

## Supplementary material

**Table S1.** Orange fruit quality  $\pm$  standard error (SE) under the effect of six different treatments (control, topping, dichlorprop-p, triclopyr, topping + dichlorprop-p and topping + triclopyr) from the two experimental orchards with different rootstocks (CIVAC19 and Forner-Alcaide no. 517) and cultivars ('Lane Late' and 'Valencia Delta Seedless') from the 2020 harvest season.

<b>Lane Late/CIVAC19</b>							
<b>Treatment</b>	<b>D <math>\pm</math> SE (mm)</b>	<b>PT <math>\pm</math> SE (mm)</b>	<b>Weigh (g) <math>\pm</math> SE</b>	<b>Juice (%) <math>\pm</math> SE</b>	<b>TSS (<math>^{\circ}</math>Brix) <math>\pm</math> SE</b>	<b>TA (g/100 cm<sup>3</sup>)</b>	<b>MI <math>\pm</math> SE</b>
Control	87.32 $\pm$ 0.52 ns	5.98 $\pm$ 0.05 ns	354.30 $\pm$ 12.91 a	45.41 $\pm$ 0.23 ns	11.22 $\pm$ 0.19 ns	0.71 $\pm$ 0.02 ns	15.81 $\pm$ 0.52 ns
Topping	84.68 $\pm$ 1.06 ns	6.06 $\pm$ 0.09 ns	312.93 $\pm$ 4.87 b	45.72 $\pm$ 0.22 ns	11.17 $\pm$ 0.19 ns	0.91 $\pm$ 0.21 ns	13.49 $\pm$ 2.52 ns
Dichlorprop-p	88.10 $\pm$ 1.28 ns	6.15 $\pm$ 0.54 ns	375.25 $\pm$ 20.77 a	47.16 $\pm$ 0.29 ns	11.06 $\pm$ 0.53 ns	0.72 $\pm$ 0.03 ns	15.38 $\pm$ 0.32 ns
Triclopyr	86.89 $\pm$ 1.43 ns	5.58 $\pm$ 0.57 ns	350.03 $\pm$ 13.08 ab	46.46 $\pm$ 1.94 ns	11.20 $\pm$ 0.40 ns	0.74 $\pm$ 0.03 ns	15.06 $\pm$ 0.44 ns
Topping + Dichlorprop-p	87.92 $\pm$ 0.95 ns	5.67 $\pm$ 0.39 ns	371.07 $\pm$ 9.95 a	46.99 $\pm$ 0.13 ns	15.99 $\pm$ 4.49 ns	0.72 $\pm$ 0.05 ns	23.03 $\pm$ 7.85 ns
Topping + Triclopyr	85.46 $\pm$ 0.69 ns	5.89 $\pm$ 0.41 ns	343.44 $\pm$ 7.70 ab	45.39 $\pm$ 0.52 ns	11.01 $\pm$ 0.31 ns	0.75 $\pm$ 0.05 ns	15.08 $\pm$ 0.61 ns
<b>Valencia DS/FA517</b>							
Control	74.36 $\pm$ 1.34 ns	5.86 $\pm$ 0.11 ns	218.44 $\pm$ 14.30 ns	49.63 $\pm$ 0.36 ns	10.70 $\pm$ 0.41 ns	1.47 $\pm$ 0.03 ns	7.27 $\pm$ 0.15 c
Topping	74.12 $\pm$ 1.30 ns	5.75 $\pm$ 0.58 ns	212.28 $\pm$ 5.67 ns	50.32 $\pm$ 1.68 ns	10.81 $\pm$ 0.03 ns	1.45 $\pm$ 0.06 ns	7.50 $\pm$ 0.29 bc
Dichlorprop-p	77.25 $\pm$ 0.48 ns	5.67 $\pm$ 0.16 ns	242.76 $\pm$ 9.89 ns	50.66 $\pm$ 0.95 ns	11.06 $\pm$ 0.21 ns	1.42 $\pm$ 0.03 ns	7.78 $\pm$ 0.31 abc
Triclopyr	74.94 $\pm$ 0.94 ns	5.24 $\pm$ 0.31 ns	221.52 $\pm$ 6.67 ns	49.38 $\pm$ 0.48 ns	11.16 $\pm$ 0.19 ns	1.47 $\pm$ 0.03 ns	7.60 $\pm$ 0.18 bc
Topping + Dichlorprop-p	78.10 $\pm$ 1.44 ns	6.07 $\pm$ 0.27 ns	248.95 $\pm$ 12.81 ns	49.10 $\pm$ 0.84 ns	10.83 $\pm$ 0.20 ns	1.27 $\pm$ 0.02 ns	8.52 $\pm$ 0.26 a
Topping + Triclopyr	76.50 $\pm$ 1.77 ns	5.56 $\pm$ 0.45 ns	235.93 $\pm$ 13.29 ns	50.29 $\pm$ 1.73 ns	10.87 $\pm$ 0.53 ns	1.33 $\pm$ 0.10 ns	8.19 $\pm$ 0.30 ab

