

Table Bk-TR 1. Fruit size and yield of trailing blackberry genotypes at OSU-NWREC for the 2017 trial planting, harvested from 2019-21. All are thornless except ‘Marion’.

	Berry Size (g)	Yield (tons·a ⁻¹)		
<i>Annual Mean</i> ^a				
2019	6.27	7.31		
2020	6.78	5.06		
2021	4.95	3.80		
Genotype	2019-21	2020	2021	2019-21
<i>Replicated</i> ^z				
Columbia Star	6.88 b	5.76 a	5.48 a	6.26 a
*ORUS 4222-1	4.89 d	5.99 a	4.68 ab	6.16 ab
ORUS 4892-1	8.32 a	5.83 a	3.55 bc	6.12 ab
Black Diamond	5.78 c	5.25 a	2.47 c	5.18 b
ORUS 4425-1	4.13 e	2.46 b	2.82 c	3.24 c
<i>Nonreplicated</i>				
Columbia Giant	12.27	8.70	2.23	4.21
Marion	4.83	6.43	0.70	4.07
ORUS 4767-1	5.03	3.92	3.03	2.73
Hall's Beauty	3.90	3.57	2.79	2.33

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

***ORUS 4222-1 pending patent approval for variety release**

Table Bk-TR 2. Fruit size and yield of trailing blackberry genotypes at OSU-NWREC for the 2018 trial planting, harvested from 2020-21. All are thornless except ‘Marion’.

	Berry Size (g)	Yield (tons·a ⁻¹)		
<i>Annual Mean</i> ^a				
2020	7.49	6.67		
2021	5.18	3.58		
Genotype	2020-21	2020	2021	2020-21
<i>Replicated</i> ^z				
ORUS 4344-3	5.97 bc	8.08 a	4.16 a	6.12 a
Black Diamond	5.40 c	7.85 a	3.57 ab	5.71 ab
ORUS 4892-2	5.95 bc	6.69 b	3.66 ab	5.17 b
ORUS 4892-1	8.05 a	5.36 c	3.58 ab	4.47 c
Columbia Star	6.30 b	5.36 c	2.95 b	4.15 c
<i>Nonreplicated</i>				
Marion	4.95	5.81	5.19	5.50
Columbia Sunrise	6.25	3.50	2.16	2.83

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

Table Bk-TR 3. Fruit size and yield of trailing blackberry genotypes at OSU-NWREC for the 2019 trial planting, harvested from 2021. All are thornless except ‘Marion’ and ‘Kotata’.

	Berry Size (g)	Yield (tons·a ⁻¹)
<i>Annual Mean</i> ^a		
2021	5.20	5.06
Genotype	2021	2021
<i>Replicated</i> ^z		
ORUS 5037-1	5.43 a	6.32 a
Black Diamond	5.30 a	4.87 b
Columbia Star	5.53 a	4.59 b
ORUS 4535-2	4.53 a	4.46 b
<i>Nonreplicated</i>		
*ORUS 4222-1	4.90	6.75
ORUS 5014-1	6.60	6.27
ORUS 5037-2	5.90	6.02
ORUS 5031-1	7.70	4.42
ORUS 5010-1	6.30	4.29
ORUS 5023-1	4.20	3.30
ORUS 5023-2	3.70	3.13
Marion	4.60	2.94
ORUS 5028-1	5.50	2.74
ORUS 5011-1	4.70	2.71
ORUS 4902-1	4.30	2.68
ORUS 5014-2	6.00	2.34
ORUS 5043-1	4.20	2.07
Kotata	4.20	1.72
ORUS 5019-1	4.20	1.48
ORUS 5008-1	5.30	1.43

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

***ORUS 4222-1 pending patent approval for variety release**

Table Bk-SE 1. Fruit size and yield of semierect blackberry genotypes at OSU-NWREC for the 2017-19 trial plantings, harvested from 2019-21.

