0.060 j	0.315 h	0.359 e	0.511 c	0.436 d	0.485 a	0.241 b	0.154 g	0.162 g	0.373 e	0.020 f
14	35.9	0.082 c	0.100 h	0.210 g	0.135 e	0.070 c	0.175 d	0.037 a	0.416 b	0.241 f	n.d.	0.131 e	0.162 d
15	35.0	1.443 c	0.998 e	1.656 ad	1.480 c	1.441 c	0.851 b	1.714 a	0.833 b	1.427 c	0.923 be	1.709 a	1.563 cd
16	29.0	0.206 h	0.160 i	0.131 e	0.090 g	0.116 c	0.065 d	0.149 ai	0.394 b	0.439 f	0.139 ae	0.131 e	0.102 cg
17	27.9	1.649 g	1.158 dh	0.736 c	0.852 ce	2.509 b	0.742 c	3.019 a	2.585 b	2.831 a	2.078 f	1.293 d	1.056 eh
Sum	36.8-27.9	3.50 d	2.48 c	3.05 ef	2.92 ef	4.65 b	2.27 c	5.40 a	4.47 b	5.09 a	3.30 df	3.64d	2.90e
18	24.6	25.691 abc	23.522 cde	27.806 b	27.758 b	28.160 b	25.960 abe	24.413acd	25.833abc	22.673 d	22.276 d	27.022 ab	23.143 cd
19	22.6	16.928 a	17.392 ae	15.795 a	16.502 a	16.752 a	22.557 cd	15.356 a	19.807 be	20.764 bd	16.967 a	23.449 c	23.792 c
Sum of basic subunits of amandin	24.6-22.6	42.62 b	40.91 a	43.60 bc	44.26 cd	44.91 cd	48.52 f	39.77 a	45.64 de	43.44 bd	39.24 a	50.47g	46.94e
20	21.4	n.d.	0.100 de	0.105 d	n.d.	0.209 c	0.109 d	0.149 a	0.131 b	0.088 e	0.139 ab	0.088 e	0.061 f
21	20.2	0.742 de	0.140 g	0.420 b	0.314 f	1.836 c	0.698 d	1.491 a	0.438 b	0.263 f	0.254 f	0.789 e	0.386 b
22	19.1	0.948 a	1.518 b	0.972 a	0.987 a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
23	18.3	0.124 cg	0.639 h	0.131 cf	0.202 b	0.116 c	0.349 d	0.093 a	0.219 b	0.132 cf	0.139 fg	0.175 e	0.142 f
24	17.6	0.454 j	0.180 cd	0.683 h	0.291 i	0.163 c	0.414 a	0.410 a	0.372 b	0.593 f	0.231 g	0.197 d	0.020 e
25	15.4	0.186 h	0.799 i	0.026 g	0.022 g	1.255 c	0.393 d	1.416 a	0.635 b	0.417 d	1.500 f	0.723 e	0.386 d
26	14.2	0.103 fg	0.080 ah	n.d.	0.067 a	0.325 c	0.175 d	0.075 a	0.197 b	0.066 a	0.092 fh	0.110 eg	0.122 e
27	13.0	0.021 g	0.260 d	0.420 f	0.404 f	0.674 c	0.262 d	0.298 a	0.219 b	0.198 b	0.369 e	0.263 d	0.223 b
Sum	21.4-13.0	2.58 fg	3.72 a	2.76 f	2.29 b	4.58 c	2.40 bg	3.93 a	2.21 b	1.76 e	2.72 f	2.35 bg	1.34 d
SUM A+B	41.6-38.4; 24.6-22.6	83.51 c	80.83 b	84.57 cd	85.90 d	81.88 b	87.06 e	79.13 a	84.36 cd	85.45 d	81.03 b	88.19 e	88.31 e

„n.d.“-stands for not detected; Means in columns with the same letter do not differ according to Tukey’s test at p<0.05. Abbreviation: MW – molecular weight; Abbreviation ‘Marcona’/‘GF 677’/2014 - MaGF4; ‘Marcona’/‘GF 677’/2015 - MaGF5; ‘Marcona’/Myrobalan plum /2014 - MaMy4; ‘Marcona’/Myrobalan plum /2015 - MaMy5; ‘Texas’/‘GF 677’/2014 - TeGF4; ‘Texas’/‘GF 677’/2015 - TeGF5; ‘Texas’/Myrobalan plum/2014 - TeMy4; ‘Texas’/Myrobalan plum/2015 - TeMy5; ‘Troito’/‘GF 677’/2014 - TrGF4; ‘Troito’/‘GF 677’/2015 - TrGF5; ‘Troito’/Myrobalan plum/2014 - TrMy4; ‘Troito’/Myrobalan plum/2015 - TrMy5;