Supplemental Table S1. Phenotypic investigation of BC2 horticultural traits.

Number	Plant Height (cm)	Plant Spread (cm)	Leaf margin	Leaf margin Serration	Blistering	Head Height (cm)	Head Width (cm)	Head Shape	Soluble solids content
1	44	47	M	Deeply Serrated	V. Small	31.5	9	Cannonball	3.4
2	43	45	M	Deeply Serrated	S	33	12	Cannonball	2.3
3	35	40	M	Crenate	L	31	12.5	Cannonball	2.6
4	44	50	M	Crenate	V. Small	32	11	Cannonball	1.8
5	43	44	M	Crenate	V. Small	38	11	Cannonball	4
6	43	47	M	Deeply Serrated	M	35	11	Cannonball	1.9
7	44	50	M	Crenate	L	39	12	Cannonball	3.5
8	46	54	M	Crenate	S	42	11	Cannonball	2.3
9	41	45	M	Deeply Serrated	M	34	14.5	Cannonball	3.1
10	48	57	M	Deeply Serrated	V. Small	38	13	Cannonball	3.3
11	49	52	L	Crenate	M	44	12.5	Cannonball	3.4
12	38	41	M	Crenate	L	30	10.5	Cannonball	2.8
13	46	46	L	Crenate	L	41	14.5	Cannonball	2
14	45	58	M	Crenate	L	34	12	Cannonball	2.1
15	40	47	S	Deeply Serrated	L	36	13	Cannonball	2.1
16	40	51	L	Crenate	M	37	11	Cannonball	2.8
17	49	59	L	Crenate	M	43	12.5	Cannonball	2.2
18	41	46	S	Deeply Serrated	V. Small	31	11	Cannonball	4.5
19	46	49	M	Deeply Serrated	S	41	13	Cannonball	3.9
20	46	57	M	Deeply Serrated	S	41	13	Cannonball	2.6
21	41	49	S	Deeply Serrated	L	35	12	Cannonball	3.2
22	45	54	M	Deeply Serrated	S	35	13	Cannonball	3.2
23	46	56	L	Deeply Serrated	L	32	12	Cannonball	1.1
24	46	56	M	Deeply Serrated	V. Small	41	12	Cannonball	2.1
25	43	47	S	Deeply Serrated	L	38	12	Cannonball	3
26	42	47	L	Deeply Serrated	V. Small	36	11	Cannonball	2.1
27	45	59	L	Deeply Serrated	V. Small	40	13	Cannonball	2.2
28	43	46	M	Deeply Serrated	L	29	9	Cannonball	1.3
29	41	58	M	Deeply Serrated	L	38	14	Cannonball	1.5
30	45	54	M	Deeply Serrated	L	39	14	Cannonball	3.1
31	44	46	M	Deeply Serrated	L	40	12.5	Cannonball	4.8
32	37	51	M	Deeply Serrated	V. Small	36	11	Cannonball	4.6
33	40	39	L	Deeply Serrated	S	33	10	Cannonball	1.1
34	35	33	M	Deeply Serrated	M	29	10	Cannonball	3.1
35	54	59	L	Crenate	M	34	12	Cannonball	4.4
36	45	44	L	Deeply Serrated	S	32	17	Cannonball	1.5
37	41	49	M	Deeply Serrated	V. Small	38	13	Cannonball	3.5
38	43	52	S	Deeply Serrated	S	37	10	Cannonball	4.1
39	45	50	M	Deeply Serrated	L	42	12	Cannonball	3.9
40	42	40	L	Deeply Serrated	S	35	11.5	Cannonball	4.1
41	36	31	S	Deeply Serrated	M	32	11	Cannonball	3.9
42	42	47	L	Crenate	V. Small	40	13	Cannonball	2.5
43	44	42	L	Crenate	M	34	12	Cannonball	3.6
