

27/10/64

Inverted color (I.C.) Beans  
 Scarlet Runner, Pink + Black (P+B) Seed, 1963/4

Color Beans	Normal Vines			Reversed Vines			Percent
	B+P	P+B	I.C.	B+P	P+B	I.C.	
Row D							
Up to 1ft (a)	398	116	0 0	315	125	3	0.7
1 to 4ft (b)	519	363	8 0.9	546	269	65	7.4
Over 4ft (c)	157	32	4 2.1	57	17	15	16.9
Sums	1074	511	12 0.75	918	411	83	5.9
Combined	1585			1329			
Percent I.C.	0.76			6.2			
Row F							
Up to 1ft (a)	34	360	8 2.0	33	358	4	1.0
1 to 4ft (b)	75	635	1 0.1	142	516	8	1.2
Over 4ft (c)	34	94	0 0	7	95	5	4.7
Sums	143	1089	9 0.72	182	969	17	1.96
Combined	1232			1151			
Percent I.C.	0.73			1.5			
Rows D+F							
Totals	1217	1600	21	1100	1380	100	
Combined	2817			2480			
Percent I.C.	0.75			4.03			
							Normal Reversed
							Percent I.C.
							(a) 0.8 0.8
							(b) 0.6 4.7
							(c) 1.2 10.2

Row D had seed from 1960 crop. A very mixed lot.  
 Row F had seed from 1962/3 crop.

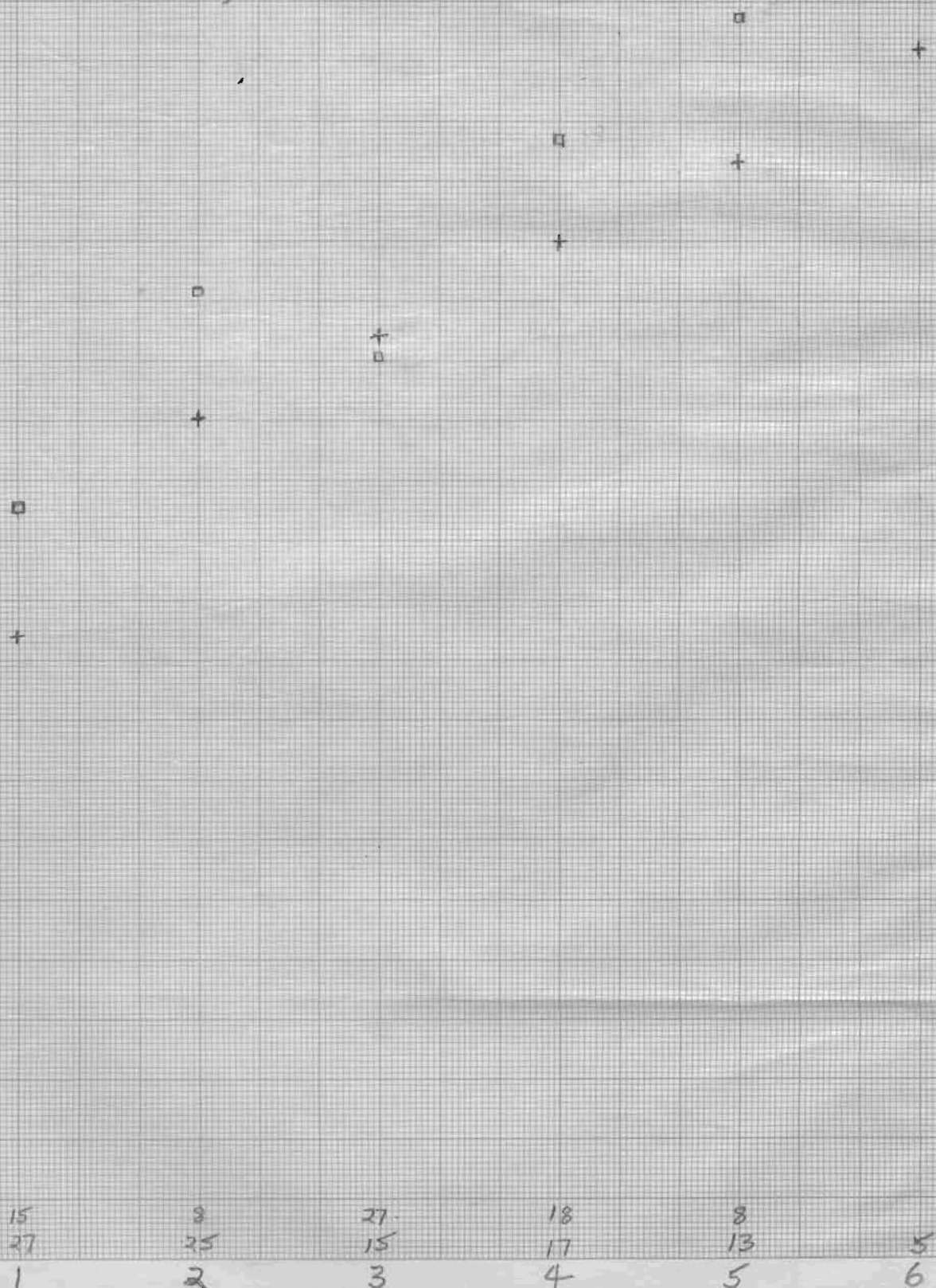
Scarlet Runner, Pink + Black Seeds, 1963/4  
 Rows D+F, Over 4 feet (c)  
 + Normal vines, □ Reversed vines

