Table S1. Taro quality constituents of the flour obtained by laboratory reference analysis (1st trial) and NIRS prediction (2nd trial) for both corms and shoots submitted to control and drought conditions.

		Corm organs				Shoot organs			
		1st trial 2015		2nd trial 2017		1st trial 2015		2nd trial 2017	
Taro acc.		Control	Drought	Control	Drought	Control	Drought	Control	Drought
					Moisture, g/100g DW				
CAN	2056	6.65 ± 1.26	6.66 ± 0.59	6.56 ± 0.23	8.79 ± 0.91	6.04 ± 0.54	5.94 ± 2.52	5.81 ± 0.90	7.37 ± 0.57
	2061	5.72 ± 0.79	6.18 ± 1.76	7.34 ± 0.64	**8.95 ± 1.22**	**10.58 ± 3.04**	5.46 ± 1.05	4.84 ± 1.69	7.35 ± 0.42
MAD	2210	6.56 ± 0.15	5.89 ± 4.58	7.42 ± 0.59	8.12 ± 0.30	5.55 ± 1.15	4.39 ± 0.00	6.24 ± 3.02	7.59 ± 0.52
	2216	6.85 ± 0.80	7.12 ± 0.99	**9.10 ± 0.43**	8.37 ± 0.73	7.58 ± 1.95	6.90 ± 0.44	7.83 ± 0.17	**10.40 ± 0.40**
SPC	2232	8.24 ± 1.72	7.36 ± 1.59	5.52 ± 0.61	5.39 ± 0.68	9.87 ± 1.79	9.57 ± 2.04	**8.47 ± 0.44**	9.68 ± 1.05
	2234	**8.56 ± 0.58**	**8.58 ± 0.59**	6.64 ± 0.76	6.56 ± 0.34	9.75 ± 1.90	**10.50 ± 1.23**	3.79 ± 1.42	6.73 ± 0.74
	2239	7.91 ± 1.63	7.93 ± 1.36	7.10 ± 0.53	8.20 ± 0.37	9.21 ± 2.27	7.75 ± 3.03	3.63 ± 1.13	5.77 ± 0.38
	Mean	7.21	7.10	7.10	7.77	8.37	7.22	5.80	7.84
	Variation (%)	-1.53		+9.44		-13.74		+35.17 **	
					Protein, g/100g DW				
CAN	2056	3.83 ± 0.05	4.51 ± 0.08	4.22 ± 0.28	4.72 ± 0.19	9.80 ± 0.02	11.68 ± 0.34	6.44 ± 1.82	6.98 ± 1.93
	2061	4.04 ± 0.07	5.03 ± 0.05	4.12 ± 0.04	5.14 ± 0.24	11.23 ± 0.06	10.75 ± 0.06	6.72 ± 2.21	7.57 ± 0.69
MAD	2210	3.89 ± 0.09	5.42 ± 0.04	5.00 ± 0.28	5.58 ± 0.63	12.90 ± 0.12	**15.14 ± 0.01**	**9.29 ± 1.09**	9.29 ± 1.54
	2216	**7.42 ± 0.11**	**8.23 ± 0.20**	**6.23 ± 0.17**	7.29 ± 0.50	12.63 ± 0.01	13.78 ± 0.01	7.72 ± 1.98	**10.09 ± 1.26**
SPC	2232	3.79 ± 0.17	4.74 ± 0.03	4.92 ± 0.47	6.38 ± 0.09	9.94 ± 0.07	13.17 ± 0.00	7.62 ± 1.63	8.96 ± 1.94
	2234	3.51 ± 0.04	3.02 ± 0.02	3.96 ± 0.08	4.41 ± 0.10	**15.22 ± 0.06**	11.75 ± 0.06	4.33 ± 2.26	6.55 ± 1.13
	2239	5.02 ± 0.01	6.14 ± 0.04	5.24 ± 0.45	**7.60 ± 0.83**	8.63 ± 0.25	10.79 ± 0.04	4.73 ± 0.46	5.02 ± 2.85
	Mean	4.50	5.30	4.81	5.87	11.48	12.44	6.69	7.78
	Variation (%)	+17.78		+22.04 **		+8.36		+16.29	
					Nitrogen, g/100g DW				
CAN	2056	0.61 ± 0.15	0.72 ± 0.16	0.67 ± 0.05	0.75 ± 0.03	1.57 ± 0.15	1.90 ± 0.15	1.02 ± 0.31	1.13 ± 0.31
	2061	0.65 ± 0.09	0.81 ± 0.03	0.66 ± 0.01	0.82 ± 0.04	1.80 ± 0.31	1.72 ± 0.11	1.03 ± 0.35	1.20 ± 0.11
MAD	2210	0.62 ± 0.16	0.90 ± 0.16	0.80 ± 0.05	0.89 ± 0.10	1.99 ± 0.25	**2.42 ± 0.12**	**1.44 ± 0.16**	1.46 ± 0.25
	2216	**1.19 ± 0.25**	**1.32 ± 0.12**	**1.00 ± 0.03**	1.17 ± 0.08	2.03 ± 0.15	2.19 ± 0.09	1.22 ± 0.30	**1.60 ± 0.20**
SPC	2232	0.61 ± 0.04	0.77 ± 0.04	0.79 ± 0.07	1.02 ± 0.01	1.59 ± 0.18	2.05 ± 0.26	1.18 ± 0.26	1.40 ± 0.31
	2234	0.56 ± 0.12	0.48 ± 0.01	0.63 ± 0.01	0.71 ± 0.02	**2.51 ± 0.27**	1.88 ± 0.11	0.62 ± 0.37	0.97 ± 0.19
	2239	1.16 ± 0.55	0.98 ± 0.11	0.84 ± 0.07	**1.22 ± 0.13**	1.38 ± 0.40	1.74 ± 0.06	0.70 ± 0.08	0.78 ± 0.45
	Mean	0.77	0.85	0.77	0.94	1.84	1.99	1.03	1.22
	Variation (%)	+10.39		+22.08 **		+8.15		+18.45	
					Starch, g/100g DW				
CAN	2056	53.09 ± 1.02	45.42 ± 0.80	50.82 ± 0.65	44.75 ± 5.70	**17.60 ± 0.62**	**14.35 ± 1.07**	5.72 ± 2.85	4.92 ± 1.35
	2061	46.35 ± 0.87	46.57 ± 1.53	51.74 ± 1.61	46.61 ± 2.76	9.41 ± 0.80	9.60 ± 0.46	5.69 ± 2.23	2.66 ± 0.83
MAD	2210	43.69 ± 1.06	44.65 ± 1.02	**52.28 ± 3.36**	**48.78 ± 0.71**	12.84 ± 0.5	10.01 ± 0.86	7.90 ± 2.91	6.77 ± 2.67
	2216	45.59 ± 2.18	43.35 ± 1.83	44.59 ± 1.62	40.40 ± 0.83	7.50 ± 0.46	7.33 ± 0.50	2.80 ± 1.39	2.99 ± 0.81
SPC	2232	48.07 ± 2.09	40.70 ± 1.10	42.12 ± 3.32	39.35 ± 4.26	12.35 ± 1.60	11.80 ± 0.59	**9.08 ± 1.50**	**8.13 ± 2.81**
	2234	**54.62 ± 0.93**	**52.59 ± 0.64**	50.72 ± 2.99	48.85 ± 1.85	11.08 ± 0.84	10.57 ± 0.30	3.68 ± 2.19	1.06 ± 0.17
	2239	47.69 ± 1.28	43.00 ± 2.13	48.12 ± 3.79	40.12 ± 3.13	9.20 ± 0.80	10.56 ± 2.05	5.89 ± 2.09	4.07 ± 2.09
	Mean	48.44	45.18	48.63	44.12	11.43	10.60	5.82	4.37
	Variation (%)	-6.73		-9.27 **		-7.26		-24.91	
					Crude Fiber, g/100g DW				
CAN	2056	0.30 ± 0.03	0.43 ± 0.09	0.28 ± 0.03	0.47 ± 0.18	1.36 ± 1.45	1.45 ± 0.09	2.13 ± 0.33	2.33 ± 0.23
	2061	0.45 ± 0.05	0.37 ± 0.04	0.25 ± 0.05	0.44 ± 0.07	1.28 ± 0.63	1.71 ± 0.15	2.13 ± 0.27	2.32 ± 0.04
MAD	2210	**0.54 ± 0.18**	0.51 ± 0.12	0.31 ± 0.07	0.37 ± 0.02	1.38 ± 0.00	-	1.93 ± 0.26	2.08 ± 0.23
	2216	0.48 ± 0.04	**0.54 ± 0.02**	0.41 ± 0.04	0.52 ± 0.03	1.80 ± 0.07	1.62 ± 0.07	2.26 ± 0.26	2.28 ± 0.17
SPC	2232	0.37 ± 0.01	0.52 ± 0.18	**0.48 ± 0.08**	0.50 ± 0.12	1.78 ± 0.49	1.57 ± 0.23	2.14 ± 0.23	2.12 ± 0.30
	2234	0.32 ± 0.09	0.31 ± 0.08	0.30 ± 0.06	0.37 ± 0.05	1.81 ± 0.43	**1.84 ± 0.12**	**2.33 ± 0.20**	2.33 ± 0.09
	2239	0.41 ± 0.07	**0.54 ± 0.03**	0.41 ± 0.10	**0.61 ± 0.04**	**1.91 ± 0.07**	1.60 ± 0.08	**2.33 ± 0.20**	**2.50 ± 0.33**
	Mean	0.41	0.46	0.35	0.47	1.62	1.63	2.18	2.28
	Variation (%)	+12.20		+34.29 **		+0.62		+4.59	
					Minerals, g/100g DW				
CAN	2056	3.86 ± 0.15	5.15 ± 0.50	4.99 ± 0.25	7.16 ± 1.87	7.98 ± 0.58	9.20 ± 0.50	9.64 ± 0.19	10.33 ± 0.65
	2061	4.10 ± 0.28	4.50 ± 0.58	4.89 ± 0.77	7.59 ± 1.11	8.40 ± 0.62	9.16 ± 0.34	9.63 ± 0.24	10.95 ± 0.79
MAD	2210	4.05 ± 0.51	4.13 ± 1.17	5.02 ± 0.86	5.75 ± 0.29	9.75 ± 1.30	9.58 ± 0.46	10.47 ± 0.48	10.84 ± 0.40
	2216	**5.58 ± 0.76**	5.72 ± 0.50	**6.89 ± 0.67**	7.92 ± 0.91	**10.31 ± 2.22**	9.89 ± 0.29	10.71 ± 0.28	11.08 ± 0.64
SPC	2232	3.58 ± 0.53	4.32 ± 0.55	5.35 ± 0.43	5.82 ± 1.50	10.16 ± 0.69	**11.18 ± 2.00**	10.40 ± 0.32	11.78 ± 0.42
	2234	2.70 ± 0.17	3.29 ± 0.02	3.32 ± 0.07	4.58 ± 0.74	8.29 ± 0.82	10.48 ± 0.60	**11.15 ± 0.46**	**12.70 ± 0.19**
	2239	4.69 ± 0.61	**6.08 ± 0.84**	5.87 ± 0.67	**8.45 ± 0.28**	9.63 ± 1.77	10.20 ± 0.24	10.59 ± 0.49	12.29 ± 0.61
	Mean	4.08	4.74	5.19	6.75	9.22	9.95	10.37	11.42
	Variation (%)	+16.18 *		+30.06 **		+7.92		+10.13 **	
					CaOx, mg/100g DW				
CAN	2056	271.17 ± 44.13	**468.75 ± 69.35**	240.74 ± 47.00	439.58 ± 188.33	343.24 ± 179.44	296.33 ± 150.40	**304.98 ± 17.47**	**450.90 ± 83.82**
	2061	270.20 ± 135.84	264.77 ± 60.80	207.37 ± 57.05	**506.97 ± 34.75**	135.68 ± 28.33	178.60 ± 20.20	183.33 ± 35.30	230.44 ± 40.83
MAD	2210	186.69 ± 25.71	231.66 ± 52.23	117.94 ± 104.02	36.86 ± 22.19	301.33 ± 70.62	210.34 ± 37.05	157.22 ± 97.01	217.64 ± 35.40
	2216	184.66 ± 44.70	184.74 ± 41.48	67.64 ± 5.04	114.12 ± 73.68	153.32 ± 35.06	119.65 ± 7.19	120.48 ± 71.47	140.17 ± 78.27
SPC	2232	124.83 ± 39.66	190.12 ± 25.39	**274.59 ± 96.83**	312.35 ± 108.05	325.67 ± 32.17	224.30 ± 13.89	263.87 ± 5.60	283.25 ± 14.75
	2234	**297.74 ± 27.75**	295.05 ± 84.62	80.79 ± 6.63	172.81 ± 60.68	**445.63 ± 23.17**	**299.46 ± 75.62**	145.90 ± 56.87	127.79 ± 34.39
	2239	224.37 ± 54.84	359.13 ± 91.01	220.40 ± 72.79	278.91 ± 78.08	171.68 ± 91.75	225.57 ± 94.71	73.67 ± 7.27	52.86 ± 33.02
	Mean	222.81	284.89	172.78	265.94	268.08	222.04	178.49	214.72
	Variation (%)	+27.86 *		+53.92		-17.17		+20.30	
					$\delta^{13}C$, ‰ DW				
CAN	2056	**-25.07 ± 0.26**	**-24.82 ± 0.14**	-24.41 ± 0.38	-24.18 ± 0.26	-26.58 ± 0.59	-25.49 ± 0.97	**-21.92 ± 1.37**	**-19.77 ± 1.90**
	2061	-25.33 ± 0.25	-25.32 ± 0.06	**-24.30 ± 0.14**	**-23.85 ± 0.13**	-25.84 ± 0.47	**-24.58 ± 0.51**	-23.25 ± 1.26	-20.31 ± 0.42
MAD	2210	-26.33 ± 0.19	-25.76 ± 0.50	-25.32 ± 0.35	-24.62 ± 0.58	-27.53 ± 0.40	-26.46 ± 0.36	-26.97 ± 0.78	-25.78 ± 0.84
	2216	-26.10 ± 1.69	-26.21 ± 0.36	-25.10 ± 0.28	-25.76 ± 0.30	**-25.82 ± 1.20**	-26.27 ± 1.52	-24.18 ± 0.62	-25.03 ± 0.38
SPC	2232	-26.75 ± 0.27	-26.76 ± 0.30	-25.59 ± 0.27	-25.37 ± 0.45	-27.24 ± 0.38	-27.18 ± 1.10	-26.52 ± 0.53	-25.61 ± 1.04
	2234	-26.32 ± 0.84	-26.53 ± 0.15	-25.62 ± 0.12	-25.52 ± 0.21	-26.12 ± 1.55	-25.81 ± 1.05	-24.48 ± 0.64	-23.78 ± 0.99
	2239	-26.47 ± 0.89	-26.98 ± 0.41	-26.06 ± 0.70	-26.62 ± 0.40	-26.69 ± 0.65	-26.84 ± 0.60	-27.38 ± 1.46	-25.86 ± 0.58
	Mean	-26.05	-26.05	-25.20	-25.13	-26.55	-26.09	-24.96	-23.74
	Variation (%)	0.00		+0.28		+1.73		+4.89	