44	42	50	S	Deeply Serrated	V. Small	34	11.5	Cannonball	2.9
45	44	42	L	Deeply Serrated	L	35	14	Cannonball	3.1
46	50	48	S	Deeply Serrated	S	36	13	Cannonball	3.9
47	46	51	M	Deeply Serrated	M	41	16	Cannonball	1.6
48	48	63	L	Crenate	L	42	11	Cannonball	3.5
49	43	49	M	Deeply Serrated	S	35	12	Cannonball	3.9
50	49	56	L	Deeply Serrated	M	41.5	10	Cannonball	3.8
51	43	47	L	Deeply Serrated	S	38.5	11	Cannonball	4.2
52	41	56	M	Deeply Serrated	S	36	11	Cannonball	4
53	42	47	S	Deeply Serrated	M	37.5	12.5	Cannonball	3.9
54	40	42	M	Deeply Serrated	M	35	11	Cannonball	4.4
55	40	38	M	Deeply Serrated	S	40	10	Cannonball	3
56	46	50	L	Deeply Serrated	M	40	10.5	Cannonball	4.3
57	37	37	S	Deeply Serrated	S	32	9	Cannonball	1.6
58	42	51	M	Deeply Serrated	M	37	11.5	Cannonball	2.8
59	44	49	L	Deeply Serrated	M	38	13.5	Cannonball	3.9
60	46	50	S	Deeply Serrated	V. Small	40	13	Cannonball	1.4
61	40	34	S	Deeply Serrated	V. Small	35	10	Cannonball	3.2
62	40	48	L	Deeply Serrated	M	32	9	Cannonball	3.7
63	30	20	L	Crenate	M	30	8.5	Cannonball	3.5
64	47	48	S	Deeply Serrated	S	38	11.5	Cannonball	3
65	40	43	L	Crenate	L	38	10	Cannonball	3.2
66	42	38	L	Deeply Serrated	L	33	10.5	Cannonball	2.9
67	42	44	M	Deeply Serrated	V. Small	29	9	Cannonball	4.1
68	45	50	M	Deeply Serrated	V. Small	33	13	Cannonball	3
69	40	38	M	Deeply Serrated	S	32	12.5	Cannonball	4.1
70	47	47	M	Deeply Serrated	S	31	10.5	Cannonball	4.4
71	50	52	S	Deeply Serrated	L	37	11	Cannonball	3.9
72	52	57	M	Crenate	S	39	10	Cannonball	4.5
73	40	32	S	Deeply Serrated	V. Small	32	11	Cannonball	3.1
74	40	40	S	Deeply Serrated	S	25	9	Cannonball	4.5
75	41	41	S	Deeply Serrated	S	33.5	9	Cannonball	3
76	40	40	M	Deeply Serrated	S	32	10	Cannonball	3.2
77	49	52	M	Crenate	L	36	11	Cannonball	3.9

78	55	52	S	Deeply Serrated	M	44	11	Cannonball	3.3
79	50	46	L	Deeply Serrated	M	41	11	Cannonball	3.7
80	57	50	L	Deeply Serrated	S	40	13.5	Cannonball	4.9
81	54	47	S	Deeply Serrated	L	42	11.5	Cannonball	3.6
82	40	45	S	Crenate	M	35	10	Cannonball	2.5
83	33	37	S	Crenate	V. Small	24	10	Cannonball	1.9
84	51	52	M	Deeply Serrated	V. Small	43	13	Cannonball	2.9
85	46	50	L	Deeply Serrated	L	36	11.5	Cannonball	2.1
86	42	42	L	Deeply Serrated	M	37	11.5	Cannonball	2.3
87	50	53	S	Deeply Serrated	M	42	12	Cannonball	3.7
88	45	49	S	Crenate	S	34.5	10	Cannonball	3.1
89	47	44	S	Deeply Serrated	L	34	11	Cannonball	3.8
90	40	45	M	Deeply Serrated	L	35	11	Cannonball	2