Grams of Beans / Grams of Sticks

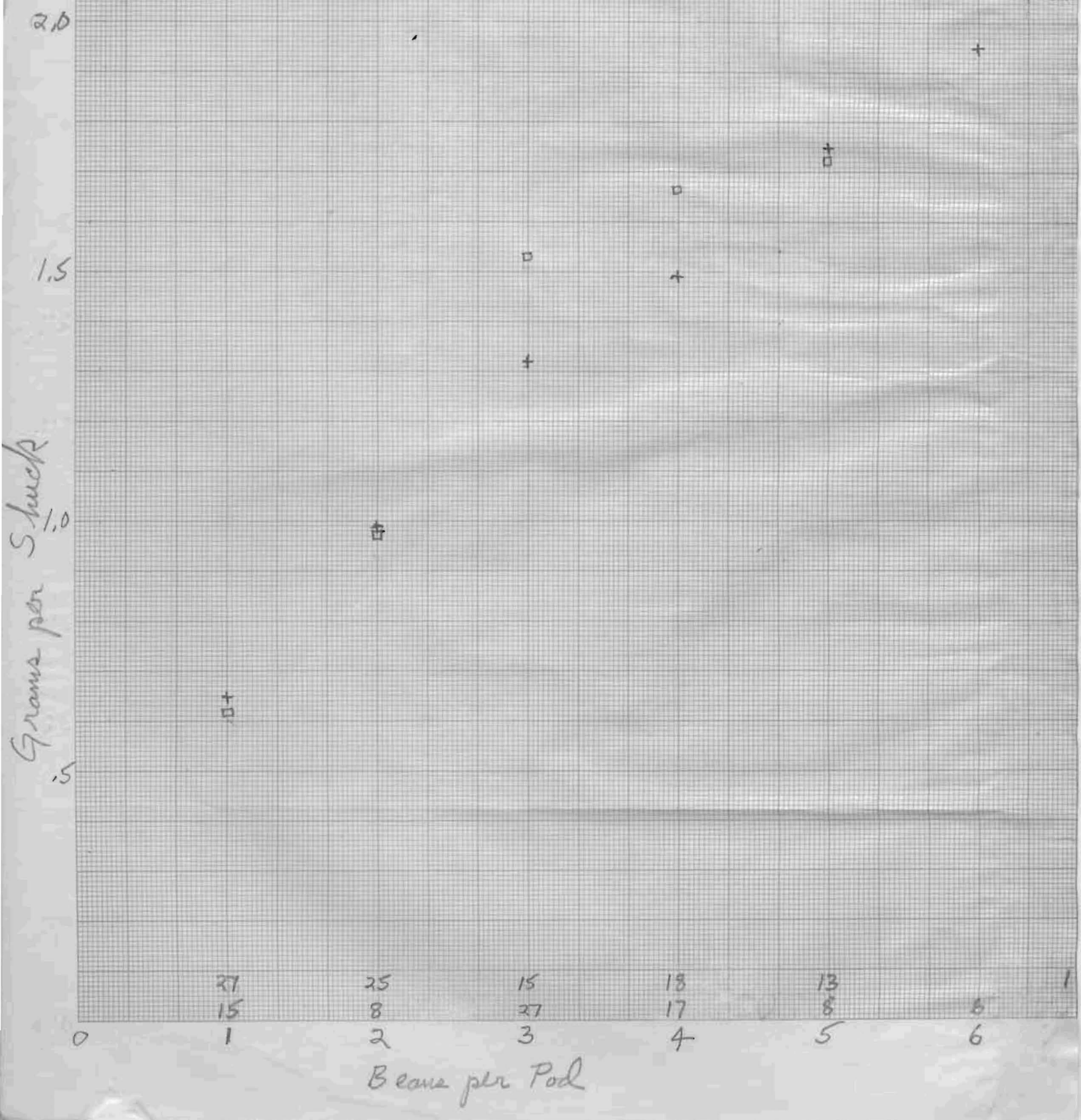
5  
4  
3  
2  
1  
0

Pods    15                    9                    27                    18                    8                    5  
           27                    25                    15                    17                    13                    5  
 1                    2                    3                    4                    5                    6

Beans per Pod



Scarlet Runner, Pink + Black Seed, 1963/4  
 Rows D + F, Over 4 feet (c) 30/10/64  
 + Normal vines, □ Reversed vines



27 25 15 13 13 1  
 15 8 27 17 8 6  
 0 1 2 3 4 5 6

Beans per Pod

Scarlet Runner, Pink + Black Seed, 1963/4

Rows D+F, Over 4 feet (c)

30/10/64

+ Normal Vines, □ Reversed vines

2.0

1.5

1.0

0.5

Grams per Bean



Beans per pod

Over 4 ft (c)

26/10/64

Scarlet Runner Pink + Black Seed. Rows D + F, 1963/4

Normal (odd numbers)

Reversed (even numbers)

Pod	Shuck	Beans	Grams Shuck	Grams Bean	Pod	Shuck	Beans	Grams Shuck	Grams Bean
27, One bean per pod,					15, One bean per pod,				
54.28	17.51	36.39	0.65	1.35	33.00	9.36	23.44	0.62	1.57
Gm Beans/Gm Shucks = 2.08					Gm Beans/Gm Shucks = 2.50				
25, Two beans per pod					8, Two beans per pod				
94.58	24.79	69.56	0.99	1.39	32.81	7.75	25.01	0.97	1.57
Gm Beans/Gm Shucks = 2.81					Gm Beans/Gm Shucks = 3.23				
27, Three beans per pod					15, Three beans per pod				
146.38	35.71	110.50	1.32	1.36	92.92	23.17	69.61	1.54	1.55
Gm Beans/Gm Shucks = 3.09					Gm Beans/Gm Shucks = 3.01				
17, Four beans per pod					18, Four beans per pod				
111.02	25.20	85.69	1.48	1.26	143.05	30.11	112.79	1.67	1.57
Gm Beans/Gm Shucks = 3.40					Gm Beans/Gm Shucks = 3.74				
13, Five beans per pod					8, Five beans per pod				
105.41	22.75	83.54	1.75	1.28	70.95	13.78	57.13	1.72	1.43
Gm Beans/Gm Shucks = 3.67					Gm Beans/Gm Shucks = 4.15				
5, Six beans per pod									
47.84	9.49	38.33	1.90	1.28					
Gm Beans/Gm Shucks = 4.04									
					1, Seven beans per pod.				
					11.75	1.96	9.76	1.96	1.40
					Gm Beans/Gm Shucks = 4.99				

According to this analysis the Reversed Vines produce heavier beans. No great change appears in weight of shucks.