Genotype	Berry Size (g)	Yield (tons·a ⁻¹)		
	2019-21	2020	2021	2019-21
<i>Nonreplicated (2017)</i>				
Chester Thornless	5.50	12.67	12.29	10.33
ORUS 4928-2	7.13	10.02	7.41	8.56
ORUS 4926-1	6.17	5.71	9.14	8.42
ORUS 4929-2	7.97	8.57	9.66	7.81
ORUS 4929-1	7.03	6.43	9.23	7.76
Triple Crown	7.83	5.96	7.31	6.64
Galaxy	7.20	4.73	7.19	6.17
Twilight	7.90	6.01	4.88	5.79
ORUS 2816-3	5.67	7.54	4.97	5.40
Eclipse	5.83	4.32	6.86	4.71
<i>Nonreplicated (2018)</i>				
Chester Thornless	5.25	8.09	10.39	9.24
Triple Crown	6.80	2.45	6.91	4.68
Black Jack	6.80	5.17	3.71	4.44
<i>Nonreplicated (2019)</i>				
Chester Thornless	4.50	-	10.88	10.88
ORUS 5057-1	5.70	-	9.86	9.86
Caddo	5.60	-	8.72	8.72
ORUS 5049-1	3.50	-	8.57	8.57
ORUS 5067-1	6.10	-	8.01	8.01
Triple Crown	6.40	-	7.63	7.63
ORUS 5058-2	7.20	-	7.37	7.37
ORUS 5056-2	4.50	-	7.15	7.15
ORUS 5058-1	5.80	-	5.87	5.87
ORUS 5050-1	3.20	-	5.86	5.86
ORUS 5056-1	3.60	-	5.27	5.27
ORUS 5065-2	2.80	-	5.01	5.01
ORUS 5065-1	3.90	-	4.61	4.61
ORUS 5066-1	5.60	-	3.91	3.91
ORUS 5045-1	3.50	-	2.88	2.88

Table Bk-PR 1. Fruit size and yield of erect primocane blackberry genotypes at OSU-NWREC for the 2017 trial planting, harvested from 2019-21. *Low primocane yields in 2020 were the result of early harvest-season termination due to wildfire smoke.*

Genotype	Berry Size (g)	Yield (tons·a ⁻¹)		
	2019-21	2020	2021	2019-21
<i>Nonreplicated (2017)</i>				
*ORUS 4999-2	7.50	3.34	7.98	6.06
ORUS 4939-4	8.63	0.31	5.12	2.78
ORUS 4939-3	5.67	0.26	3.15	1.69
ORUS 4939-6	5.37	0.48	2.45	1.43

***ORUS 4999-2 pending patent approval for variety release**

Table Bk-PR 2. Fruit size and yield of erect primocane blackberry genotypes at OSU-NWREC for the 2018 trial planting, harvested from 2020-21. *Low primocane yields in 2020 were the result of early harvest-season termination due to wildfire smoke.*

	Berry Size (g)	Yield (tons·a ⁻¹)		
<i>Annual Mean</i> ^a				
2020	8.13	1.22		
2021	7.50	5.41		
Genotype	2020-21	2020	2021	2020-21
<i>Replicated</i> ^z				
Prime-Ark 45	8.55 a	1.41 a	6.07 a	3.74 a
ORUS 5068-3	7.08 a	1.03 a	4.74 a	2.88 a
<i>Nonreplicated</i>				
ORUS 5069-1	6.45	0.91	5.12	3.02
ORUS 5068-5	9.35	2.16	2.23	2.19
ORUS 5068-1	7.80	0.64	2.38	1.51

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

Table Bk-PR 3. Fruit size and yield of erect primocane blackberry genotypes at OSU-NWREC for the 2019 trial planting, harvested from 2021.

	Berry Size (g)	Yield (tons·a ⁻¹)
<i>Annual Mean</i> ^a		
2021	7.40	5.99
Genotype	2021	2021
<i>Replicated</i> ^z		
*ORUS 4999-2	6.60 a	7.23 a
ORUS 5174-2	7.67 a	5.70 a
Prime-Ark 45	7.93 a	5.03 a
<i>Nonreplicated</i>		
ORUS 5174-1	7.60	2.15
ORUS 5173-4	8.70	1.62
ORUS 5174-3	6.10	1.47
ORUS 5175-1	5.30	0.63

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

***ORUS 4999-2 pending patent approval for variety release**

Table Ry-FL 1. Fruit size and yield of florican red raspberry genotypes at OSU-NWREC for the 2018 trial planting, harvested from 2020-21. Yield measurements are based on machine picking using a Littau Harvester.