91	48	50	L	Deeply Serrated	M	37	11	Cannonball	3
92	52	50	M	Deeply Serrated	M	43	13	Cannonball	2.5
93	40	41	S	Deeply Serrated	S	38	12	Cannonball	4
94	43	55	S	Crenate	L	37.5	12	Cannonball	1.8
95	46	48	L	Deeply Serrated	L	39	12	Cannonball	5.1
96	39	43	S	Deeply Serrated	S	29	8.5	Cannonball	3.5
97	43	38	M	Crenate	M	33	10	Cannonball	4.2
98	46	42	L	Crenate	M	34	11	Cannonball	3.2
99	44	38	L	Deeply Serrated	L	35	11	Cannonball	3.4
100	44	52	S	Deeply Serrated	V. Small	34	10.5	Cannonball	2.5
101	46	41	L	Deeply Serrated	M	41	11	Cannonball	2.7
102	50	57	S	Crenate	L	39	10	Cannonball	3.5
103	40	47	M	Deeply Serrated	V. Small	26	7.5	Cannonball	3.6
104	42	30	M	Deeply Serrated	V. Small	41.5	10.5	Cannonball	4.2
105	48	50	L	Deeply Serrated	V. Small	30	15	Cannonball	2.2
106	42	57	L	Deeply Serrated	M	37	10	Cannonball	2.7
107	40	41	M	Deeply Serrated	M	31	8.5	Cannonball	3.5
108	42	50	L	Crenate	L	32	9	Cannonball	4.1
109	42	34	L	Deeply Serrated	S	35	11	Cannonball	3.8
110	45	37	M	Deeply Serrated	V. Small	39	15	Cannonball	2.3
111	44	47	M	Deeply Serrated	V. Small	31.5	9	Cannonball	3.4
112	52	44	M	Deeply Serrated	V. Small	38	13	Cannonball	2.6
113	49	35	L	Deeply Serrated	M	34	10	Cannonball	2.8
114	47	49	M	Deeply Serrated	M	37	12	Cannonball	2
115	39	45	M	Deeply Serrated	M	34	9.5	Cannonball	2.3
116	47	35	L	Deeply Serrated	S	37	9	Cannonball	3.2
117	45	33	L	Deeply Serrated	S	43	12	Cannonball	1.6
118	42	48	S	Deeply Serrated	M	33	8.5	Cannonball	3.4
119	52	44	L	Crenate	M	37	9	Cannonball	2.2
120	44	34	M	Deeply Serrated	S	32	9.5	Cannonball	3.9
121	52	40	S	Deeply Serrated	V. Small	37	12	Cannonball	1.9
122	40	38	S	Deeply Serrated	M	31	8.5	Cannonball	4.4
123	40	39	S	Deeply Serrated	V. Small	33	9	Cannonball	3.5
124	39	40	L	Deeply Serrated	L	36	9	Cannonball	3.2
125	44	45	M	Deeply Serrated	V. Small	34	8.5	Cannonball	1.8
126	48	44	M	Deeply Serrated	S	38	8.5	Cannonball	4.2
127	52	62	M	Deeply Serrated	V. Small	40	11	Cannonball	1.9
128	41	40	M	Deeply Serrated	V. Small	37	12	Cannonball	3.3
129	43	42	M	Deeply Serrated	M	35	10	Cannonball	2.5
130	48	42	S	Deeply Serrated	S	38	10	Cannonball	4.1
131	44	42	S	Deeply Serrated	V. Small	36	9	Cannonball	3.1
132	40	29	S	Deeply Serrated	S	38	12	Cannonball	3.3
133	48	52	M	Crenate	M	36	11	Cannonball	2
134	44	42	S	Crenate	M	36	8.5	Cannonball	3.7
135	46	45	L	Deeply Serrated	L	35	11	Cannonball	3.1
136	52	56	S	Crenate	M	44	10.5	Cannonball	4.1