Row D, Normal vines (odd numbers), over 4 feet (C), 1963/4

22, One Bean per Pod

18, Two Beans per Pod.

22, One Bean per Pod					18, Two Beans per Pod.				
Pod	Shucks	Beans		Grams	Pod	Shucks	Beans		Grams
Grams	Grams	Type	Grams	Bean	Grams	Grams	Type	Grams	Bean
2.48	0.68	B+P	1.77	1.77	4.58	1.27	B+P	3.32	1.66
3.05	1.07	B+P	1.98	1.98	4.87	1.21	P+B	3.67	1.84
2.49	0.97	P+B	1.52	1.52	3.43	0.79	B+P	2.61	1.30
2.33	0.60	B+P	1.70	1.70	3.92	1.02	B+P	2.90	1.45
2.67	0.93	B+P	1.74	1.74	3.95	0.80	B+P	3.13	1.57
2.59	0.71	B+P	1.87	1.87	3.99	1.13	1-I.C. 1-P+B	2.85	1.42
2.64	0.69	B+P	1.95	1.95	4.91	1.30	B+P	3.61	1.81
2.20	0.62	B+P	1.55	1.55	4.06	1.55	B+P	2.49	1.24
2.26	0.69	B+P	1.53	1.53	2.51	0.68	B+P	1.83	0.92
2.12	0.53	B+P	1.57	1.57	2.67	0.59	B+P	2.08	1.04
2.10	0.62	B+P	1.37	1.37	4.82	0.89	B+P	3.91	1.96
2.20	0.54	B+P	1.64	1.64	3.55	0.90	B+P	2.64	1.32
1.41	0.36	B+P	1.05	1.05	1.82	0.72	B+P	1.09	0.55
2.06	0.63	B+P	1.42	1.42	5.44	1.36	P+B	4.05	2.02
1.60	0.78	B+P	0.81	0.81	3.50	0.93	I.C.	2.57	1.29
1.86	0.40	B+P	1.44	1.44	3.80	1.06	P+B	2.73	1.37
1.59	0.44	B+P	1.15	1.15	2.90	0.84	P+B	2.05	1.02
1.40	0.34	B+P	1.06	1.06	3.64	0.76	B+P	2.86	1.43
1.42	0.39	B+P	1.04	1.04					
1.52	0.33	B+P	1.20	1.20					
0.85	0.17	B+P	0.67	0.67					
3.12	2.36	P+B	0.74	0.74					
<b>Sum</b>	45.96	14.85	30.77	30.77	68.36	17.80	50.39	25.21	
Gm Beans / Gm Shucks			2.072				2.830		
Gm / Shuck	.675		Gm / Bean	1.400	.989		1.400	1.401	

Row D, Normal vines (odd numbers), over 4 feet (c), 1963/4

17, Three Beans per Pod

9, Four Beans per Pod

Pod	Shucks	Beans			Pod	Shucks	Beans		
Grams	Grams	Type	Grams	Bean	Grams	Grams	Type	Grams	Bean
6.46	1.73	<u>P+B</u>	4.70	1.57	7.80	1.78	<u>P+B</u>	6.01	1.50
5.92	1.51	B+P	4.39	1.46	7.42	1.52	B+P	5.90	1.48
5.18	1.17	<u>P+B</u>	4.00	1.33	5.81	1.59	<u>P+B</u>	4.21	1.05
4.85	1.06	<u>P+B</u>	3.78	1.26	8.35	1.68	B+P	6.65	1.66
4.79	1.11	B+P	3.68	1.23	7.84	1.56	B+P	6.27	1.57
5.84	1.27	B+P	4.57	1.52	6.79	1.38	B+P	5.42	1.36
5.49	1.08	B+P	4.42	1.47	5.47	0.93	B+P	4.54	1.14
6.07	1.12	B+P	4.92	1.64	5.04	0.87	B+P	4.17	1.04
5.90	1.05	B+P	4.85	1.62	6.18	0.92	B+P	5.25	1.31
5.88	1.56	B+P	4.30	1.43					
4.61	1.02	B+P	3.59	1.20					
5.73	1.15	B+P	4.69	1.56					
5.09	1.10	B+P	3.98	1.33					
7.55	2.33	<u>P+B</u>	5.23	1.74					
3.94	1.23	<sup>1-c.c</sup> <u>2-P+B</u>	2.70	0.90					
5.34	0.84	B+P	4.43	1.48					
4.01	0.80	B+P	3.20	1.07					

Sum	92.65	21.13		71.43	23.81	66.70	12.23		48.42	12.11
Gm Beans/Gm Shucks			3.380					3.965		
Gm/Shuck		1.244	Gm/Bean	1.401		1.360			1.345	

6, Five Beans per Pod

3, Six Beans per Pod

9.59	2.32	B+P	7.28	1.46	9.04	1.74	B+P	7.28	1.21
9.42	1.97	B+P	7.44	1.49	8.75	1.40	B+P	7.36	1.23
6.84	1.25	B+P	5.59	1.12	9.54	1.59	B+P	7.95	1.33
7.12	1.17	B+P	5.95	1.19					
5.79	1.08	B+P	4.70	0.94					
5.77	0.99	B+P	4.78	0.96					