Table S1 (continued).

		$\Delta^{13}C$, ‰ DW							
CAN	2056	17.51 ± 0.27	17.25 ± 0.14	17.11 ± 0.41	16.80 ± 0.33	19.08 ± 0.61	17.95 ± 1.01	15.02 ± 1.25	13.15 ± 1.75
	2061	17.78 ± 0.26	17.78 ± 0.07	16.99 ± 0.13	16.28 ± 0.13	18.31 ± 0.49	17.00 ± 0.53	16.70 ± 1.43	14.06 ± 0.46
MAD	2210	18.83 ± 0.20	18.23 ± 0.52	18.38 ± 0.38	17.51 ± 0.68	**20.08 ± 0.42**	18.96 ± 0.38	19.70 ± 0.84	18.72 ± 0.82
	2216	18.58 ± 1.76	18.70 ± 0.37	18.00 ± 0.23	18.67 ± 0.27	18.30 ± 1.26	18.77 ± 1.59	17.13 ± 0.86	17.86 ± 0.41
SPC	2232	19.27 ± 0.28	19.28 ± 0.32	18.50 ± 0.35	18.07 ± 0.54	19.78 ± 0.40	**19.71 ± 1.15**	19.15 ± 0.46	18.33 ± 0.96
	2234	18.82 ± 0.88	19.04 ± 0.15	18.76 ± 0.15	18.50 ± 0.25	18.61 ± 1.62	18.29 ± 1.10	17.52 ± 0.62	16.98 ± 0.80
	2239	**18.98 ± 0.93**	**19.51 ± 0.43**	**19.13 ± 0.78**	**19.55 ± 0.39**	19.20 ± 0.68	19.36 ± 0.63	**20.47 ± 1.49**	**18.90 ± 0.59**
	Mean	18.54	18.54	18.13	17.91	19.05	18.58	17.96	16.86
	Variation (%)	0.00		-1.21		-2.47		-6.12	
		$\delta^{15}N$, ‰ DW							
CAN	2056	4.63 ± 0.51	4.77 ± 1.04	5.42 ± 0.47	5.98 ± 0.81	8.72 ± 2.36	6.75 ± 1.00	8.54 ± 1.41	9.98 ± 0.47
	2061	5.08 ± 0.71	4.06 ± 0.21	5.32 ± 0.56	5.92 ± 0.57	8.89 ± 1.05	7.40 ± 0.56	9.50 ± 0.82	9.38 ± 0.52
MAD	2210	4.28 ± 1.11	**5.31 ± 1.41**	**7.53 ± 0.62**	**6.67 ± 0.41**	**11.22 ± 0.95**	**10.20 ± 0.95**	10.75 ± 0.98	10.16 ± 0.66
	2216	4.89 ± 1.15	5.12 ± 0.23	5.71 ± 0.50	5.12 ± 0.28	9.14 ± 1.71	7.62 ± 0.19	9.25 ± 1.51	9.55 ± 1.61
SPC	2232	**5.10 ± 0.53**	4.70 ± 0.46	5.86 ± 0.54	5.16 ± 0.16	7.81 ± 1.99	7.09 ± 0.33	9.26 ± 1.24	8.90 ± 0.52
	2234	4.05 ± 0.94	3.38 ± 0.29	4.34 ± 0.58	3.29 ± 0.77	10.10 ± 4.09	6.32 ± 0.38	9.82 ± 1.36	7.91 ± 0.96
	2239	4.90 ± 1.17	4.67 ± 1.17	5.68 ± 0.22	5.60 ± 1.38	7.05 ± 1.27	7.25 ± 2.51	**13.96 ± 1.04**	**13.35 ± 1.20**
	Mean	4.71	4.57	5.69	5.39	8.99	7.52	10.15	9.89
	Variation (%)	-2.97		-5.27		-16.35 *		-2.56	

Data are expressed in dry weight basis (DW) and represents the mean ± SD of three independent lines replications per accession.
Variation is the difference between control and drought per constituent.
*,** Significant differences between control and drought conditions (One-way ANOVA, *$p \leq 0.05$; **$p \leq 0.01$).
Bold signalizes the maximum value. Underline signalizes the minimum value.
CAN, Canary Islands; MAD, Madeira Island; SPC, South Pacific Community.

Table S2. Pearson correlations of taro corms and shoots, from the 1st agronomic trial.

