

Table S1: Antioxidant scavenging activity of individual “Tuls” lines (total 79) grown *in vitro* when compared to a trolox equivalent ($\mu\text{molTE/g}$) standard using DPPH antioxidant assay. Means from all the lines were compared with each other using Tukey’s test. Columns with same letter indicate no significant difference ($P<0.05$).

Line#	Mean		StDev
C17	1427.0	a	179.0
C26	1401.0	a	205.0
C28	1294.7	ab	138.2
C18	1284.1	ab	30.4
C19	1227.5	ab	85.8
C27	970.0	bc	664.0
C56	633.4	cd	10.5
C41	608.0	cde	438.0
C5	475.0	def	562.0
C2	412.2	defg	94.2
C50	252.0	defg	201.0
C78	246.6	defg	3.3
C10	238.8	defg	39.6
C11	226.8	defg	51.4
C32	222.7	defg	10.1
C4	209.0	efg	107.8
C37	199.5	efg	33.5
C6	194.6	efg	35.3
C25	181.8	fg	70.8
C29	175.1	fg	4.4
C20	172.0	fg	0.3
C39	169.1	fg	72.9
C33	166.2	fg	57.2
C7	164.7	fg	47.8
C21	161.1	fg	1.7
C12	161.0	fg	61.8
C15	160.2	fg	2.7
C58	142.9	fg	2.5
C3	138.4	fg	49.6
C68	137.8	fg	7.1
C38	135.8	fg	18.2
C22	135.1	fg	0.3
C8	129.4	fg	21.6
C14	129.0	fg	3.1
C63	125.0	fg	10.1
C30	123.7	fg	11.2
C79	122.7	fg	0.4
C75	121.9	fg	8.7
C1	120.8	fg	35.6
C36	119.7	fg	11.8
C57	119.3	fg	2.7
C31	113.9	fg	36.5
C42	111.8	fg	1.1
C59	111.4	fg	13.2

C35	111.0	fg	12.6
C34	111.0	fg	16.9
C13	109.6	fg	4.8
C16	109.6	fg	4.8
C76	102.7	fg	0.4
C64	102.6	fg	1.5
C74	102.2	fg	1.1
C49	96.1	fg	7.1
C52	90.9	fg	0.9
C72	87.8	fg	2.4
C51	84.0	fg	37.5
C77	83.8	fg	0.1
C24	82.7	fg	4.9
C23	82.3	fg	2.6
C9	81.7	fg	0.5
C71	78.8	fg	1.7
C67	76.8	fg	1.8
C45	74.2	fg	16.4
C66	72.1	fg	26.9
C73	71.0	fg	2.3
C44	70.0	fg	12.5
C62	69.9	fg	2.5
C40	67.9	fg	2.9
C70	66.5	fg	1.0
C69	66.4	fg	1.4
C48	65.7	fg	14.2
C55	63.5	fg	2.2
C53	52.2	fg	1.5
C65	51.1	fg	5.5
C54	50.6	g	2.3
C60	49.7	g	2.2
C47	47.7	g	18.2
C46	42.4	g	13.8
C43	37.7	g	2.3
C61	27.3	g	4.3