Sum	44.53	8.78		35.74	7.16	27.33	4.73		22.59	3.77
Gm Beans/Gm Shucks			4.070					4.770		
Gm/Shuck		1.464	Gm/Bean	1.193		1.577			1.257	

Row D, Reversed vines (even numbers), over 4 feet (c), 1963/4

10, One Bean per Pod

Pod	Shucks	Beans		Grams
Grams	Grams	Type	Grams	Bean
3.12	1.03	B+P	2.09	2.09
2.52	0.54	B+P	1.97	1.97
2.72	0.71	B+P	2.01	2.01
2.17	0.67	P+B	1.47	1.47
2.05	0.47	B+P	1.55	1.55
2.46	0.72	P+B	1.72	1.72
1.83	0.36	B+P	1.48	1.48
1.97	0.44	B+P	1.53	1.53
1.55	0.54	P+B	1.00	1.00
2.23	0.66	I.C.	1.54	1.54

13, Four Beans per Pod

Pod	Shucks	Beans		Grams
Grams	Grams	Type	Grams	Bean
7.68	1.15	B+P	6.53	1.63
7.40	1.33	B+P	6.07	1.52
7.20	1.28	B+P	5.92	1.48
9.62	1.91	B+P	7.68	1.92
9.02	2.20	B+P	6.80	1.70
8.50	1.56	B+P	6.93	1.73
7.40	1.25	B+P	6.15	1.54
6.33	1.32	B+P	5.01	1.25
8.09	1.63	B+P	6.44	1.61
8.93	1.81	I.C.	7.12	1.78
7.80	1.86	P+B	5.94	1.49
7.97	1.78	I.C.	6.18	1.55
7.93	1.61	I.C.	6.31	1.58

Sums 22.62 6.14 16.36 16.36 103.87 20.69 83.08 20.78  
 Gm Beans/Gm Shucks 2.67 4.02  
 Gm/Shuck .614 Gm/Bean 1.64 1.590 1.60

4, Two Beans Per Pod

3.89	0.80	B+P	3.08	1.54
5.39	1.25	P+B	4.15	2.08
4.11	1.13	P+B	2.98	1.49
3.69	0.80	I.C.	2.88	1.44

2, Five Beans Per Pod

7.45	1.29	B+P	6.16	1.23
8.31	1.80	B+P	6.48	1.30

Sums 17.08 3.98 13.09 6.55 15.76 3.09 12.64 2.53  
 Gm Beans/Gm Shucks 3.29 4.09  
 Gm/Shuck 0.995 Gm/Bean 1.64 1.545 1.27

3, Three Beans Per Pod

6.07	1.56	P+B	4.48	1.49
5.61	1.34	P+B	4.28	1.42
7.02	1.59	B+P	5.42	1.81

Sums 18.70 4.49 14.18 4.72  
 Gm Beans/Gm Shucks 3.16  
 Gm/Shuck 1.495 Gm/Bean 1.57



Row F, Normal vines (odd numbers), over 4 feet (c), 1963/4

Pod	Shucks	Beans	Grams	Pod	Shucks	Beans	Grams
Grams	Grams	Type	Grams	Grams	Grams	Type	Grams
5, One Bean per Pod							
1.80	0.47	P+B	1.33	4.56	0.88	P+B	3.66
1.09	0.53	P+B	0.53	5.97	1.38	P+B	4.58
1.74	0.36	P+B	1.38	53.73	14.58		39.07
1.58	0.42	P+B	1.17	Gm Beans/Gm Shucks = 2.68			
2.11	0.88	P+B	1.21	Gm/Shuck = 1.46, Gm/Bean = 1.30			
Sum	8.32	2.66	5.62	5.62			

Gm Beans/Gm Shucks = 2.11  
 Gm/Shuck = 0.53, Gm/Bean = 1.12

7, Two Beans per Pod							
3.89	0.89	B+P	3.00	1.50	6.91	1.48	B+P
4.81	1.50	P+B	3.31	1.66	8.69	2.12	P+B
4.14	1.20	P+B	2.92	1.46	5.19	1.93	P+B
4.41	1.09	P+B	3.33	1.67	3.18	0.84	P+B
1.26	0.39	P+B	0.85	0.43	7.18	1.79	P+B
2.96	0.70	P+B	2.24	1.12	50.32	12.97	37.27
4.75	1.22	P+B	3.52	1.76	Gm Beans/Gm Shucks = 2.87		
Sum	26.22	6.99	19.17	9.60	Gm/Shuck = 1.62, Gm/Bean = 1.16		

Gm Beans/Gm Shucks = 2.74  
 Gm/Shuck = 1.00, Gm/Bean = 1.37

10, Three Beans per Pod							
5.43	1.30	B+P	4.13	1.38	8.90	2.50	P+B
5.37	1.19	B+P	4.18	1.39	10.46	2.37	P+B
6.01	1.63	P+B	4.37	1.46	5.57	1.83	P+B
6.12	1.41	P+B	4.70	1.57	8.31	1.60	P+B
6.39	1.99	P+B	4.38	1.46	8.37	1.91	P+B
4.71	1.68	P+B	3.03	1.01	60.88	13.97	47.80
6.53	1.71	P+B	4.74	1.58	Gm Beans/Gm Shucks = 3.42		

8, Four Beans per Pod							
7.01	1.69	B+P	5.30	1.32	Gm/Shuck = 2.00, Gm/Bean = 1.37		
6.10	1.48	B+P	4.61	1.15			
6.06	1.64	B+P	4.41	1.10			
6.91	1.48	B+P	5.43	1.36			
8.69	2.12	P+B	6.57	1.64			
5.19	1.93	P+B	3.24	0.81			
3.18	0.84	P+B	2.32	0.58			
7.18	1.79	P+B	5.39	1.35			
50.32	12.97		37.27	9.31			

