



# Spontaneous Plants Improve the Inter-Row Soil Fertility in a Citrus Orchard but Nitrogen Lacks to Boost Organic Carbon

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**Table S1.** Statistical summary of the properties studied in this work.

Property	Statistical parameter	Natural Scale	Logarithmic Scale	Square Root Scale
$K_s/\text{mm h}^{-1}$	Count	23	23	
	Mean	11.4054996	0.9355886	
	Std. Dev.	8.73277583	0.34364052	
	Max.	38.6763661	1.58744566	
	Min.	2.05949776	0.31376132	
	G1 coeff.	1.47539071	-0.12422107	
	$D_{K-S}$	0.17169	0.12562	
	$p_{K-S}$	0.4563	0.8176	
$\rho_b/\text{g cm}^{-3}$	Count	31		
	Mean	1.54110652		
	Std. Dev.	0.06313108		
	Max.	1.65395575		
	Min.	1.4002163		
	G1 coeff.	-0.38596346		
	$D_{K-S}$	0.10739		
	$p_{K-S}$	0.83		
$w_{\text{root}}/\text{mg g}^{-1}$	Count	12	12	12
	Mean	0.61716732	2.86896138	0.61225894
	Std. Dev.	0.96155911	0.14646293	0.51413437
	Max.	3.35659713	3.09371755	1.83210183
	Min.	0.00428644	2.57802927	0.06547092
	G1 coeff.	2.43539603	-0.433868	1.31494504
	$D_{K-S}$	0.30928	0.12455	0.24128
	$p_{K-S}$	0.162	0.9808	0.4206
$DHA/\text{nmol g}^{-1} \text{ h}^{-1}$	Count	132	132	
	Mean	10.4020652	0.93268371	
	Std. Dev.	6.46273192	0.28608829	
	Max.	40.1855327	1.60406973	
	Min.	1.12651157	0.05173566	
	G1 coeff.	1.40195447	-0.49849089	
	$D_{K-S}$	0.091827	0.064931	
	$p_{K-S}$	0.2156	0.6339	

<i>GLA</i> /μmol g <sup>-1</sup> h <sup>-1</sup>	Count	90	90
	Mean	0.49275628	2.61346501
	Std. Dev.	0.31184243	0.26458178
	Max.	1.51717578	3.1810359
	Min.	0.09413131	1.97373409
	G1 coeff.	1.25807268	0.0543105
	D <sub>K-S</sub>	0.1625	0.063865
	p <sub>K-S</sub>	0.01521	0.8334
<i>E<sub>C-CO2</sub></i> /kg ha <sup>-1</sup> h <sup>-1</sup>	Count	175	175
	Mean	0.54351149	2.57445895
	Std. Dev.	0.52461876	0.39866392
	Max.	3.58726431	3.55476338
	Min.	0.00421204	0.62449259
	G1 coeff.	2.69819421	-0.75681889
	D <sub>K-S</sub>	0.17153	0.05596
	p <sub>K-S</sub>	6.745 10 <sup>-5</sup>	0.6435
<i>w<sub>SOC</sub></i> (%)	Count	156	
	Mean	0.89641796	
	Std. Dev.	0.11951462	
	Max.	1.35183945	
	Min.	0.38241432	
	G1 coeff.	-0.04472481	
	D <sub>K-S</sub>	0.081304	
	p <sub>K-S</sub>	0.2538	
<i>w<sub>N</sub></i> (%)	Count	128	128
	Mean	0.11473438	2.05517287
	Std. Dev.	0.01733815	0.06176705
	Max.	0.18666667	2.27106677
	Min.	0.084	1.92427929
	G1 coeff.	1.26676347	0.77409679
	D <sub>K-S</sub>	0.15876	0.12754
	p <sub>K-S</sub>	0.003155	0.03109
<i>n<sub>K</sub></i> / mmol <sub>(+)</sub> (100 g) <sup>-1</sup>	Count	128	128
	Mean	2.12037301	0.30780881
	Std. Dev.	0.7465386	0.1186054
	Max.	6.01053762	0.77891332
	Min.	1.17653077	0.07060329
	G1 coeff.	2.99866012	1.50463926
	D <sub>K-S</sub>	0.18223	0.13286
	p <sub>K-S</sub>	0.0004063	0.02181
<i>w<sub>F</sub></i> /mg kg <sup>-1</sup>	Count	128	
	Mean	64.7363664	
	Std. Dev.	32.1763752	
	Max.	154.8174	
	Min.	6.3407	
	G1 coeff.	0.41451693	
	D <sub>K-S</sub>	0.056146	
	p <sub>K-S</sub>	0.8145	