

Tables 1a-h. Total yield, marketable yield, percent marketable yield, berry weight and average harvest date of floricane-fruiting blackberry genotypes in Laurel Springs, NC. Data is an average of two replicated plots.

Table 1a. Total yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	726	3329	3910	10660	481	6055	1706	6681
Natchez	1142	5175	3070	4245	2153	1584	2122	3668
Navaho	1233	6861	3944	8907	960	3963	2045	6577
NC 430	195	1474	3035	9413	1808	4574	1679	5154
Ouachita	1009	4353	362	3208	1003	2656	791	3406

Table 1b. Marketable yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	577	2821	2702	9170	323	5769	1201	5920
Natchez	968	4696	2685	3600	2039	1513	1897	3270
Navaho	1106	6438	1882	7824	788	3745	1259	6002
NC 430	158	1298	2500	8358	1581	4391	1413	4683
Ouachita	809	3925	294	2930	948	2552	684	3136

Table 1c. Percentage marketable weight (%)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	80	85	69	86	67	95	72	89
Natchez	85	91	87	85	95	96	89	90
Navaho	90	94	48	88	82	94	73	92
NC 430	81	88	82	89	87	96	84	91
Ouachita	80	90	81	91	95	96	85	93

Table 1d. Average berry weight (g)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	3.7	4.6	4.4	4.1	4.1	4.4	4.1	4.4
Natchez	7.4	9.6	8.8	9.0	9.2	8.3	8.5	9.0
Navaho	3.8	5.0	4.8	5.0	4.4	4.3	4.3	4.7
NC 430	5.8	7.3	6.4	7.0	5.1	6.0	5.8	6.8
Ouachita	5.4	7.1	5.3	6.4	5.2	6.0	5.3	6.5

Table 1e. 2010 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	3-Aug	23-Jul	19-Aug	12-Aug	3-Sep	30-Aug
Natchez	14-Jul	10-Jul	27-Jul	19-Jul	9-Aug	13-Aug
Navaho	31-Jul	23-Jul	23-Aug	17-Aug	20-Sep	14-Sep
NC 430	26-Jul	22-Jul	5-Aug	9-Aug	12-Aug	5-Sep
Ouachita	17-Jul	11-Jul	2-Aug	2-Aug	12-Aug	25-Aug

Table 1f. 2011 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	4-Aug	11-Aug	24-Aug	29-Aug	6-Sep	20-Sep
Natchez	11-Jul	10-Jul	29-Jul	26-Jul	20-Aug	14-Aug
Navaho	28-Jul	2-Aug	17-Aug	25-Aug	11-Sep	15-Sep
NC 430	21-Jul	19-Jul	13-Aug	12-Aug	2-Sep	7-Sep
Ouachita	21-Jul	23-Jul	13-Aug	8-Aug	1-Sep	27-Aug

Table 1g. 2012 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	4-Jul	31-Jul	3-Aug	21-Aug	3-Sep	5-Sep
Natchez	6-Jul	5-Jul	26-Jul	24-Jul	16-Aug	14-Aug
Navaho	11-Jul	26-Jul	8-Aug	19-Aug	12-Sep	6-Sep
NC 430	7-Jul	16-Jul	4-Aug	13-Aug	26-Aug	3-Sep
Ouachita	11-Jul	13-Jul	9-Aug	7-Aug	1-Sep	28-Aug

Table 1h. Average Harvest Date at 5, 50 and 95 percent total yield 2010-2012 combined

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Chester	24-Jul	1-Aug	15-Aug	20-Aug	4-Sep	8-Sep
Natchez	10-Jul	8-Jul	27-Jul	23-Jul	15-Aug	13-Aug
Navaho	23-Jul	27-Jul	16-Aug	20-Aug	14-Sep	11-Sep
NC 430	18-Jul	19-Jul	7-Aug	11-Aug	23-Aug	5-Sep
Ouachita	16-Jul	15-Jul	8-Aug	5-Aug	25-Aug	26-Aug

Tables 2a-d. Total yield, marketable yield, percent marketable yield, berry weight and average harvest date of florican-fruiting raspberry genotypes in Laurel Springs, NC. Data is an average of two replicated plots.