7, Five Beans per Pod							
8.76	1.94	B+P	6.80	1.36			
10.51	1.82	B+P	8.67	1.73			
8.90	2.50	P+B	6.36	1.27			
10.46	2.37	P+B	9.10	1.82			
5.57	1.83	P+B	3.73	0.75			
8.31	1.60	P+B	6.70	1.34			
8.37	1.91	P+B	6.44	1.29			
60.88	13.97		47.80	9.56			

2, Six Beans per Pod							
9.07	2.62	P+B	6.44	1.07			
11.44	2.14	P+B	9.30	1.55			

Row F, Reversed vines (even numbers), over 4 feet (C), 1963/4

Pod	Shuck	Beans		Grams	Pod	Shuck	Beans		Grams
Grams	Grams	Type	Grams	Bean	Grams	Grams	Type	Grams	Bean
5, One bean per Pod					5, Four beans per Pod				
1.14	0.33	B+P	0.79	0.79	6.62	1.72	1.C	4.88	1.22
2.81	1.03	P+B	1.78	1.78	7.61	2.18	P+B	5.43	1.36
2.26	0.83	P+B	1.41	1.41	8.80	1.83	P+B	6.96	1.74
2.02	0.55	P+B	1.46	1.46	8.87	2.05	P+B	6.82	1.71
2.15	0.48	P+B	1.64	1.64	7.28	1.64	P+B	5.62	1.41
Sum	10.39		7.08	7.08	39.18	9.42		29.71	7.44

Gm Beans/Gm Shucks = 2.20  
 Gm/Shuck = 0.64, Gm/Bean = 1.42

Gm Beans/Gm Shucks = 3.16  
 Gm/Shuck = 1.88, Gm/Bean = 1.49

4, Two beans per Pod

4.10	1.02	1.C	3.08	1.54
4.03	1.20	P+B	2.81	1.41
4.20	1.02	B+P	3.18	1.59
3.40	0.53	P+B	2.85	1.43

Sum 15.73 3.77 11.92 5.97

Gm Beans/Gm Shucks = 3.16  
 Gm/Shuck = 0.92, Gm/Bean = 1.49

6, Five beans per Pod

9.45	2.15	P+B	7.31	1.46
9.21	1.83	P+B	7.37	1.47
10.42	2.18	B+P	8.24	1.65
8.74	1.40	P+B	7.35	1.47
8.60	1.65	P+B	6.93	1.39
8.77	1.48	P+B	7.29	1.46

55.19 10.69 44.49 8.90

Gm Beans/Gm Shucks = 4.17  
 Gm/Shuck = 1.78, Gm/Bean = 1.48

12, Three beans per Pod

7.23	1.90	P+B	5.32	1.77
6.15	1.71	P+B	4.41	1.47
6.56	1.67	P+B	4.88	1.63
5.68	1.78	P+B	3.88	1.29
4.77	1.42	P+B	3.36	1.12
7.12	1.71	B+P	5.39	1.80
6.98	1.55	P+B	5.41	1.80
5.62	0.90	P+B	4.70	1.57
7.77	2.10	P+B	5.67	1.89
5.43	1.29	B+P	4.15	1.38
5.64	1.49	P+B	4.15	1.38
5.27	1.16	B+P	4.11	1.37

Sum 74.22 18.68 55.43 18.47

1, Seven beans per Pod

11.75	1.96	P+B	9.76	1.40
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Gm Beans/Gm Shucks = 4.99  
 Gm/Shuck = 1.96, Gm/Bean = 1.40