Origin	Constituents	Pt-corm	N-corm	St-corm	Fb-corm	M-corm	CaOx-corm	δ¹³C-corm	Δ¹³C-corm	δ¹⁵N-corm	Pt-shoot	N-shoot	St-shoot	Fb-shoot	M-shoot	CaOx-shoot	δ¹³C-shoot	Δ¹³C-shoot
CANARY ISLANDS	N-corm	**1.00****	-															
	St-corm	**-0.72****	**-0.72****	-														
	Fb-corm	0.13	0.14	**-0.76****	-													
	M-corm	0.22	0.22	-0.56	**0.63***	-												
	CaOx-corm	0.24	0.23	-0.51	0.50	**0.72****	-											
	δ¹³C-corm	0.20	0.19	-0.28	0.13	0.51	**0.70***	-										
	Δ¹³C-corm	-0.20	-0.19	0.28	-0.13	-0.51	**-0.70***	**-1.00****	-									
	δ¹⁵N-corm	0.18	0.18	-0.12	-0.08	-0.27	0.06	0.15	-0.15	-								
	Pt-shoot	0.42	0.42	**-0.78****	**0.62***	0.50	0.52	0.57	-0.57	0.13	-							
	N-shoot	0.45	0.45	**-0.79****	**0.61***	0.51	0.57	**0.59***	**-0.59***	0.19	**0.99****	-						
	St-shoot	-0.23	-0.25	0.45	-0.44	-0.12	0.24	0.50	-0.50	0.02	-0.16	-0.14	-					
	Fb-shoot	0.20	0.20	0.05	-0.24	0.10	-0.36	-0.30	0.30	-0.18	-0.42	-0.43	-0.44	-				
	M-shoot	0.04	0.04	-0.10	0.17	**0.60***	0.19	0.03	-0.03	-0.29	0.08	0.11	-0.31	0.31	-			
	CaOx-shoot	0.26	0.25	0.22	-0.51	-0.14	0.14	0.52	-0.52	0.40	-0.12	-0.06	**0.72****	-0.13	-0.17	-		
	δ¹³C-shoot	0.44	0.45	-0.55	0.31	0.41	0.08	-0.12	0.12	-0.37	0.38	0.36	**-0.65***	0.44	0.45	**-0.59***	-	
	Δ¹³C-shoot	-0.44	-0.45	0.55	-0.31	-0.41	-0.08	0.12	-0.12	0.37	-0.38	-0.36	**0.65***	-0.44	-0.45	**0.59***	**-1.00****	-
	δ¹⁵N-shoot	0.24	0.24	0.02	-0.29	**-0.72****	-0.46	-0.13	0.13	0.56	-0.02	-0.03	0.12	-0.19	**-0.72****	0.40	-0.43	0.43
MADEIRA ISLAND	N-corm	**1.00****	-															
	S-corm	-0.03	-0.03	-														
	F-corm	0.01	0.01	**-0.93****	-													
	M-corm	0.36	0.36	-0.03	-0.05	-												
	CaOx-corm	-0.16	-0.17	0.00	0.04	-0.11	-											
	δ¹³C-corm	0.31	0.31	-0.10	0.07	-0.20	0.55	-										
	Δ¹³C-corm	-0.31	-0.31	0.10	-0.07	0.20	-0.55	**-1.00****	-									
	δ¹⁵N-corm	0.19	0.19	-0.07	0.06	0.22	**0.70***	**0.58***	**-0.58***	-								
	P-shoot	0.20	0.20	-0.18	0.37	-0.45	0.40	0.42	-0.43	0.22	-							
	N-shoot	0.20	0.21	-0.19	0.37	-0.45	0.39	0.42	-0.42	0.22	**1.00****	-						
	S-shoot	**-0.80****	**-0.80****	0.08	-0.16	-0.47	0.02	-0.05	0.05	-0.28	-0.31	-0.31	-					
	F-shoot	0.70	0.70	-0.10	0.18	0.63	-0.07	0.17	-0.17	0.14	0.30	0.31	**-0.83***	-				
	M-shoot	-0.23	-0.23	0.24	-0.19	0.47	-0.31	**-0.73****	**0.73****	-0.08	-0.38	-0.37	-0.19	0.14	-			
	CaOx-shoot	**-0.58***	**-0.58***	-0.17	0.25	**-0.78****	-0.04	0.12	-0.12	-0.34	0.20	0.20	**0.59***	-0.63	-0.26	-		
	δ¹³C-shoot	0.43	0.43	0.13	-0.13	0.26	-0.05	0.18	-0.18	0.31	0.11	0.10	-0.46	0.33	-0.00	-0.43	-	
	Δ¹³C-shoot	-0.43	-0.43	-0.13	0.13	-0.26	0.05	-0.18	0.18	-0.31	-0.11	-0.11	0.46	-0.33	0.00	0.43	**-1.00****	-
	δ¹⁵N-shoot	**-0.67***	**-0.67***	-0.11	0.20	**-0.60***	-0.07	0.06	-0.07	-0.33	0.08	0.08	**0.69***	-0.49	-0.21	**0.78****	-0.12	0.12
SOUTH PACIFIC COMMUNITY	N-corm	**0.66****	-															
	St-corm	**-0.60****	**-0.50***	-														
	Fb-corm	**0.60****	0.40	**-0.90****	-													
	M-corm	**0.78****	0.41	**-0.56***	**0.66****	-												
	CaOx-corm	0.30	0.23	0.10	**0.03**	0.13	-											
	δ¹³C-corm	-0.11	0.03	0.32	**-0.55***	-0.34	0.16	-										
	Δ¹³C-corm	0.11	-0.03	-0.32	**0.55***	0.34	-0.16	**-1.00****	-									
	δ¹⁵N-corm	0.32	0.36	-0.29	0.22	0.28	-0.19	0.11	-0.11	-								
	Pt-shoot	-0.22	-0.14	-0.01	-0.03	-0.46	0.33	0.18	-0.18	-0.43	-							
	N-shoot	-0.22	-0.14	-0.01	-0.02	-0.46	0.33	0.18	-0.18	-0.43	**1.00****	-						
	St-shoot	-0.12	-0.25	0.08	-0.16	-0.12	-0.38	-0.16	0.16	-0.05	0.06	0.06	-					
	Fb-shoot	-0.36	-0.09	0.40	-0.24	-0.21	0.00	-0.10	0.10	0.28	-0.34	-0.34	**-0.49***	-				
	M-shoot	0.05	-0.24	-0.14	0.10	0.34	-0.27	-0.03	0.03	0.27	-0.41	-0.41	-0.07	0.12	-			
	CaOx-shoot	**-0.50***	-0.29	0.40	-0.42	**-0.64****	0.22	0.28	-0.28	-0.12	**0.64****	**0.64****	0.26	-0.01	**-0.52***	-		
	δ¹³C-shoot	-0.29	-0.22	0.12	-0.08	-0.16	0.15	0.27	-0.27	-0.46	0.20	0.20	-0.43	0.19	-0.15	0.08	-	
	Δ¹³C-shoot	0.29	0.22	-0.12	0.08	0.16	-0.15	-0.27	0.27	0.46	-0.20	-0.20	0.43	-0.19	0.15	-0.08	**-1.00****	-
	δ¹⁵N-shoot	-0.20	-0.04	0.10	0.10	-0.37	0.13	-0.21	0.21	0.24	0.20	0.20	-0.24	**0.52***	-0.28	0.36	0.03	-0.03
OVERALL	N-corm	**0.85****	-															
	St-corm	**-0.46****	**-0.46****	-														
	Fb-corm	**0.45****	**0.39***	**-0.87****	-													
	M-corm	**0.55****	**0.43****	**-0.48****	**0.51****	-												
	CaOx-corm	-0.10	-0.06	0.02	-0.07	0.11	-											
	δ¹³C-corm	0.07	0.02	0.07	-0.20	-0.05	**0.40****	-										
	Δ¹³C-corm	-0.07	-0.02	-0.07	0.20	0.05	**-0.40****	**-1.00****	-									
	δ¹⁵N-corm	0.29	**0.31***	-0.24	0.19	0.23	-0.02	0.26	-0.26	-								
	Pt-shoot	0.25	0.19	-0.27	**0.33***	-0.17	0.07	0.04	-0.04	-0.08	-							
	N-shoot	0.25	0.19	-0.27	**0.33***	-0.17	0.08	0.05	-0.05	-0.07	**1.00****	-						
	St-shoot	**-0.49****	**-0.46****	0.27	**-0.35***	-0.24	0.20	0.22	-0.22	-0.12	-0.25	-0.24	-					
	Fb-shoot	0.04	0.11	0.22	-0.13	-0.10	-0.29	**-0.38***	**0.38***	0.03	-0.18	-0.18	**-0.51****	-				
	M-shoot	0.03	-0.08	-0.09	0.13	**0.34***	-0.29	**-0.51****	**0.51****	0.06	-0.14	-0.14	-0.28	0.32	-			
	CaOx-shoot	**-0.39***	-0.30	0.30	**-0.37***	**-0.56****	0.19	0.03	-0.03	-0.09	0.18	0.20	**0.52****	-0.02	-0.27	-		
	δ¹³C-shoot	0.06	0.00	0.01	-0.10	0.07	0.23	**0.41****	**-0.41****	-0.15	0.05	0.05	-0.27	0.05	-0.20	-0.25	-	
	Δ¹³C-shoot	-0.06	0.00	-0.01	0.10	-0.07	-0.23	**-0.41****	**0.41****	0.14	-0.05	-0.05	0.27	-0.05	0.20	0.25	**-1.00****	-
	δ¹⁵N-shoot	-0.01	0.00	-0.08	0.23	-0.29	-0.19	-0.02	0.02	0.21	0.29	0.29	-0.02	0.12	-0.23	0.25	-0.11	0.11

Pt, protein (g/100g, DW); N, nitrogen (g/100g, DW); St, starch (g/100g, DW); Fb, crude fiber (g/100g, DW); M, total minerals (g/100g, DW); CaOx, calcium oxalate (g/100g, DW); δ¹³C, carbon isotopic composition (‰, DW); Δ¹³C, carbon isotope discrimination (‰, DW); δ¹⁵N, nitrogen isotopic composition (‰, DW).

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table S3. Sweet potato quality constituents of the flour obtained by laboratory reference analysis (1st trial) and NIRS prediction (2nd trial) for both tuber and shoot organs, under control and drought conditions.