Table 2a. Total yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	86	32	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	329	728	1936	3586	1747	2265	1133	2157
NC 344	141	336	652	2046	522	1237	397	1191
NC 612	193	312	852	1873	1220	1629	522	1092
Octavia	198	292	1174	2214	1863	1675	686	1253
Redeva 93/6	3776	5406	4184	4734	n/a	n/a	3980	5070

Table 2b. Marketable yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	53	21	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	259	649	1762	3372	1391	2111	1010	2010
NC 344	119	303	605	1984	443	1196	362	1143
NC 612	113	256	676	1541	851	1449	394	899
Octavia	162	271	1067	2009	1703	1610	614	1140
Redeva 93/6	3408	5150	3245	4274	n/a	n/a	3327	4712

Table 2c. Percentage marketable weight (%)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	62	65	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	79	89	91	94	80	93	85	92
NC 344	84	90	93	97	85	97	89	94
NC 612	58	82	79	82	70	89	69	82
Octavia	82	93	91	91	91	96	86	92

Redeva 93/6	90	95	78	90	n/a	n/a	84	93
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Table 2d. Average berry weight (g)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	1.9	1.9	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	2.6	3.4	3.1	3.0	2.7	2.7	2.9	3.2
NC 344	2.4	2.7	2.7	2.5	2.2	2.1	2.6	2.6
NC 612	2.2	2.9	2.8	2.5	2.5	2.4	2.5	2.7
Octavia	4.8	4.4	4.2	4.4	3.7	3.9	4.5	4.4
Redeva 93/6	2.7	4.9	2.7	2.7	n/a	n/a	2.7	3.8

Table 2e. 2010 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	4-Jul	26-Jun	12-Jul	9-Jul	22-Jul	20-Jul
Moutere	29-Jun	26-Jun	14-Jul	11-Jul	7-Aug	2-Aug
NC 344	28-Jun	24-Jun	11-Jul	12-Jul	2-Aug	2-Aug
NC 612	15-Jul	24-Jun	11-Jul	17-Jul	24-Jul	31-Jul
Octavia	19-Jul	3-Jul	30-Jul	21-Jul	10-Aug	8-Aug
Redeva 93/6	29-Jul	25-Jul	12-Sep	3-Sep	16-Oct	16-Oct

Table 2f. 2011 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	30-Jul	1-Jul	9-Jul	10-Jul	19-Jul	24-Jul
NC 344	28-Jun	1-Jul	6-Jul	11-Jul	17-Jul	25-Jul
NC 612	4-Jul	5-Jul	13-Jul	13-Jul	26-Jul	26-Jul
Octavia	7-Jul	8-Jul	17-Jul	18-Jul	6-Aug	2-Aug
Redeva 93/6	5-Jul	29-Jun	10-Sep	22-Aug	1-Oct	26-Sep

Table 2g. 2012 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	22-Jun	23-Jun	5-Jul	8-Jul	21-Jul	22-Jul
NC 344	20-Jun	23-Jun	3-Jul	8-Jul	19-Jul	22-Jul
NC 612	28-Jun	28-Jun	9-Jul	14-Jul	24-Jul	18-Jul
Octavia	8-Jul	29-Jun	23-Jul	21-Jul	5-Aug	5-Aug
Redeva 93/6	n/a	n/a	n/a	n/a	n/a	n/a

Table 2h. Average Harvest Date at 5, 50 and 95 percent total yield 2010-2012 combined