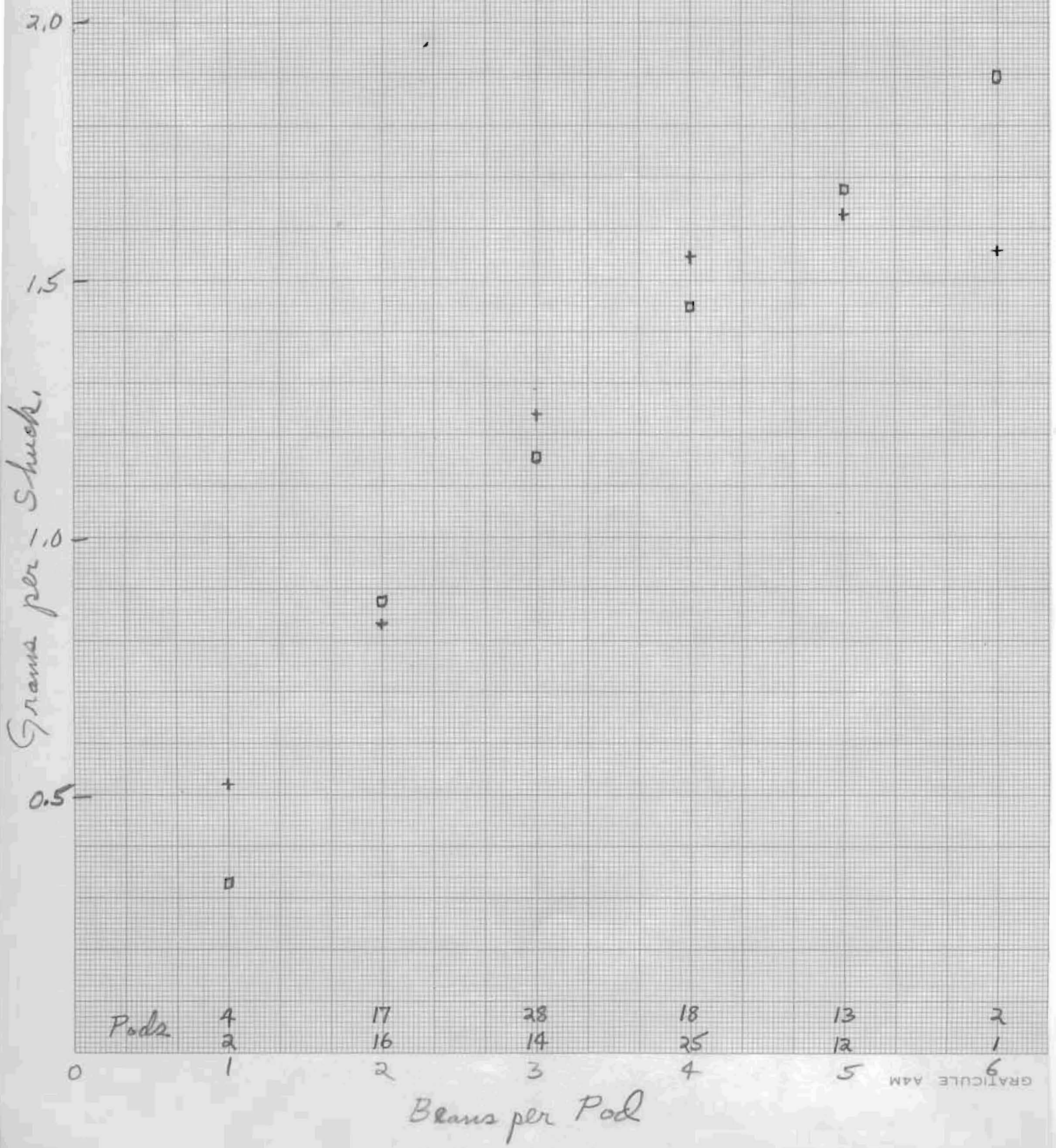


Scarlet Runner, Pink + Black Seed, 1963/4

Row D, Under 1 foot (a)

30/10/64

+ Normal vines, □ Reversed vines.



Pods 4 17 28 18 13 2  
 2 16 14 25 12 1  
 1 2 3 4 5 6

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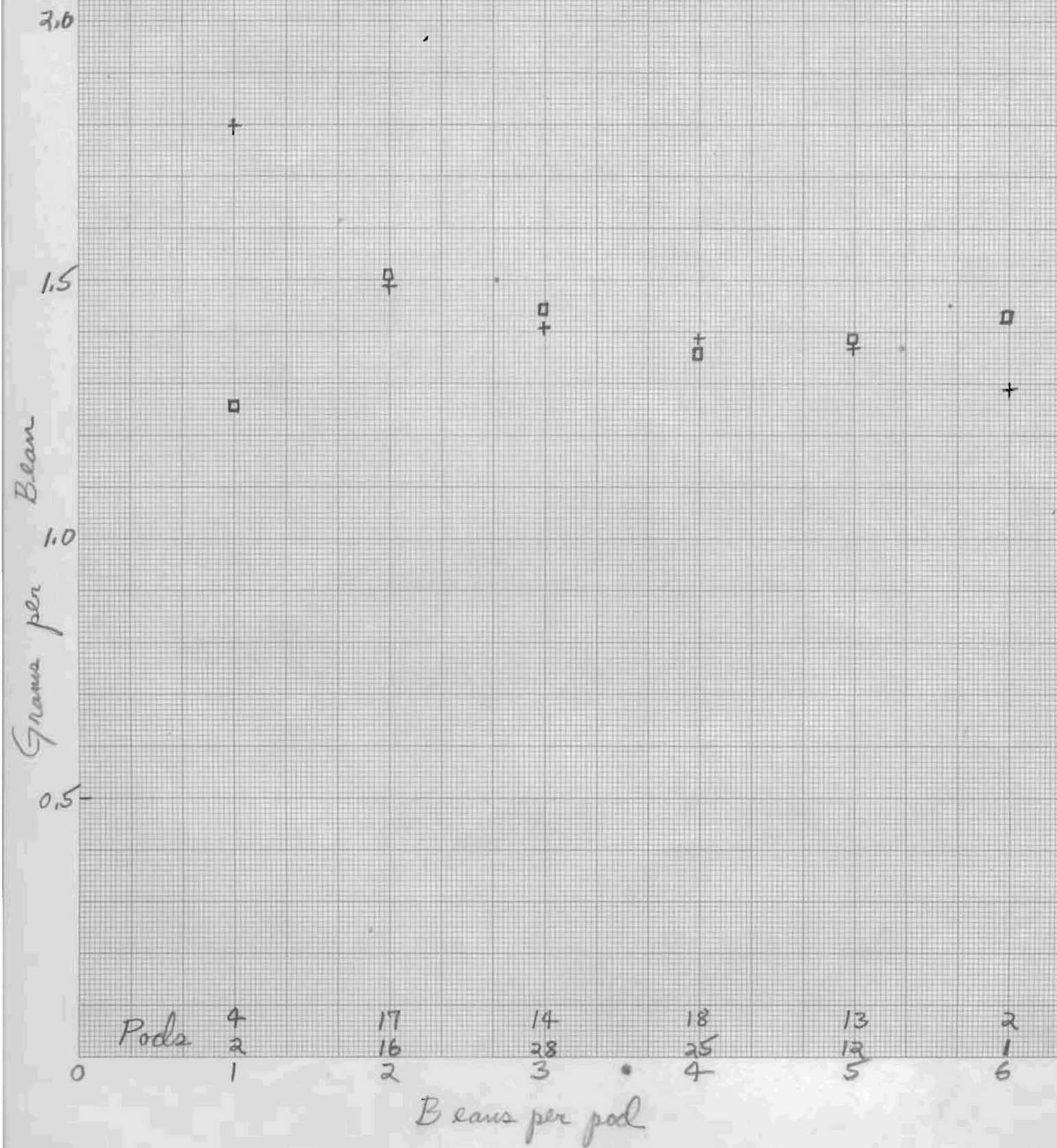
Beans per Pod