	Berry Size (g)	Yield (tons·a ⁻¹)		
<i>Annual Mean</i> ^a				
2020	2.93	3.89		
2021	1.97	1.52		
Genotype	2020-21	2020	2021	2020-21
<i>Replicated</i> ^z				
ORUS 4961-1	3.02 a	5.60 a	1.67 ab	3.63 a
WSU 2376	2.75 ab	5.52 a	1.74 ab	3.63 a
Wakefield	2.12 bc	4.90 ab	2.28 a	3.59 a
WSU 2348	2.60 abc	4.72 ab	1.27 ab	2.99 ab
ORUS 4640-1	2.52 abc	4.05 bc	1.60 ab	2.82 ab
Meeker	2.10 c	3.30 cd	1.82 ab	2.56 bc
ORUS 4463-1	2.58 abc	2.30 d	1.22 ab	1.76 cd
WSU 2385	2.40 abc	2.54 d	0.91 b	1.73 cd
ORUS 4978-3	1.97 c	2.10 d	1.22 ab	1.66 d
<i>Nonreplicated</i>				
ORUS 4641-3	2.90	5.48	6.62	6.05
Wakehaven	2.65	7.88	3.78	5.83
ORUS 4975-1	2.90	2.99	7.69	5.34
Cascade Harvest	3.30	6.19	3.14	4.66
WSU 2234	2.25	6.11	3.12	4.62
WSU 2278	2.40	5.89	2.84	4.36
WSU 2268	2.55	5.66	3.02	4.34
WSU 2510	2.40	6.15	2.32	4.24
WSU 2372	2.90	6.68	1.68	4.18
WSU 2506	2.90	5.53	2.79	4.16
WSU 2298	2.45	5.21	2.92	4.06
WSU 2505	2.60	5.57	2.25	3.91
ORUS 4465-2	2.80	-	3.81	3.81
WSU 2377	3.20	6.38	1.07	3.73
WSU 2432	2.70	4.56	2.51	3.53
WSU 2511	2.55	5.39	1.23	3.31
WSU 2437	2.40	4.18	2.42	3.30
ORUS 4600-3	1.70	4.43	1.91	3.17

WSU 2357	2.50	4.76	1.41	3.08
ORUS 4961-3	2.85	3.90	1.74	2.82
ORUS 4972-1	2.00	3.79	1.28	2.54
ORUS 4974-1	2.30	3.91	1.15	2.53
WSU 2442	2.05	3.44	1.58	2.51
ORUS 4965-1	2.75	2.69	2.30	2.50
ORUS 4978-2	3.15	3.36	1.47	2.41
ORUS 4971-3	3.40	2.57	2.17	2.37
ORUS 4971-2	3.05	2.76	1.66	2.21
ORUS 4971-1	3.15	2.48	1.71	2.09
ORUS 4978-1	2.65	2.63	1.33	1.98
ORUS 4961-5	2.90	2.33	1.29	1.81
ORUS 4089-2	3.20	-	0.70	0.70

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

Table Ry-FL 2. Fruit size and yield of florican red raspberry genotypes at OSU-NWREC for the 2019 trial planting, harvested from 2020-21. Yield measurements are based on machine picking using a Littau Harvester.

	Berry Size (g)	Yield (tons·a ⁻¹)
<i>Annual Mean</i> ^a		
2021	2.89	2.94
Genotype	2021	2021
<i>Replicated</i> ^z		
ORUS 4974-1	3.00 ab	3.93 a
ORUS 4715-2	3.20 a	3.78 ab
*WSU 2605	2.97 ab	3.18 abc
WSU 2481	3.20 a	3.12 abc
WSU 2516	3.20 a	3.06 abc
ORUS 5104-2	2.90 ab	2.72 bc
ORUS 5106-1	2.23 c	2.68 bc
ORUS 4965-3	2.77 ab	2.54 c
Meeker	2.57 bc	2.35 c
WSU 2277	2.83 ab	2.04 c
<i>Nonreplicated</i>		
AAC Eden	4.6	4.81
ORUS 5106-3	1.9	3.26
ORUS 5105-1	2.0	3.25
ORUS 5107-1	1.6	3.01
ORUS 5102-2	2.2	2.86
ORUS 5099-1	2.9	2.62
ORUS 5108-3	2.7	2.53
ORUS 5106-2	1.8	2.51
ORUS 4843-1	3.9	2.48
WSU 2088	2.5	2.43
ORUS 5105-2	1.4	2.13
ORUS 5094-1	2.2	2.09
ORUS 4845-3	2.5	2.05
ORUS 5104-4	2.0	2.00
ORUS 5094-2	2.5	1.99
ORUS 4845-2	2.2	1.95
ORUS 5100-1	2.2	1.08

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

****WSU 2605* was hand-picked due to very early season ripening**

Table Ry-PR 1. Fruit size and yield of primocane red raspberry genotypes at OSU-NWREC for the 2018 trial planting, harvested from 2019-21.