		Tuber organs				Shoot organs			
		1st trial 2017		2nd trial 2018		1st trial 2017		2nd trial 2018	
Sweet potato Acc.		Control	Drought	Control	Drought	Control	Drought	Control	Drought
					Moisture, g/100g DW				
MAD	1036	3.60 ± 0.24	3.18 ± 0.00	4.50 ± 0.24	4.52 ± 0.12	6.21 ± 2.36	6.41 ± 0.00	4.74 ± 0.44	4.50 ± 0.11
	1038	4.23 ± 0.91	3.29 ± 0.24	5.74 ± 0.22	4.12 ± 0.72	5.36 ± 1.81	6.47 ± 0.86	6.04 ± 0.60	**7.07 ± 1.03**
	2927	5.04 ± 0.59	5.27 ± 1.62	5.70 ± 0.42	**5.87 ± 0.43**	4.82 ± 0.97	**6.64 ± 1.23**	4.17 ± 0.28	4.57 ± 0.62
	3126	**6.16 ± 1.19**	5.67 ± 1.34	4.22 ± 0.94	3.53 ± 0.66	6.02 ± 1.74	5.23 ± 1.05	4.33 ± 0.60	5.45 ± 0.16
CAN	2937	5.41 ± 1.61	4.82 ± 0.00	**7.43 ± 0.54**	4.91 ± 1.55	**6.86 ± 1.12**	5.61 ± 0.00	3.73 ± 1.00	6.48 ± 0.39
	2938	5.37 ± 0.93	4.93 ± 0.17	4.15 ± 0.59	4.32 ± 1.25	5.49 ± 0.61	6.36 ± 0.40	3.02 ± 1.17	4.07 ± 1.07
GUI	3124	3.94 ± 1.22	5.63 ± 2.37	3.92 ± 0.19	3.16 ± 0.62	5.78 ± 1.17	5.85 ± 0.50	4.08 ± 0.35	4.27 ± 0.72
	3125	6.01 ± 1.23	**7.35 ± 1.67**	6.03 ± 1.19	3.73 ± 1.17	6.35 ± 0.88	**6.64 ± 0.68**	**7.04 ± 0.86**	5.03 ± 0.40
	Mean	4.97	5.02	5.21	4.27	5.86	6.15	4.64	5.18
	Variation (%)	+1.01		-18.04 *		+4.95		+11.64	
					Protein, g/100g DW				
MAD	1036	6.20 ± 0.58	**9.27 ± 0.17**	4.91 ± 0.81	**10.10 ± 0.03**	14.51 ± 1.33	16.41 ± 0.01	15.08 ± 1.89	17.18 ± 0.05
	1038	6.86 ± 0.54	4.28 ± 0.49	**5.49 ± 1.03**	4.11 ± 0.44	17.56 ± 0.58	12.79 ± 1.29	17.80 ± 0.87	15.10 ± 1.30
	2927	6.16 ± 0.79	7.10 ± 0.62	4.34 ± 0.42	6.78 ± 0.30	15.47 ± 2.30	10.42 ± 0.57	15.07 ± 1.16	11.06 ± 0.36
	3126	**7.42 ± 1.10**	6.14 ± 0.63	5.02 ± 0.27	6.54 ± 0.75	**20.50 ± 0.65**	**16.59 ± 0.94**	**18.76 ± 0.45**	17.08 ± 1.34
CAN	2937	6.82 ± 1.36	4.90 ± 0.06	5.33 ± 0.85	5.68 ± 0.56	12.73 ± 0.25	8.46 ± 0.05	16.31 ± 0.55	10.22 ± 1.20
	2938	5.39 ± 0.52	5.00 ± 0.08	4.23 ± 0.37	8.76 ± 1.63	15.71 ± 1.18	10.54 ± 0.36	15.92 ± 1.87	**18.72 ± 1.18**
GUI	3124	4.37 ± 0.94	4.57 ± 0.06	2.89 ± 0.16	4.56 ± 0.16	18.87 ± 2.36	15.97 ± 1.97	15.21 ± 0.79	13.11 ± 0.71
	3125	6.92 ± 0.55	6.33 ± 1.17	5.20 ± 1.48	4.80 ± 0.55	15.58 ± 1.68	13.13 ± 0.92	15.88 ± 1.27	14.10 ± 1.05
	Mean	6.27	5.95	4.68	6.42	16.36	13.04	16.25	14.57
	Variation (%)	-5.10		+37.18 **		-20.29 **		-10.34 *	
					Nitrogen, g/100g DW				
MAD	1036	0.99 ± 0.09	**1.48 ± 0.04**	0.78 ± 0.13	**1.62 ± 0.01**	2.32 ± 0.00	2.58 ± 0.05	2.41 ± 0.30	2.75 ± 0.01
	1038	1.10 ± 0.09	0.68 ± 0.08	**0.88 ± 0.17**	0.66 ± 0.07	2.81 ± 0.08	2.05 ± 0.19	2.85 ± 0.14	2.42 ± 0.21
	2927	0.99 ± 0.13	1.14 ± 0.10	0.69 ± 0.07	1.09 ± 0.05	2.48 ± 0.33	1.67 ± 0.08	2.41 ± 0.19	1.77 ± 0.06
	3126	**1.19 ± 0.18**	0.98 ± 0.10	0.80 ± 0.04	1.05 ± 0.12	**3.28 ± 0.10**	**2.65 ± 0.14**	**3.00 ± 0.07**	2.73 ± 0.21
CAN	2937	1.09 ± 0.22	0.78 ± 0.01	0.85 ± 0.14	0.91 ± 0.09	2.04 ± 0.04	1.50 ± 0.17	2.61 ± 0.09	1.64 ± 0.19
	2938	0.86 ± 0.08	0.61 ± 0.24	0.67 ± 0.06	1.41 ± 0.26	2.51 ± 0.22	1.69 ± 0.07	2.55 ± 0.30	**3.00 ± 0.19**
GUI	3124	0.70 ± 0.15	0.73 ± 0.01	0.46 ± 0.03	0.73 ± 0.03	3.02 ± 0.34	2.56 ± 0.28	2.43 ± 0.13	2.10 ± 0.11
	3125	1.11 ± 0.09	1.01 ± 0.19	0.84 ± 0.24	0.77 ± 0.09	2.49 ± 0.24	2.10 ± 0.13	2.54 ± 0.20	2.26 ± 0.17
	Mean	1.00	0.93	0.75	1.03	2.62	2.10	2.60	2.33
	Variation (%)	-7.00		+37.33 **		-19.85 **		-10.38 *	
					Starch, g/100g DW				
MAD	1036	44.22 ± 2.01	38.24 ± 1.40	**47.90 ± 0.43**	**47.90 ± 0.04**	4.04 ± 0.74	7.52 ± 0.77	1.80 ± 0.49	2.65 ± 0.01
	1038	46.65 ± 2.46	45.67 ± 0.45	41.32 ± 4.06	38.13 ± 6.63	1.73 ± 0.30	4.92 ± 1.05	2.22 ± 0.37	3.55 ± 1.25
	2927	38.28 ± 3.16	37.54 ± 0.68	40.85 ± 3.50	32.77 ± 1.20	2.93 ± 0.52	4.49 ± 0.29	4.41 ± 0.55	2.55 ± 1.56
	3126	46.51 ± 2.02	41.28 ± 2.04	44.67 ± 1.21	32.67 ± 3.63	1.12 ± 0.41	4.84 ± 1.31	2.92 ± 0.52	1.41 ± 0.84
CAN	2937	**48.18 ± 2.07**	44.06 ± 4.14	42.72 ± 5.46	44.38 ± 2.29	**6.57 ± 1.49**	**16.93 ± 0.98**	2.45 ± 0.21	5.35 ± 0.68
	2938	43.01 ± 0.44	43.79 ± 2.82	43.72 ± 2.40	33.54 ± 4.50	4.12 ± 0.08	8.61 ± 1.41	2.20 ± 0.48	3.19 ± 0.28
GUI	3124	38.21 ± 3.00	**48.44 ± 1.58**	40.17 ± 1.66	44.26 ± 1.60	3.50 ± 0.43	3.48 ± 0.35	5.01 ± 0.38	5.28 ± 1.54
	3125	42.04 ± 0.56	39.60 ± 0.59	31.15 ± 2.18	31.88 ± 2.19	5.81 ± 1.32	5.96 ± 1.53	**6.05 ± 0.66**	**6.75 ± 1.56**
	Mean	43.39	42.33	41.56	38.19	3.73	7.09	3.38	3.84
	Variation (%)	-2.44		-8.11		+90.08 **		+13.61	
					Minerals, g/100g DW				
MAD	1036	4.17 ± 0.20	4.52 ± 0.06	3.69 ± 0.15	4.07 ± 0.03	11.12 ± 0.64	10.98 ± 0.22	13.67 ± 0.56	12.85 ± 0.04
	1038	4.03 ± 0.28	4.07 ± 0.39	**4.29 ± 0.20**	4.10 ± 0.25	13.80 ± 0.13	11.77 ± 0.66	14.56 ± 0.27	12.71 ± 0.31
	2927	4.58 ± 0.59	4.46 ± 0.06	3.95 ± 0.14	4.08 ± 0.15	11.63 ± 1.44	9.89 ± 0.65	12.70 ± 0.45	11.32 ± 0.20
	3126	3.71 ± 0.32	3.96 ± 0.06	3.64 ± 0.13	3.69 ± 0.27	**14.18 ± 1.26**	11.86 ± 0.46	**15.14 ± 0.23**	13.05 ± 0.11
CAN	2937	4.01 ± 0.37	3.70 ± 0.02	3.94 ± 0.07	3.83 ± 0.16	9.57 ± 1.01	7.58 ± 0.00	13.97 ± 0.25	10.46 ± 0.78
	2938	4.39 ± 0.17	4.40 ± 0.03	3.82 ± 0.21	3.98 ± 0.28	11.70 ± 0.34	8.89 ± 1.01	13.98 ± 0.58	**13.20 ± 0.38**
GUI	3124	3.93 ± 0.80	4.07 ± 0.22	3.38 ± 0.15	3.56 ± 0.14	12.91 ± 1.06	**12.88 ± 0.87**	11.52 ± 0.77	10.84 ± 0.11
	3125	**4.89 ± 0.57**	**5.04 ± 0.28**	4.09 ± 0.50	**4.16 ± 0.05**	12.32 ± 1.43	10.30 ± 0.51	12.27 ± 0.48	11.32 ± 0.42
	Mean	4.21	4.28	3.85	3.93	12.15	10.52	13.48	11.97
	Variation (%)	+1.66		+2.08		-13.42 **		-11.20 **	
					CaOx, mg/100g DW				
MAD	1036	15.83 ± 7.56	15.34 ± 1.81	27.16 ± 11.57	39.61 ± 19.08	155.75 ± 17.00	69.42 ± 12.33	-	40.26 ± 24.24
	1038	43.73 ± 17.56	35.84 ± 6.26	23.85 ± 11.87	8.39 ± 3.09	43.81 ± 16.12	36.72 ± 8.82	-	40.50 ± 2.95
	2927	37.75 ± 6.25	28.26 ± 19.37	16.59 ± 9.69	31.91 ± 7.81	36.70 ± 8.19	28.53 ± 20.20	**70.01 ± 31.82**	-
	3126	76.13 ± 11.98	59.59 ± 6.48	16.17 ± 5.17	66.11 ± 26.84	89.95 ± 12.21	116.76 ± 10.07	25.80 ± 18.33	32.68 ± 2.90
CAN	2937	59.37 ± 12.90	78.59 ± 10.52	46.18 ± 15.89	29.16 ± 25.62	**221.98 ± 20.10**	214.77 ± 28.51	26.83 ± 3.09	47.84 ± 2.20
	2938	47.02 ± 18.76	**85.19 ± 28.12**	8.63 ± 13.13	**74.60 ± 30.18**	144.69 ± 40.82	**245.57 ± 11.87**	39.50 ± 2.17	**105.27 ± 17.89**
GUI	3124	**173.42 ± 22.01**	66.97 ± 5.57	101.54 ± 2.18	54.66 ± 12.72	49.44 ± 27.68	56.12 ± 30.04	68.36 ± 31.53	70.16 ± 58.35
	3125	88.77 ± 17.84	54.17 ± 14.57	**102.75 ± 5.70**	71.72 ± 12.88	47.75 ± 4.38	17.02 ± 3.53	32.76 ± 15.96	57.71 ± 20.32
	Mean	67.75	52.99	42.86	47.02	98.76	98.11	43.87	56.35
	Variation (%)	-21.79		+9.71		-0.66		+28.45	
					Total carbon, % DW				
MAD	1036	**40.89 ± 0.17**	**41.15 ± 0.00**	40.72 ± 0.20	**41.40 ± 0.03**	41.44 ± 0.18	41.28 ± 0.00	40.72 ± 0.35	40.15 ± 0.04
	1038	40.51 ± 0.22	40.59 ± 0.18	40.34 ± 0.05	40.33 ± 0.19	40.02 ± 0.76	40.63 ± 0.25	40.43 ± 0.14	40.87 ± 0.19
	2927	40.38 ± 0.42	40.80 ± 0.31	40.57 ± 0.30	40.84 ± 0.17	41.49 ± 0.15	41.15 ± 0.05	40.69 ± 0.23	40.10 ± 0.49
	3126	40.13 ± 0.25	40.31 ± 0.11	40.63 ± 0.18	40.73 ± 0.18	41.07 ± 0.13	41.32 ± 0.27	40.41 ± 0.12	40.73 ± 0.12
CAN	2937	40.29 ± 0.20	40.39 ± 0.00	39.93 ± 0.06	40.51 ± 0.17	**41.98 ± 0.16**	42.23 ± 0.00	40.63 ± 0.07	41.09 ± 0.63
	2938	39.91 ± 0.28	40.06 ± 0.01	**40.80 ± 0.32**	41.12 ± 0.27	41.27 ± 0.20	41.94 ± 0.70	40.76 ± 0.44	40.28 ± 0.32
GUI	3124	40.34 ± 0.26	40.12 ± 0.08	40.55 ± 0.23	40.69 ± 0.09	41.53 ± 1.10	41.44 ± 0.38	**41.83 ± 0.41**	**41.80 ± 0.16**
	3125	40.24 ± 0.27	39.94 ± 0.38	40.41 ± 0.16	41.06 ± 0.11	41.39 ± 0.82	**42.34 ± 0.29**	40.98 ± 0.28	40.98 ± 0.40
	Mean	40.34	40.42	40.49	40.83	41.27	41.54	40.81	40.75
	Variation (%)	+0.20		+0.84		+0.65		-0.15	