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Mandarin	n/a	n/a	n/a	n/a	n/a	n/a
Moutere	7-Jul	26-Jun	9-Jul	9-Jul	26-Jul	26-Jul
NC 344	25-Jun	26-Jun	6-Jul	10-Jul	23-Jul	26-Jul
NC 612	5-Jul	29-Jun	11-Jul	14-Jul	24-Jul	25-Jul
Octavia	11-Jul	3-Jul	23-Jul	20-Jul	7-Aug	5-Aug
Redeva 93/6	17-Jul	12-Jul	11-Sep	28-Aug	8-Oct	6-Oct

Tables 3a-h. Total yield, marketable yield, percent marketable yield, berry weight and average harvest date of primocane-fruited raspberry genotypes in Laurel Springs, NC, grown in and outside of tunnels 2010-2012. Data is an average of two replicated plots.

Table 3a. Total yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	4117	5361	4546	3592	4169	3881	4277	4278
Caroline	4825	6673	5411	4912	5474	4951	5237	5512
Himbo Top	6328	7333	5614	5139	5402	5188	5781	5887
Joan J	3760	5923	4740	4652	5618	4795	4706	5123
Nantahala	2207	4680	4293	4040	3346	3638	3282	4119
Nova	949	2302	1147	1254	1128	1869	1075	1808
Redeva 93/6	4450	5508	4561	4355	3761	3537	4257	4466

Table 3b. Marketable yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	3788	5111	3526	3217	2868	3565	3394	3964
Caroline	4366	6492	4308	4359	4358	4509	4344	5120
Himbo Top	5932	7132	4380	4753	4473	4855	4928	5580
Joan J	3500	5756	3856	4259	5018	4645	4124	4886
Nantahala	1890	4557	3043	3549	2869	3370	2601	3825
Nova	773	2266	921	1068	921	1738	872	1691
Redeva 93/6	4026	5316	3603	3987	2900	3352	3510	4218

Table 3c. Percentage marketable weight (%)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	92	95	78	90	69	92	79	92
Caroline	91	97	80	89	80	91	83	92
Himbo Top	94	97	78	92	82	94	85	94
Joan J	93	97	81	92	90	97	88	95
Nantahala	86	97	71	88	86	93	81	93
Nova	81	98	80	85	81	93	81	92

Redeva 93/6	90	97	79	92	77	95	82	94
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Table 3d. Average berry weight (g)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	2.9	3.4	3.2	3.3	3.2	3.5	3.1	3.4
Caroline	3.1	2.8	3.1	2.9	3.0	3.0	3.1	2.9
Himbo Top	3.2	3.5	3.4	3.6	3.2	3.4	3.3	3.5
Joan J	3.2	3.8	4.1	3.5	3.5	3.3	3.6	3.5
Nantahala	3.0	3.2	3.1	3.1	3.1	3.2	3.1	3.2
Nova	2.8	3.2	3.1	3.1	3.3	3.3	3.1	3.2
Redeva 93/6	2.6	3.4	2.8	2.9	2.9	3.3	2.8	3.2

Table 3e. 2010 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	18-Jul	15-Jul	25-Aug	16-Aug	29-Sep	23-Sep
Caroline	10-Aug	31-Jul	9-Sep	23-Aug	9-Oct	20-Sep
Himbo Top	27-Jul	20-Jul	27-Aug	17-Aug	30-Sep	12-Oct
Joan J	25-Jul	15-Jul	11-Sep	26-Aug	12-Oct	14-Oct
Nantahala	20-Aug	1-Sep	24-Sep	26-Sep	20-Oct	28-Oct
Nova	3-Sep	14-Jul	27-Sep	25-Sep	19-Oct	27-Oct
Redeva 93/6	3-Aug	1-Aug	13-Sep	4-Sep	14-Oct	6-Oct