Scarlet Runner, Pink + Black Seed, 1963/4

Row D, Under 1 foot (a)

30/10/64

+ Normal vines, □ Reversed vines



Row D, Normal Vines (odd numbers), under 1ft (a), 1963/4

	4 One bean per pod				28 Three beans per pod					
	Pod Grams	Shuck Grams	Beans Type	Beans Grams	Beans Bean	Pod Grams	Shuck Grams	Beans Type	Beans Grams	Beans Bean
	2.12	0.38	B+P	1.72	1.72	6.46	1.32	B+P	5.14	1.71
	2.49	0.62	B+P	1.84	1.84	6.10	1.10	B+P	5.00	1.67
	2.59	0.52	B+P	2.06	2.06	6.47	1.39	B+P	5.07	1.69
	2.20	0.58	B+P	1.59	1.59	5.39	1.18	P+B	4.21	1.40
Sums	9.40	2.10	B+P	7.21	7.21	6.96	1.71	B+P	5.26	1.75
	Gm Beans / Gm Shucks = 3.43					7.61	1.73	B+P	5.86	1.95
	Gm / Shuck = 0.52, Gm / Bean = 1.80					5.03	1.30	P+B	3.72	1.24
						5.65	1.28	P+B	4.38	1.46
	16 Two beans per pod					6.34	1.48	B+P	4.84	1.61
	4.47	0.83	B+P	3.62	1.81	6.28	1.42	B+P	4.85	1.62
	4.38	0.84	B+P	3.50	1.75	6.22	1.32	B+P	4.88	1.63
	4.90	1.15	B+P	3.75	1.88	5.63	1.30	B+P	4.33	1.44
	5.15	1.23	B+P	3.90	1.95	4.45	0.98	B+P	3.47	1.16
	4.62	1.05	B+P	3.57	1.79	5.72	1.20	B+P	4.52	1.51
	4.87	1.05	B+P	3.82	1.91	6.10	1.46	B+P	4.62	1.54
	4.29	0.90	B+P	3.38	1.69	5.70	1.32	B+P	4.39	1.46
	4.18	1.01	B+P	3.17	1.59	5.60	1.24	B+P	4.36	1.45
	4.56	0.81	B+P	3.74	1.87	4.59	1.08	B+P	3.50	1.17
	3.20	0.62	B+P	2.55	1.27	5.25	1.13	B+P	4.12	1.37
	3.70	0.82	B+P	2.85	1.43	5.98	1.53	B+P	4.43	1.48
	4.05	1.05	B+P	3.00	1.50	4.81	1.30	B+P	3.50	1.17
	2.40	0.67	P+B	1.72	0.86	4.89	1.08	B+P	3.82	1.27
	2.08	0.43	B+P	1.63	0.82	3.31	1.18	B+P	2.11	0.70
	2.60	0.44	B+P	2.15	1.08	6.63	1.55	P+B	5.08	1.69
	1.56	0.41	B+P	1.15	0.57	4.32	0.82	P+B	3.48	1.16
Sums	61.01	13.31		47.50	23.77	4.03	0.81	B+P	3.22	1.07
	Gm Beans / Gm Shucks = 3.57					3.43	0.83	B+P	2.58	0.86
	Gm / Shuck = 0.83, Gm / Bean = 1.49					3.75	0.57	B+P	3.18	1.06

Row D, Normal Vines (odd numbers), under 1 ft (a), 1963/4

Pod Shuck		Beans		Grams	Pod Shuck		Beans		Grams
Grams	Grams	Type	Grams	Bean	Grams	Grams	Type	Grams	Bean
Summs. 152.70		34.61		117.92		39.29		12	
Gm Beans / Gm Shucks = 3.41					Five beans per pod				
Gm / Shuck = 1.24, Gm / Bean = 1.41					9.27	1.78	B+P	7.47	1.49
					8.28	1.36	B+P	6.89	1.38
					9.79	1.68	B+P	8.10	1.62
					8.75	1.63	B+P	7.12	1.42
					8.29	1.47	B+P	6.81	1.36
					9.65	2.05	B+P	7.59	1.52
					9.72	1.90	B+P	7.81	1.56
					8.10	1.58	B+P	6.50	1.30
					6.98	1.44	B+P	7.42	1.48
					6.86	1.15	B+P	5.75	1.15
					6.66	1.28	B+P	5.28	1.06
					6.65	1.18	B+P	5.63	1.13
					6.36	1.65	B+P	4.37	1.17
					6.93	1.59	B+P	5.33	1.33
					7.97	1.70	B+P	6.25	1.56
					9.90	2.37	P+B	7.52	1.88
					9.18	2.13	P+B	7.05	1.76
					8.36	1.88	P+B	6.47	1.62
					6.19	1.07	B+P	5.11	1.28
					5.58	1.17	B+P	4.42	1.11
					5.57	1.10	B+P	4.47	1.12
					4.52	0.93	B+P	3.60	0.90
Summs. 128.43		27.88		100.45		25.13		1	
Gm Beans / Gm Shucks = 3.60					Six beans per pod				
Gm / Shuck = 1.55, Gm / Bean = 1.39					9.33	1.56	B+P	7.75	1.29
					Gm Bean / Gm Shucks = 4.97				
					Gm / Shuck = 1.56, Gm / Bean = 1.29				