Table S3 (continued).

		$\delta^{13}C$, ‰ DW							
MAD	1036	-26.77 ± 0.62	-24.19 ± 0.00	-27.60 ± 0.60	-27.93 ± 0.07	-27.89 ± 0.40	-25.22 ± 0.00	-29.14 ± 1.12	-25.89 ± 0.02
	1038	-25.66 ± 0.38	-25.18 ± 0.87	**-26.19 ± 0.19**	-26.26 ± 0.61	-27.29 ± 0.31	-26.81 ± 0.91	-27.48 ± 0.40	-25.54 ± 0.13
	2927	-25.42 ± 0.05	-24.37 ± 0.34	-27.56 ± 0.31	-26.33 ± 0.25	-27.37 ± 0.26	-25.72 ± 0.34	-26.56 ± 0.94	-26.59 ± 0.64
	3126	**-24.63 ± 0.28**	**-22.51 ± 0.17**	-26.41 ± 0.41	**-26.01 ± 1.03**	**-26.51 ± 0.25**	**-23.63 ± 0.47**	-27.05 ± 0.23	-24.87 ± 0.61
CAN	2937	-25.33 ± 0.49	-24.05 ± 0.00	-27.82 ± 0.60	-26.89 ± 0.51	-27.48 ± 0.54	-26.12 ± 0.00	-28.44 ± 0.53	-27.63 ± 0.46
	2938	-25.55 ± 0.15	-23.43 ± 0.02	-26.41 ± 0.44	-28.97 ± 0.32	-27.21 ± 0.21	-25.79 ± 1.23	-28.77 ± 0.66	-24.83 ± 0.24
GUI	3124	-26.14 ± 0.18	-25.78 ± 0.27	-26.54 ± 0.40	-27.05 ± 0.74	-27.65 ± 0.43	-27.73 ± 0.35	-26.59 ± 0.15	-27.15 ± 0.90
	3125	-25.59 ± 0.37	-25.19 ± 0.30	-27.01 ± 0.74	-26.85 ± 0.64	-27.22 ± 0.26	-26.40 ± 0.34	**-24.89 ± 0.10**	**-24.60 ± 0.40**
	Mean	-25.64	-24.34	-26.94	-27.03	-27.33	-25.93	-27.37	-25.89
	Variation (%)	+5.07 **		-0.33		+5.12 **		+5.41 **	
		$\Delta^{13}C$, ‰ DW							
MAD	1036	**19.29 ± 0.65**	16.59 ± 0.00	20.15 ± 0.63	20.50 ± 0.07	**20.47 ± 0.42**	17.67 ± 0.00	**21.77 ± 1.18**	18.36 ± 0.02
	1038	18.12 ± 0.40	17.62 ± 0.91	18.68 ± 0.20	18.75 ± 0.63	19.83 ± 0.32	19.33 ± 0.95	20.03 ± 0.42	18.00 ± 0.14
	2927	17.88 ± 0.05	16.78 ± 0.05	20.11 ± 0.33	18.83 ± 0.26	19.92 ± 0.27	18.19 ± 0.36	19.06 ± 0.98	19.10 ± 0.67
	3126	17.06 ± 0.29	14.85 ± 0.17	18.91 ± 0.43	18.49 ± 1.08	19.02 ± 0.26	16.00 ± 0.49	19.58 ± 0.24	17.31 ± 0.64
CAN	2937	17.78 ± 0.51	16.44 ± 0.00	**20.39 ± 0.63**	19.41 ± 0.53	20.03 ± 0.56	18.60 ± 0.00	21.04 ± 0.55	**20.18 ± 0.48**
	2938	18.01 ± 0.15	15.80 ± 0.02	18.91 ± 0.47	**21.58 ± 0.33**	19.74 ± 0.22	17.52 ± 0.07	21.38 ± 0.69	17.26 ± 0.25
GUI	3124	18.63 ± 0.19	**18.25 ± 0.28**	19.04 ± 0.42	19.58 ± 0.77	20.21 ± 0.46	**20.29 ± 0.37**	19.10 ± 0.16	19.68 ± 0.94
	3125	18.05 ± 0.38	17.63 ± 0.31	19.53 ± 0.78	19.36 ± 0.67	19.76 ± 0.27	18.90 ± 0.36	17.32 ± 0.10	17.01 ± 0.47
	Mean	18.10	16.74	19.46	19.56	19.87	18.31	19.91	18.36
	Variation (%)	-7.51 **		+0.51		-7.85 **		-7.79 **	
		$\delta^{15}N$, ‰ DW							
MAD	1036	4.68 ± 0.41	2.96 ± 0.00	4.41 ± 0.84	4.87 ± 0.14	4.70 ± 0.11	3.63 ± 0.00	3.24 ± 0.48	3.29 ± 0.02
	1038	6.00 ± 0.57	3.67 ± 0.20	4.01 ± 0.48	3.67 ± 0.27	**6.17 ± 0.03**	3.10 ± 0.54	**5.27 ± 0.13**	2.64 ± 0.50
	2927	5.86 ± 1.09	4.08 ± 0.18	4.03 ± 0.33	4.37 ± 0.34	5.30 ± 0.96	3.37 ± 0.25	4.04 ± 0.28	1.55 ± 0.48
	3126	4.90 ± 0.84	3.32 ± 0.53	3.95 ± 0.43	5.08 ± 1.51	4.96 ± 0.80	2.97 ± 0.32	3.91 ± 0.04	1.67 ± 0.46
CAN	2937	3.96 ± 0.46	3.13 ± 0.00	4.75 ± 0.15	3.67 ± 0.81	4.20 ± 0.43	2.53 ± 0.00	4.27 ± 0.18	0.95 ± 0.71
	2938	4.79 ± 0.68	3.61 ± 0.73	**5.12 ± 0.29**	**7.38 ± 0.52**	5.46 ± 0.38	3.98 ± 1.45	4.17 ± 0.44	3.16 ± 0.25
GUI	3124	5.31 ± 1.30	**4.36 ± 0.02**	3.83 ± 0.18	4.93 ± 0.49	5.37 ± 0.83	**4.27 ± 0.29**	5.11 ± 0.44	3.76 ± 0.49
	3125	**6.37 ± 0.92**	4.06 ± 0.23	4.05 ± 0.93	3.93 ± 0.28	5.81 ± 1.37	3.83 ± 0.44	4.79 ± 0.46	**3.94 ± 0.42**
	Mean	5.23	3.65	4.27	4.74	5.25	3.46	4.35	2.62
	Variation (%)	-30.21 **		+11.01		-34.10 **		-39.77 **	

Data are expressed in dry weight basis (DW) and represents the mean ± SD of three independent lines replications per accession.
Variation is the difference between control and drought per constituent.
*,** Significant differences between control and drought conditions (One-way ANOVA, *$p \leq 0.05$; **$p \leq 0.01$).
Bold signalizes the maximum value. Underline signalizes the minimum value.
CAN, Canary Islands; MAD, Madeira Island; GUI, Guinea-Bissau.

Table S4. Pearson correlations of sweet potato tubers and shoots, from the 1st agronomic trial.