Table 3f. 2011 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	31-Jul	21-Jul	24-Aug	15-Aug	21-Sep	22-Sep
Caroline	2-Aug	1-Aug	26-Aug	16-Aug	19-Sep	12-Sep
Himbo Top	15-Aug	18-Jul	5-Sep	13-Aug	26-Sep	14-Sep
Joan J	12-Aug	18-Jul	5-Sep	13-Aug	4-Oct	17-Sep
Nantahala	26-Aug	26-Aug	13-Sep	14-Sep	4-Oct	8-Oct
Nova	31-Aug	21-Jul	19-Sep	14-Sep	5-Oct	10-Oct
Redeva 93/6	18-Aug	6-Aug	13-Sep	31-Aug	5-Oct	28-Sep

Table 3g. 2012 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	10-Aug	5-Aug	30-Aug	24-Aug	28-Sep	20-Sep
Caroline	15-Aug	9-Aug	3-Sep	30-Aug	2-Oct	25-Sep
Himbo Top	22-Aug	6-Aug	10-Sep	28-Aug	3-Oct	25-Sep
Joan J	10-Aug	4-Aug	30-Aug	21-Aug	3-Oct	17-Sep
Nantahala	3-Sep	24-Aug	24-Sep	16-Sep	18-Oct	9-Oct
Nova	19-Sep	4-Sep	5-Oct	26-Sep	22-Oct	19-Oct
Redeva 93/6	21-Aug	23-Aug	16-Sep	16-Sep	7-Oct	10-Oct

Table 3h. Average Harvest Date at 5, 50 and 95 percent total yield 2010-2012 combined

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
Autumn Britten	30-Jul	24-Jul	26-Aug	18-Aug	26-Sep	21-Sep
Caroline	9-Aug	3-Aug	2-Sep	23-Aug	30-Sep	19-Sep
Himbo Top	11-Aug	25-Jul	3-Sep	19-Aug	29-Sep	27-Sep
Joan J	5-Aug	22-Jul	5-Sep	20-Aug	6-Oct	26-Sep
Nantahala	26-Aug	27-Aug	20-Sep	18-Sep	14-Oct	15-Oct
Nova	7-Sep	2-Aug	27-Sep	21-Sep	15-Oct	18-Oct
Redeva 93/6	14-Aug	10-Aug	14-Sep	6-Sep	8-Oct	4-Oct

Tables 4a-h. Total yield, marketable yield, percent marketable yield, berry weight and average harvest date of primocane-fruited blackberry genotypes in Laurel Springs, NC, grown in and outside of tunnels 2010-2012. Data is an average of two replicated plots.

Table 4a. Total yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	893	253	2163	948	n/a	n/a	1528	600
APF 45	1259	4981	1727	3078	1262	1181	1416	3080
APF 46	1079	2685	1992	1899	n/a	n/a	1535	2292
NC 536	2335	2325	3538	2931	n/a	n/a	2937	2628
NC 537	1926	2906	4515	4789	2996	4998	3145	4231
Prime Jan	1574	3169	2071	1904	n/a	n/a	1822	2537
Prime Jim	1535	2047	2254	2250	n/a	n/a	1895	2149

Table 4b. Marketable yield (g/plant)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	597	85	1203	833	n/a	n/a	900	459
APF 45	1017	4291	939	2594	1033	962	996	2616
APF 46	880	1879	1205	1543	n/a	n/a	1042	1711
NC 536	1430	993	1602	1881	n/a	n/a	1516	1437
NC 537	1685	2338	2492	3614	2603	4296	2260	3416
Prime Jan	1067	2137	1105	1351	n/a	n/a	1086	1744
Prime Jim	1355	1570	1263	1739	n/a	n/a	1309	1655

Table 4c. Percentage marketable weight (%)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	67	34	56	88	n/a	n/a	61	61
APF 45	81	86	54	84	82	81	72	84
APF 46	81	69	60	81	n/a	n/a	71	75
NC 536	61	43	45	64	n/a	n/a	53	54
NC 537	88	80	55	75	87	86	77	80
Prime Jan	69	68	53	71	n/a	n/a	61	69

Prime Jim	88	77	56	77	n/a	n/a	72	77
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Table 4d. Average berry weight (g)