Values with different letters are significantly different among the treatments according to LSD-Fisher test ( $p < 0.05$ ). ns: non-statistical differences. FA517: Forner-Alcaide no. 517 and Valencia DS: 'Valencia Delta Seedless'; D: Diameter; PT: Peel thickness; Weigh: Weigh of the fruit sample analyzed for fruit quality; TSS: Total Soluble Solids; TA: Titratable Acidity; MI: Maturity index.

**Table S2.** Shoot number  $\pm$  standard error (SE) under the effect of six different treatments (control, topping, dichlorprop-p, triclopyr, topping + dichlorprop-p and topping + triclopyr) in the two experimental orchards with different rootstocks (CIVAC19 and Forner-Alcaide no. 517) and cultivars ('Lane Late' and 'Valencia Delta Seedless').

Treatment	July, 2018		September, 2018		July, 2019		September, 2019	
	Lane Late/CIVAC19	Valencia DS/FA517	Lane Late/CIVAC19	Valencia DS/FA517	Lane Late/CIVAC19	Valencia DS/FA517	Lane Late/CIVAC19	Valencia DS/FA517
Control	4.33 $\pm$ 0.33 bcdef	3.50 $\pm$ 0.22 cdefghi	7.50 $\pm$ 0.76 a	5.50 $\pm$ 0.34 abcd	3.33 $\pm$ 0.71 defghi	6.29 $\pm$ 1.80 ab	1.60 $\pm$ 1.03 hijklm	0.33 $\pm$ 0.21 klm
Topping	5.00 $\pm$ 1.00 abcde	6.50 $\pm$ 0.72 ab	3.17 $\pm$ 1.25 defghi	4.00 $\pm$ 1.03 bcdefg	7.00 $\pm$ 1.72 a	2.89 $\pm$ 0.75 efghij	0.40 $\pm$ 0.24 jklm	0.00 $\pm$ 0.00 m
Dichlorprop-p	1.83 $\pm$ 0.40 ghijklm	2.17 $\pm$ 0.60 fghijklm	4.50 $\pm$ 1.26 bcdef	2.60 $\pm$ 0.60 efghijklm	1.33 $\pm$ 0.53 ijklm	1.44 $\pm$ 0.80 hijklm	0.20 $\pm$ 0.20 klm	2.17 $\pm$ 0.79 fghijklm
Triclopyr	3.00 $\pm$ 0.37 defghij	4.00 $\pm$ 0.68 bcdefg	5.00 $\pm$ 0.89 abcde	7.50 $\pm$ 1.15 a	2.00 $\pm$ 0.55 ghijklm	1.67 $\pm$ 0.65 hijklm	2.60 $\pm$ 1.03 efghijklm	0.17 $\pm$ 0.17 lm
Topping + dichlorprop-p	2.83 $\pm$ 0.40 efghijk	6.00 $\pm$ 0.86 abc	5.67 $\pm$ 0.76 abc	2.83 $\pm$ 0.48 efghijk	4.44 $\pm$ 1.76 bcdef	1.67 $\pm$ 0.69 hijklm	0.00 $\pm$ 0.00 m	0.33 $\pm$ 0.21 klm
Topping + triclopyr	2.50 $\pm$ 0.62 efghijklm	4.33 $\pm$ 0.67 bcdef	3.67 $\pm$ 0.49 cdefgh	2.67 $\pm$ 0.33 efghijkl	3.89 $\pm$ 0.99 cdefg	1.56 $\pm$ 0.47 hijklm	0.40 $\pm$ 0.24 jklm	0.33 $\pm$ 0.21 klm

Values with different letters are significantly different among treatments and between the orchards assayed according to LSD-Fisher test ( $p < 0.05$ ). Valencia DS: 'Valencia Delta Seedless'; FA517: Forner-Alcaide no. 517.