Origin	Constituents	Pt-tuber	N-tuber	St-tuber	M-tuber	CaOx-tuber	δ^{13}C-tuber	Δ^{13}C-tuber	δ^{15}N-tuber	TC-tuber	Pt-shoot	N-shoot	St-shoot	M-shoot	CaOx-shoot	δ^{13}C-shoot	Δ^{13}C-shoot	δ^{15}N-shoot
MADEIRA ISLAND	N-tuber	**0.99****	-															
	St-tuber	-0.39	-0.38	-														
	M-tuber	0.31	0.31	**-0.76****	-													
	CaOx-tuber	-0.08	-0.05	0.39	**-0.48***	-												
	δ^{13}C-tuber	0.18	0.19	-0.32	-0.10	0.32	-											
	Δ^{13}C-tuber	-0.18	-0.19	0.32	0.10	-0.32	**-1.00****	-										
	δ^{15}N-tuber	-0.05	-0.06	0.15	0.16	0.18	**-0.54****	**0.54****	-									
	TC-tuber	0.31	0.31	-0.23	0.22	**-0.78****	-0.17	0.17	**-0.47***	-								
	Pt-shoot	0.35	0.35	0.35	-0.28	**0.57****	0.06	-0.06	0.33	**-0.47***	-							
	N-shoot	0.34	0.34	0.34	-0.27	**0.58****	0.04	-0.04	0.35	**-0.49***	**1.00****	-						
	St-shoot	0.20	0.19	**-0.48***	0.34	**-0.56****	0.35	-0.35	**-0.76****	**0.63****	**-0.47***	**-0.50***	-					
	M-shoot	0.10	0.08	**0.58****	-0.35	**0.65****	-0.10	0.10	**0.54****	**-0.60****	**0.82****	**0.82****	**-0.69****	-				
	CaOx-shoot	0.05	0.09	0.21	-0.27	0.10	-0.09	0.09	-0.16	0.00	0.32	0.32	0.02	0.05	-			
	δ^{13}C-shoot	0.21	0.22	-0.38	-0.05	0.20	**0.94****	**-0.94****	**-0.62****	-0.05	0.01	-0.01	**0.47***	-0.22	0.07	-		
	Δ^{13}C-shoot	-0.21	-0.22	0.38	0.05	-0.20	**-0.94****	**0.94****	**0.62****	0.05	-0.01	0.01	**-0.47***	0.22	-0.07	**-1.00****	-	
	δ^{15}N-shoot	0.20	0.19	0.26	0.12	0.18	**-0.57****	**0.57****	**0.90****	-0.31	**0.53****	**0.54****	**-0.68****	**0.63****	-0.02	**-0.64****	**0.64****	-
	TC-shoot	0.17	0.18	**-0.59****	0.34	-0.12	0.15	-0.15	-0.21	0.04	-0.06	-0.05	0.26	**-0.43***	0.40	0.26	-0.26	-0.27
CANARY ISLANDS	N-tuber	**0.99****	-															
	St-tuber	0.48	0.50	-														
	M-tuber	0.14	0.11	-0.29	-													
	CaOx-tuber	-0.24	-0.23	-0.24	-0.12	-												
	δ^{13}C-tuber	**-0.63***	**-0.65***	-0.24	-0.10	**0.66***	-											
	Δ^{13}C-tuber	**0.63***	**0.64***	0.24	0.11	**-0.66***	**-1.00****	-										
	δ^{15}N-tuber	0.36	0.34	-0.13	0.48	-0.40	**-0.66***	**0.66***	-									
	TC-tuber	0.04	0.07	0.18	**-0.59***	0.41	0.25	-0.25	**-0.64***	-								
	Pt-shoot	0.35	0.33	-0.03	0.57	**-0.64***	**-0.79****	**0.79****	**0.82****	**-0.66***	-							
	N-shoot	0.39	0.37	-0.04	**0.59***	**-0.65***	**-0.79****	**0.79****	**0.85****	**-0.59***	**0.98****	-						
	St-shoot	-0.37	-0.35	-0.04	**-0.62***	0.45	**0.58***	**-0.59***	**-0.78****	**0.64***	**-0.88****	**-0.88****	-					
	M-shoot	0.40	0.39	-0.14	**0.62***	-0.47	**-0.78****	**0.78****	**0.87****	**-0.63***	**0.94****	**0.94****	**-0.83****	-				
	CaOx-shoot	0.05	0.00	0.20	-0.21	0.24	**0.58***	**-0.58***	-0.50	0.12	**-0.58***	**-0.58***	0.34	**-0.65***	-			
	δ^{13}C-shoot	**-0.59***	**-0.61***	-0.35	0.01	0.50	**0.78****	**-0.78****	-0.48	0.11	-0.57	-0.53	0.50	-0.48	0.38	-		
	Δ^{13}C-shoot	**0.64***	**0.67***	0.38	-0.15	**-0.61***	**-0.95****	**0.95****	0.51	-0.02	**0.61***	**0.62***	-0.45	**0.58***	-0.50	**-0.810****	-	
	δ^{15}N-shoot	0.30	0.28	-0.15	**0.65***	-0.35	-0.57	0.58	**0.78****	**-0.65***	**0.85****	**0.80****	**-0.82****	**0.82****	-0.45	**-0.64***	0.38	-
	TC-shoot	-0.02	-0.02	0.37	-0.50	0.16	0.44	-0.44	**-0.67***	0.41	**-0.68***	**-0.64***	**0.62***	**-0.69***	**0.68***	0.56	-0.29	**-0.88****
GUINEA-BISSAU	N-tuber	**0.99****	-															
	St-tuber	-0.29	-0.34	-														
	M-tuber	**0.87****	**0.88****	-0.34	-													
	CaOx-tuber	-0.45	-0.42	-0.42	-0.54	-												
	δ^{13}C-tuber	**0.62***	**0.61***	0.02	**0.68***	**-0.68***	-											
	Δ^{13}C-tuber	**-0.62***	**-0.61***	-0.02	**-0.68***	**0.68***	**-1.00****	-										
	δ^{15}N-tuber	0.46	0.49	-0.30	0.26	0.32	-0.28	0.28	-									
	TC-tuber	-0.26	-0.25	0.03	-0.45	0.40	-0.36	0.36	0.05	-								
	Pt-shoot	-0.51	-0.48	-0.05	**-0.64***	**0.81****	**-0.63***	**0.63***	0.22	0.29	-							
	N-shoot	-0.49	-0.46	-0.04	**-0.63***	**0.80****	**-0.62***	**0.62***	0.23	0.29	**1.00****	-						
	St-shoot	0.54	0.52	-0.24	0.47	-0.42	0.46	-0.46	0.10	-0.34	**-0.64***	**-0.65***	-					
	M-shoot	-0.39	-0.36	0.31	-0.49	0.49	-0.45	0.44	0.23	0.29	**0.86****	**0.87****	**-0.73****	-				
	CaOx-shoot	-0.15	-0.15	0.25	-0.18	0.19	-0.52	0.51	0.40	0.16	0.24	0.25	-0.35	0.40	-			
	δ^{13}C-shoot	**0.69***	**0.68***	-0.48	**0.69***	-0.52	**0.67***	**-0.66***	-0.07	-0.35	**-0.69***	**-0.68***	**0.63***	**-0.78****	-0.55	-		
	Δ^{13}C-shoot	**-0.69***	**-0.68***	0.48	**-0.69***	0.52	**-0.67***	**0.66***	0.07	0.35	**0.68***	**0.68***	**-0.63***	**0.78****	0.54	**-1.00****	-	
	δ^{15}N-shoot	0.19	0.23	-0.29	0.17	0.33	-0.17	0.17	**0.58***	0.29	0.33	0.34	-0.06	0.41	0.44	-0.20	0.20	-
	TC-shoot	-0.01	-0.06	-0.18	0.13	-0.28	0.16	-0.16	-0.52	0.05	-0.58	**-0.59***	0.43	**-0.74****	-0.36	0.44	-0.44	-0.28
OVERALL	N-tuber	**0.99****	-															
	St-tuber	-0.26	-0.28	-														
	M-tuber	**0.36***	**0.35***	**-0.51****	-													
	CaOx-tuber	**-0.40****	**-0.38****	-0.04	-0.21	-												
	δ^{13}C-tuber	0.12	0.14	-0.15	-0.08	-0.07	-											
	Δ^{13}C-tuber	-0.12	-0.14	0.15	0.08	0.07	**-1.00****	-										
	δ^{15}N-tuber	0.11	0.10	-0.10	**0.31***	0.21	**-0.56****	**0.56****	-									
	TC-tuber	**0.34***	**0.36***	-0.17	-0.16	**-0.40****	-0.01	0.01	**-0.29***	-								
	Pt-shoot	0.23	0.22	0.01	-0.10	0.24	-0.28	0.28	**0.47****	-0.11	-							
	N-shoot	0.24	0.23	0.01	-0.09	0.23	-0.28	0.28	**0.48****	-0.11	**1.00****	-						
	St-shoot	-0.15	-0.13	-0.01	-0.07	0.06	**0.39****	**-0.39****	**-0.53****	0.05	**-0.71****	**-0.72****	-					
	M-shoot	0.16	0.15	0.10	-0.04	0.16	**-0.36***	**0.36***	**0.57****	-0.10	**0.89****	**0.90****	**-0.79****	-				
	CaOx-shoot	-0.13	-0.11	**0.34***	-0.26	0.05	0.26	-0.26	**-0.34***	-0.17	**-0.39****	**-0.40****	**0.53****	**-0.56****	-			
	δ^{13}C-shoot	0.24	0.26	**-0.33***	0.02	-0.16	**0.88****	**-0.88****	**-0.51****	0.11	-0.16	-0.17	0.28	-0.26	0.09	-		
	Δ^{13}C-shoot	-0.20	-0.22	**0.32***	-0.03	0.14	**-0.93****	**0.92****	**0.53****	-0.07	0.21	0.22	**-0.31***	**0.32***	-0.16	**-0.97****	-	
	δ^{15}N-shoot	0.16	0.16	-0.01	**0.29***	0.19	**-0.55****	**0.55****	**0.80****	-0.24	**0.56****	**0.56****	**-0.55****	**0.59****	-0.20	**-0.57****	**0.53****	-
	TC-shoot	-0.15	-0.16	-0.14	0.13	0.17	0.11	-0.11	**-0.33***	-0.23	**-0.41****	**-0.41****	**0.51****	**-0.60****	**0.39****	0.12	-0.11	**-0.32***

Pt, protein (g/100g, DW); N, nitrogen (g/100g, DW); St, starch (g/100g, DW); M, total minerals (g/100g, DW); CaOx, calcium oxalate (g/100g, DW); δ^{13}C, carbon isotopic composition (‰, DW); Δ^{13}C, carbon isotope discrimination (‰, DW); δ^{15}N, nitrogen isotopic composition (‰, DW); TC, total carbon (%, DW).

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table S5. Pearson correlations of taro corms and shoots, from the 2nd agronomic trial.