Genotype	2010		2011		2012		Mean	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	7.0	6.4	8.0	7.6	n/a	n/a	7.5	7.0
APF 45	7.7	9.6	8.4	10.2	8.2	9.3	8.1	9.7
APF 46	5.4	6.8	5.5	7.2	n/a	n/a	5.4	7.0
NC 536	8.9	7.9	9.8	9.2	n/a	n/a	9.4	8.5
NC 537	5.4	5.6	6.4	6.5	5.9	5.5	5.9	5.9
Prime Jan	6.2	7.4	7.1	7.1	n/a	n/a	6.6	7.2
Prime Jim	6.4	6.6	6.9	7.1	n/a	n/a	6.7	6.8

Table 4e. 2010 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	25-Aug	3-Sep	24-Sep	18-Sep	27-Oct	11-Oct
APF 45	5-Sep	1-Sep	24-Sep	27-Sep	26-Oct	27-Oct
APF 46	19-Aug	5-Aug	13-Sep	4-Sep	25-Oct	22-Oct
NC 536	30-Aug	8-Aug	24-Sep	19-Sep	26-Oct	25-Oct
NC 537	27-Aug	16-Aug	15-Sep	15-Sep	12-Oct	23-Oct
Prime Jan	25-Aug	13-Aug	19-Sep	10-Sep	14-Oct	24-Oct
Prime Jim	21-Aug	21-Aug	11-Sep	10-Sep	12-Oct	19-Oct

Table 4f. 2011 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	26-Aug	23-Aug	24-Sep	25-Sep	18-Oct	18-Oct
APF 45	23-Aug	27-Aug	26-Sep	9-Oct	18-Oct	19-Oct
APF 46	12-Aug	10-Aug	1-Sep	29-Aug	4-Oct	15-Oct
NC 536	24-Aug	14-Aug	19-Sep	9-Sep	15-Oct	16-Oct
NC 537	30-Aug	30-Aug	15-Sep	19-Sep	12-Oct	15-Oct
Prime Jan	20-Aug	22-Aug	12-Sep	13-Sep	16-Oct	17-Oct
Prime Jim	18-Aug	21-Aug	3-Sep	16-Sep	10-Oct	16-Oct

Table 4g. 2012 Average Harvest Date at 5, 50 and 95 percent total yield

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136	n/a	n/a	n/a	n/a	n/a	n/a
APF 45	30-Aug	30-Aug	30-Aug	1-Oct	16-Oct	18-Oct
APF 46	n/a	n/a	n/a	n/a	n/a	n/a
NC 536	n/a	n/a	n/a	n/a	n/a	n/a
NC 537	30-Aug	31-Aug	15-Sep	17-Sep	3-Oct	6-Oct
Prime Jan	n/a	n/a	n/a	n/a	n/a	n/a
Prime Jim	n/a	n/a	n/a	n/a	n/a	n/a

Table 4h. Average Harvest Date at 5, 50 and 95 percent total yield 2010-2012 combined

Genotype	5%		50%		95%	
	Outside	Tunnel	Outside	Tunnel	Outside	Tunnel
APF 136*	25-Aug	28-Aug	24-Sep	21-Sep	22-Oct	14-Oct
APF 45	29-Aug	29-Aug	16-Sep	2-Oct	20-Oct	21-Oct
APF 46*	15-Aug	7-Aug	7-Sep	1-Sep	14-Oct	18-Oct
NC 536*	27-Aug	11-Aug	21-Sep	14-Sep	20-Oct	20-Oct
NC 537	29-Aug	25-Aug	15-Sep	17-Sep	9-Oct	14-Oct
Prime Jan*	22-Aug	17-Aug	15-Sep	11-Sep	15-Oct	20-Oct
Prime Jim*	19-Aug	21-Aug	7-Sep	13-Sep	11-Oct	17-Oct

*do not include 2012 harvest dates