	Berry Size (g)	Yield (tons·a ⁻¹)		
<i>Annual Mean</i> ^a				
2019	3.38	4.56		
2020	2.90	3.82		
2021	2.47	3.39		
Genotype	2019-21	2020	2021	2019-21
<i>Replicated</i> ^z				
Polka	3.28 a	4.63 a	3.93 a	4.41 a
ORUS 4487-1	2.56 b	3.01 a	2.84 a	3.43 b
<i>Nonreplicated</i>				
ORUS 5114-1	3.63	2.02	2.79	2.98
ORUS 4858-1	3.07	2.66	0.65	2.67
ORUS 5118-1	2.80	1.96	2.56	2.41
ORUS 5243-3	3.27	0.72	1.60	2.10
ORUS 5243-2	3.40	0.78	3.13	1.90
ORUS 4291-1	3.13	1.33	1.79	1.44
ORUS 5243-1	4.37	1.75	0.18	1.24
ORUS 5114-2	2.57	0.86	0.15	1.17
ORUS 5109-2	3.40	0.81	0.28	1.05
Vintage	2.27	0.35	0.51	0.72

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

Table Ry-PR 2. Fruit size and yield of primocane red raspberry genotypes at OSU-NWREC for the 2019 trial planting, harvested from 2020-21.

	Berry Size (g)	Yield (tons·a ⁻¹)		
<i>Annual Mean</i> ^a				
2020	3.12	1.59		
2021	2.46	1.72		
Genotype	2020-21	2020	2021	2020-21
<i>Replicated</i> ^z				
ORUS 5209-1	3.12 a	2.51 a	2.09 a	2.30 a
ORUS 5250-1	3.08 a	1.91 b	1.83 a	1.87 b
ORUS 5248-1	3.22 a	1.01 c	2.17 a	1.59 bc
Kokanee	2.18 b	1.38 c	1.70 ab	1.54 c
ORUS 4725-1	2.35 b	1.17 c	0.80 c	0.99 d
ORUS 4858-2	-	-	1.19 bc	-
<i>Nonreplicated</i>				
ORUS 5248-3	4.35	2.54	3.02	2.78
*ORUS 4716-1	2.65	1.19	3.01	2.10
Polka	2.30	1.97	1.82	1.89
ORUS 5211-1	2.65	1.59	2.15	1.87
ORUS 5209-2	2.10	1.48	1.39	1.44
ORUS 5220-1	1.85	0.79	1.84	1.32
ORUS 5227-3	3.15	0.97	1.26	1.11
ORUS 5218-1	3.15	1.12	1.10	1.11
ORUS 5227-2	4.10	0.58	1.35	0.96
ORUS 5248-2	2.95	0.53	1.25	0.89

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

***ORUS 4716-1 pending patent approval for variety release**

Table Ry-PR 3. Fruit size and yield of primocane red raspberry genotypes at OSU-NWREC for the 2020 trial planting, harvested from 2021.

	Berry Size (g)	Yield (tons·a ⁻¹)
<i>Annual Mean</i> ^a		
2021	1.57	1.53
Genotype	2021	2021
<i>Replicated</i> ^z		
*ORUS 4716-1	2.03 a	2.27 a
Heritage	1.10 b	0.78 b
<i>Nonreplicated</i>		
ORUS 5345-1	1.80	2.31
Polka	2.20	2.05
ORUS 5467-2	1.90	1.82
ORUS 4487-1	1.60	1.76
ORUS 5347-1	3.00	1.57
ORUS 5465-1	2.50	1.43
ORUS 5201-2	1.80	1.27
ORUS 5332-2	2.00	1.21
ORUS 5332-1	1.70	1.19
Addison	1.30	1.18
ORUS 5465-2	2.60	1.04
ORUS 5345-2	1.20	0.51

^a Annual means based on replicated plot samples.

^z Groups determined by t-Test (LSD) of replicated plot means, $p \leq 0.05$.

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