Origin	Constituents	Pt-corm	N-corm	St-corm	Fb-corm	M-corm	CaOx-corm	δ13C-corm	Δ13C-corm	δ15N-corm	Pt-shoot	N-shoot	St-shoot	Fb-shoot	M-shoot	CaOx-shoot	δ13C-shoot	Δ13C-shoot
CANARY ISLANDS	N-corm	**1.00****	-															
	St-corm	**-0.64***	**-0.63***	-														
	Fb-corm	**0.72****	**0.71***	**-0.97****	-													
	M-corm	**0.79****	**0.78****	**-0.93****	**0.97****	-												
	CaOx-corm	**0.83****	**0.82****	**-0.91****	**0.95****	**0.95****	-											
	δ13C-corm	**0.68***	**0.69***	-0.19	0.26	0.40	0.39	-										
	Δ13C-corm	**-0.79****	**-0.79****	0.37	-0.43	**-0.59***	-0.56	**-0.97****	-									
	δ15N-corm	0.45	0.43	**-0.88****	**0.81****	**0.80****	**0.79****	-0.01	-0.20	-								
	Pt-shoot	0.12	0.11	-0.39	0.41	0.35	0.42	-0.42	0.26	0.53	-							
	N-shoot	0.15	0.13	-0.42	0.43	0.37	0.44	-0.41	0.26	0.52	**1.00****	-						
	St-shoot	**-0.63***	**-0.64***	0.14	-0.15	-0.28	-0.29	**-0.80****	**0.79****	0.01	**0.59***	**0.58***	-					
	Fb-shoot	0.44	0.45	-0.10	0.09	0.16	0.17	**0.77****	**-0.69***	-0.08	**-0.76****	**-0.73****	**-0.89****	-				
	M-shoot	**0.87****	**0.87****	**-0.75****	**0.82****	**0.90****	**0.84****	**0.60***	**-0.75****	0.55	0.06	0.07	-0.57	0.37	-			
	CaOx-shoot	0.08	0.08	-0.13	0.11	0.02	0.02	0.03	0.06	-0.09	-0.24	-0.16	-0.02	0.33	-0.09	-		
	δ13C-shoot	0.56	0.57	-0.13	0.16	0.20	0.24	0.52	-0.47	-0.04	-0.38	-0.32	**-0.66***	**0.72****	0.30	**0.67***	-	
	Δ13C-shoot	-0.49	-0.50	0.11	-0.13	-0.15	-0.19	-0.47	0.41	0.09	0.42	0.35	**0.62***	**-0.71****	-0.24	**-0.73****	**-0.99****	-
	δ15N-shoot	0.33	0.34	-0.21	0.17	0.15	0.23	0.49	-0.42	0.09	-0.48	-0.47	**-0.64***	**0.79****	0.23	0.20	0.49	-0.47
MADEIRA ISLAND	N-corm	**1.00****	-															
	St-corm	**-0.90****	**-0.90****	-														
	Fb-corm	**0.88****	**0.88****	**-0.95****	-													
	M-corm	**0.91****	**0.90****	**-0.93****	**0.94****	-												
	CaOx-corm	0.46	0.46	-0.20	0.21	0.47	-											
	δ13C-corm	**-0.63***	**-0.63***	0.41	-0.51	-0.58	**-0.76***	-										
	Δ13C-corm	0.53	0.53	-0.27	0.38	0.44	**0.74***	**-0.98****	-									
	δ15N-corm	**-0.86****	**-0.86****	**0.90****	**-0.79****	**-0.76****	-0.04	0.23	-0.13	-								
	Pt-shoot	-0.03	-0.03	0.12	0.01	-0.09	0.15	-0.16	0.21	0.22	-							
	N-shoot	0.01	0.01	0.08	0.05	-0.05	0.15	-0.17	0.21	0.18	**1.00****	-						
	St-shoot	**-0.65***	**-0.66***	**.074****	**-0.61***	**-0.59***	0.14	0.16	-0.08	**0.87****	0.57	0.54	-					
	Fb-shoot	**0.62***	**0.62***	**-0.72****	**0.61***	**0.60***	0.04	-0.20	0.07	**-0.72****	**-0.62***	**-0.58***	**-0.82****	-				
	M-shoot	0.48	0.48	-0.57	**0.59***	**0.58***	0.12	-0.08	-0.03	-0.55	-0.48	-0.45	-0.52	0.55	-			
	CaOx-shoot	-0.16	-0.17	0.13	-0.13	-0.03	0.33	0.21	-0.28	0.27	-0.20	-0.20	0.35	0.16	0.25	-		
	δ13C-shoot	**0.62***	**0.63***	**-0.72****	0.55	**0.60***	-0.21	0.00	-0.10	**-0.85****	**-0.62***	**-0.59***	**-0.93****	**0.79****	0.53	-0.20	-	
	Δ13C-shoot	**-0.61***	**-0.62***	**0.71****	-0.54	**-0.58***	0.17	0.02	0.08	**0.84****	**0.67***	**0.64***	**0.95****	**-0.83****	-0.53	0.17	**-0.99****	-
	δ15N-shoot	-0.26	-0.26	0.37	-0.31	-0.29	0.32	-0.19	0.22	0.55	0.25	0.24	0.50	-0.13	**-0.60***	0.37	-0.55	0.50
SOUTH PACIFIC COMMUNITY	N-corm	**1.00****	-															
	St-corm	**-0.73****	**-0.72****	-														
	Fb-corm	**0.75****	**0.75****	**-0.92****	-													
	M-corm	**0.83****	**0.83****	**-0.73****	**0.90****	-												
	CaOx-corm	0.46	0.46	**-0.79****	**0.76****	**0.64****	-											
	δ13C-corm	-0.47*	**-0.47***	0.32	**-0.59***	**-0.69****	-0.15	-										
	Δ13C-corm	0.28	0.28	-0.13	0.43	**0.54***	0.05	**-0.97****	-									
	δ15N-corm	0.33	0.33	-0.20	0.24	0.36	0.44	-0.18	0.14	-								
	Pt-shoot	0.16	0.16	**-0.48***	0.24	0.01	0.32	0.24	-0.36	-0.15	-							
	N-shoot	0.20	0.19	**-0.52***	0.28	0.05	0.35	0.21	-0.34	-0.12	**1.00****	-						
	St-shoot	0.06	0.06	-0.30	0.09	0.02	0.39	0.32	-0.38	0.45	**0.60***	**0.61***	-					
	Fb-shoot	0.10	0.11	0.16	0.06	0.20	-0.11	-0.26	0.30	0.10	**-0.87****	**-0.85****	**-0.70****	-				
	M-shoot	0.33	0.34	-0.11	0.15	0.25	-0.01	-0.14	0.06	**-0.50***	-0.01	-0.01	**-0.54***	0.28	-			
	CaOx-shoot	-0.16	-0.17	-0.36	0.08	-0.26	0.31	**0.52***	**-0.59***	0.15	**0.58***	**0.58***	0.51	-0.42	-0.34	-		
	δ13C-shoot	-0.29	-0.29	0.25	-0.25	-0.32	-0.40	0.20	-0.14	**-0.67****	-0.12	-0.14	-0.45	0.13	0.44	-0.20	-	
	Δ13C-shoot	0.28	0.28	-0.19	0.25	0.35	0.37	-0.26	0.21	**0.63****	0.03	0.05	0.33	-0.06	-0.41	0.07	**-0.99****	-
	δ15N-shoot	0.40	0.41	0.03	0.19	**0.50***	0.17	**-0.50***	**0.50***	**0.59****	**-0.62****	**-0.59****	-0.17	**0.53***	-0.14	**-0.56***	**-0.53***	**0.59***
OVERALL	N-corm	**1.00****	-															
	St-corm	**-0.70****	**-0.70****	-														
	Fb-corm	**0.67****	**0.67****	**-0.93****	-													
	M-corm	**0.69****	**0.69****	**-0.72****	**0.82****	-												
	CaOx-corm	-0.01	-0.01	**-0.38***	**0.45****	**0.50****	-											
	δ13C-corm	**-0.48****	**-0.48****	**0.38***	**-0.44****	-0.14	0.25	-										
	Δ13C-corm	**0.41****	**0.41****	-0.28	**0.34***	0.04	**-0.33***	**-0.99****	-									
	δ15N-corm	0.08	0.08	0.09	0.02	0.24	0.16	0.17	-0.16	-								
	Pt-shoot	0.23	0.22	-0.22	0.14	0.16	-0.06	0.11	-0.12	0.27	-							
	N-shoot	0.25	0.24	-0.24	0.16	0.20	-0.03	0.13	-0.15	0.28	**1.00****	-						
	St-shoot	-0.15	-0.16	0.05	-0.09	-0.22	0.01	-0.04	0.05	**0.42****	**0.48****	**0.47****	-					
	Fb-shoot	0.18	0.19	-0.17	0.21	0.22	0.11	-0.11	0.08	-0.27	**-0.76****	**-0.74****	**-0.73****	-				
	M-shoot	**0.44****	**0.44****	**-0.43****	**0.49****	0.28	0.04	**-0.46****	**0.41****	**-0.40****	-0.16	-0.17	**-0.35***	**0.35***	-			
	CaOx-shoot	**-0.32***	**-0.32***	0.00	-0.08	-0.06	**0.38***	**0.54****	**-0.57****	0.10	0.04	0.08	0.20	0.01	**-0.36***	-		
	δ13C-shoot	-0.30	-0.30	0.15	-0.17	0.08	**0.40***	**0.66****	**-0.69****	-0.23	-0.21	-0.17	**-0.45****	0.29	-0.20	**0.52****	-	
	Δ13C-shoot	0.28	0.28	-0.13	0.17	-0.07	**-0.38***	**-0.65****	**0.68****	0.23	0.19	0.15	**0.44****	-0.28	0.20	**-0.56****	**-0.99****	-
	δ15N-shoot	0.30	0.30	-0.01	0.16	0.23	0.04	**-0.39***	**0.39***	**0.37***	**-0.42****	**-0.41****	-0.03	**0.40****	0.04	-0.27	**-0.35***	**0.37***

Pt, protein (g/100g, DW); N, nitrogen (g/100g, DW); St, starch (g/100g, DW); Fb, crude fiber (g/100g, DW); M, total minerals (g/100g, DW); CaOx, calcium oxalate (g/100g, DW); δ13C, carbon isotopic composition (‰, DW); Δ13C, carbon isotope discrimination (‰, DW); δ15N, nitrogen isotopic composition (‰, DW).

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table S6. Pearson correlations of sweet potato tubers and shoots, from the 2nd agronomic trial.

Origin	Constituents	Pt-tuber	N-tuber	St-tuber	M-tuber	CaOx-tuber	δ^{13}C-tuber	Δ^{13}C-tuber	δ^{15}N-tuber	TC-tuber	Pt-shoot	N-shoot	St-shoot	M-shoot	CaOx-shoot	δ^{13}C-shoot	Δ^{13}C-shoot	δ^{15}N-shoot
MADEIRA ISLAND	N-tuber	**1.00****	-															
	St-tuber	0.10	0.10	-														
	M-tuber	0.16	0.15	-0.21	-													
	CaOx-tuber	-0.05	-0.05	**-0.72****	-0.18	-												
	δ^{13}C-tuber	-0.33	-0.33	**-0.44***	0.07	0.35	-											
	Δ^{13}C-tuber	0.33	0.33	**0.44***	-0.07	-0.35	**-1.00****	-										
	δ^{15}N-tuber	**0.55****	**0.56****	-0.21	-0.13	0.38	-.410*	.410*	-									
	TC-tuber	**0.79****	**0.78****	0.27	-0.09	-0.26	**-0.59****	**0.59****	0.40	-								
	Pt-shoot	0.11	0.12	0.25	-0.11	0.01	-0.07	0.07	0.28	-0.07	-							
	N-shoot	0.12	0.12	0.25	-0.11	0.01	-0.07	0.07	0.28	-0.07	**1.00****	-						
	St-shoot	-0.18	-0.18	0.14	0.03	-0.26	-0.37	0.37	-0.03	-0.08	-0.07	-0.07	-					
	M-shoot	-0.23	-0.23	0.40	-0.16	-0.20	0.11	-0.11	-0.06	-0.32	**0.83****	**0.83****	-0.15	-				
	CaOx-shoot	-0.19	-0.19	-0.23	0.27	0.06	-0.50	0.50	-0.14	-0.02	-0.22	-0.22	0.53	-0.36	-			
	δ^{13}C-shoot	0.29	0.29	**-0.49***	0.04	**0.46***	0.20	-0.20	0.31	0.10	0.15	0.15	0.25	-0.30	0.20	-		
	Δ^{13}C-shoot	-0.29	-0.30	**0.49***	-0.04	**-0.46***	-0.20	0.20	-0.31	-0.10	-0.15	-0.15	-0.25	0.30	-0.20	**-1.00****	-	
	δ^{15}N-shoot	-0.19	-0.19	**0.48***	0.27	**-0.44***	-0.25	0.25	-0.14	-0.27	**0.55****	**0.55****	0.25	**0.67****	0.26	-0.40	0.40	-
	TC-shoot	**-0.49***	**-0.49***	-0.01	-0.16	0.19	-0.05	0.05	-0.08	-0.40	0.13	0.12	0.21	0.08	0.10	0.02	-0.02	0.14
CANARY ISLANDS	N-tuber	**1.00****	-															
	St-tuber	**-0.61***	**-0.61***	-														
	M-tuber	0.49	0.50	-0.25	-													
	CaOx-tuber	**0.79****	**0.79****	**-0.64***	0.51	-												
	δ^{13}C-tuber	**-0.74****	**-0.74****	**0.71****	-0.09	**-0.69***	-											
	Δ^{13}C-tuber	**0.74****	**0.74****	**-0.71****	0.09	**0.69***	**-1.00****	-										
	δ^{15}N-tuber	**0.62***	**0.63***	**-0.73****	0.17	0.44	**-0.73****	**0.73****	-									
	TC-tuber	0.39	0.39	-0.38	-0.11	-0.04	-0.19	0.19	0.48	-								
	Pt-shoot	0.44	0.44	**-0.61***	0.25	0.51	-0.57	0.57	**0.78****	0.18	-							
	N-shoot	0.44	0.44	**-0.61***	0.25	0.50	-0.57	0.57	**0.78****	0.18	**1.00****	-						
	St-shoot	0.19	0.19	0.06	-0.22	0.10	0.02	-0.02	-0.35	0.01	**-0.61***	**-0.61***	-					
	M-shoot	-0.03	-0.03	-0.21	0.11	0.07	-0.21	0.21	0.51	-0.11	**0.83****	**0.83****	**-0.82****	-				
	CaOx-shoot	**0.80***	**0.80***	**-0.79***	0.25	0.67	**-0.73***	**0.73***	**0.96****	**0.71***	0.57	0.57	0.16	-0.23	-			
	δ^{13}C-shoot	**0.89****	**0.89****	**-0.79****	0.22	**0.66***	**-0.77****	**0.77****	**0.74****	0.53	0.45	0.45	0.27	-0.04	**0.97****	-		
	Δ^{13}C-shoot	**-0.89****	**-0.89****	**0.79****	-0.22	**-0.66***	**0.77****	**-0.77****	**-0.74****	-0.53	-0.45	-0.45	-0.27	0.04	**-0.97****	**-1.00****	-	
	δ^{15}N-shoot	-0.12	-0.12	-0.13	0.06	0.09	-0.15	0.15	0.39	-0.20	**0.79****	**0.79****	**-0.81****	**0.96****	-0.41	-0.16	0.16	-
	TC-shoot	-0.51	-0.51	0.38	-0.40	-0.31	0.39	-0.39	**-0.65***	-0.07	**-0.66***	**-0.66***	0.25	**-0.59***	-0.61	-0.51	0.51	-0.40
GUINEA-BISSAU	N-tuber	**1.00****	-															
	St-tuber	-0.30	-0.31	-														
	M-tuber	**0.68***	**0.69***	-0.43	-													
	CaOx-tuber	-0.44	-0.44	-0.32	0.00	-												
	δ^{13}C-tuber	-0.23	-0.23	-0.28	-0.52	-0.14	-											
	Δ^{13}C-tuber	0.32	0.32	0.21	0.52	0.13	**-0.98****	-										
	δ^{15}N-tuber	0.47	0.46	0.30	0.25	-0.39	-0.35	0.45	-									
	TC-tuber	0.09	0.09	0.37	0.49	0.08	**-0.92****	**0.83****	0.13	-								
	Pt-shoot	-0.25	-0.24	-0.44	-0.16	0.44	**0.64***	**-0.61***	-0.27	**-0.65***	-							
	N-shoot	-0.24	-0.24	-0.45	-0.15	0.44	**0.63***	**-0.61***	-0.27	**-0.64***	**1.00****	-						
	St-shoot	0.28	0.28	-0.41	0.45	0.02	-0.17	0.19	0.10	0.15	0.16	0.15	-					
	M-shoot	-0.12	-0.11	-0.50	-0.14	0.41	**0.64***	**-0.62***	-0.41	**-0.65***	**0.82****	**0.82****	-0.11	-				
	CaOx-shoot	-0.03	-0.04	0.14	-0.04	0.01	-0.26	0.35	0.40	0.06	0.08	0.08	0.33	-0.14	-			
	δ^{13}C-shoot	0.31	0.32	**-0.86****	0.46	0.28	0.16	-0.12	-0.29	-0.18	0.42	0.42	**0.74****	0.40	-0.01	-		
	Δ^{13}C-shoot	-0.31	-0.32	**0.86****	-0.46	-0.28	-0.16	0.12	0.29	0.18	-0.42	-0.42	**-0.74****	-0.41	0.01	**-1.00****	-	
	δ^{15}N-shoot	-0.47	-0.47	-0.16	-0.30	.634*	0.43	-0.42	-0.26	-0.45	**0.88****	**0.88****	-0.13	**0.72****	0.19	0.09	-0.09	-
	TC-shoot	-0.51	-0.52	**0.79****	**-0.59***	-0.25	0.02	-0.07	0.13	0.10	-0.18	-0.18	-0.21	-0.51	0.17	**-0.69***	**0.69***	0.01
OVERALL	N-tuber	**1.00****	-															
	St-tuber	0.01	0.00	-														
	M-tuber	**0.38****	**0.38****	-0.17	-													
	CaOx-tuber	-0.11	-0.10	**-0.61****	-0.18	-												
	δ^{13}C-tuber	**-0.42****	**-0.42****	-0.18	-0.28	0.01	-											
	Δ^{13}C-tuber	**0.46****	**0.45****	0.14	0.22	0.02	**-0.98****	-										
	δ15N-tuber	**0.54****	**0.54****	-0.19	0.09	0.14	**-0.53****	**0.59****	-									
	TC-tuber	0.26	0.26	0.23	**0.37***	-0.15	**-0.69****	**0.53****	0.17	-								
	Pt-shoot	0.26	0.26	-0.06	0.04	0.08	-0.09	0.14	**0.42****	-0.11	-							
	N-shoot	0.26	0.26	-0.06	0.04	0.08	-0.09	0.14	**0.42****	-0.11	**1.00****	-						
	St-shoot	**-0.29***	**-0.29***	-0.20	-0.13	**0.42****	0.00	0.04	-0.16	-0.12	**-0.29***	**-0.30***	-					
	M-shoot	0.10	0.10	0.21	0.10	**-0.34***	0.00	0.01	0.20	-0.08	**0.79****	**0.80****	**-0.59****	-				
	CaOx-shoot	0.11	0.11	-0.26	0.05	0.28	**-0.36***	**0.44***	**0.45***	0.07	0.13	0.13	0.28	-0.20	-			
	δ^{13}C-shoot	0.27	0.28	**-0.66****	0.09	**0.52****	0.05	-0.01	0.20	-0.07	0.23	0.23	**0.43****	-0.23	0.33	-		
	Δ^{13}C-shoot	-0.27	-0.28	**0.66****	-0.09	**-0.52****	-0.05	0.01	-0.20	0.07	-0.23	-0.23	**-0.43****	0.23	-0.33	**-1.00****	-	
	δ^{15}N-shoot	**-0.33***	**-0.33***	0.06	-0.06	0.20	0.06	-0.01	-0.01	-0.27	**0.52****	**0.52****	0.19	**0.40****	0.08	-0.08	0.08	-
	TC-shoot	**-0.58****	**-0.58****	0.06	**-0.48****	**0.35***	0.18	-0.17	-0.26	-0.15	**-0.30***	**-0.30***	**0.51****	**-0.52****	0.05	-0.07	0.07	0.21

Pt, protein (g/100g, DW); N, nitrogen (g/100g, DW); St, starch (g/100g, DW); M, total minerals (g/100g, DW); CaOx, calcium oxalate (g/100g, DW); δ^{13}C, carbon isotopic composition (‰, DW); Δ^{13}C, carbon isotope discrimination (‰, DW); δ^{15}N, nitrogen isotopic composition (‰, DW); TC, total carbon (%, DW).

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).