Row D, Reversed Vines (even numbers), under 1 ft (a), 1963/4

	Pod	Shuck	Beans		Grams	Pod	Shuck	Beans		Grams
	Grams	Grams	Type	Grams	Bean	Grams	Grams	Type	Grams	Bean
	2	One	bean per pod			14	Three	beans per pod		
	1.46	0.34	B+P	1.12	1.12	6.77	1.26	B+P	5.51	1.84
	1.71	0.31	B+P	1.40	1.40	5.13	0.72	B+P	4.39	1.46
Sum	3.17	0.65	B+P	2.52	2.52	5.33	0.95	B+P	4.37	1.46
	Gm beans/Gm Shuck = 3.88					4.71	1.23	B+P	3.49	1.16
	Gm/Shuck = 0.33, Gm/bean = 1.26					4.49	0.86	B+P	3.62	1.21
						4.85	1.37	B+P	3.49	1.16
	17 Two beans per pod					4.16	0.89	I.C.	3.25	1.08
	3.32	0.56	B+P	2.74	1.37	5.65	1.11	P+B	4.54	1.51
	4.49	1.09	B+P	3.41	1.71	5.74	1.19	B+P	4.55	1.52
	3.44	0.72	B+P	2.70	1.35	4.99	1.12	B+P	3.87	1.29
	2.78	0.72	P+B	2.06	1.03	6.18	1.27	B+P	4.90	1.63
	2.73	0.51	P+B	2.23	1.12	6.50	1.75	B+P	4.74	1.58
	4.07	0.77	P+B	3.28	1.64	5.81	1.29	P+B	4.52	1.51
	3.98	0.77	P+B	3.20	1.60	6.27	1.17	P+B	5.10	1.70
	3.11	0.65	B+P	2.45	1.22	76.57	16.18		60.34	20.11
	4.68	1.25	P+B	3.44	1.72	Gm beans/Gm Shuck = 3.73				
	3.27	0.69	B+P	2.56	1.28	Gm/Shuck = 1.16, Gm/bean = 1.44				
	5.51	1.40	P+B	4.11	2.06					
	4.50	0.98	P+B	3.52	1.76					
	3.97	0.85	P+B	3.11	1.55					
	4.40	0.97	P+B	3.42	1.71					
	3.61	0.73	P+B	2.87	1.44					
	4.20	0.89	P+B	3.30	1.65					
	4.21	1.40	P+B	2.79	1.39					
Sum	66.27	14.95		51.19	25.60					
	Gm beans/Gm shuck = 3.42									
	Gm/Shuck = 0.88, Gm/bean = 1.51									



Row D, Reversed Vines (even numbers), under 1 ft. (a), 1963/4

Four beans per pod					Five beans per pod				
Pod Grams	Shuck Grams	Beans Type	Beans Grams	Beans Bean	Pod Grams	Shuck Grams	Beans Type	Beans Grams	Beans Bean
8.05	1.58	B+P	6.45	1.61	9.64	1.65	B+P	7.99	1.60
8.14	1.48	B+P	6.64	1.66	9.81	1.62	B+P	8.19	1.64
7.69	1.33	B+P	6.36	1.59	7.90	1.44	B+P	6.47	1.29
7.35	1.35	B+P	6.00	1.50	6.97	1.45	B+P	5.51	1.10
6.08	1.18	B+P	4.89	1.22	4.59	1.05	B+P	3.54	0.71
7.99	1.44	B+P	6.56	1.64	9.58	1.84	B+P	7.74	1.55
4.69	0.63	P+B	4.05	1.01	9.84	1.75	B+P	8.08	1.62
6.51	1.62	B+P	4.88	1.22	9.40	1.89	B+P	7.48	1.50
6.22	1.36	B+P	4.86	1.21	8.51	1.52	P+B	6.97	1.39
8.67	1.73	B+P	6.92	1.73	8.20	2.17	B+P	6.02	1.20
8.70	1.81	B+P	6.87	1.72	6.18	1.43	B+P	4.72	0.94
7.30	1.38	P+B	5.90	1.48	10.52	2.08	B+P	8.48	1.70
6.17	1.00	P+B	5.17	1.29	10.07	2.00	P+B	8.07	1.62
4.81	1.39	B+P	3.42	0.86	119.11	21.89		89.26	17.86
6.47	1.50	B+P	4.97	1.24	Gm beans/Gm Shucks = 4.08				
7.44	1.95	B+P	5.47	1.37	Gm/shuck = 1.68, Gm/bean = 1.38				
5.80	1.35	B+P	4.46	1.12					
6.19	1.23	B+P	4.94	1.23	2 Six beans per pod				
6.95	1.56	B+P	5.37	1.34	8.97	1.62	B+P	7.35	1.23
6.45	1.45	B+P	5.00	1.25	12.01	2.19	B+P	9.79	1.63
5.86	1.42	B+P	4.44	1.11	20.98	3.81		17.14	2.86
5.93	1.37	B+P	4.55	1.14	Gm beans/Gm Shucks 4.50				
7.22	1.45	B+P	5.75	1.44	Gm/shuck = 1.90, Gm/bean = 1.43				
7.52	1.71	P+B	5.79	1.45					
8.43	1.83	B+P	6.58	1.65					

Sum 172.62 36.10 136.29 34.08  
 Gm beans/Gm shucks = 3.78  
 Gm/shuck = 1.45, Gm/bean = 1.36

## Inverted Colour Beans

An attempt was made to accentuate the percentage of Hawaiian inverted colour beans. The standard and <sup>1st year</sup> I.C. seeds of 1961/2 were derived from crop of 1959. The vines grown from I.C. seed were quite similar to vines grown from standard seed. However the former did not grow as tall as the latter. The gross percentage of I.C. beans on vines grown from standard seed is ~~substantially~~ <sup>nearly</sup> the same for 1961/2 and 1959. The 1961/2 gross percentage I.C. beans on vines grown from <sup>1st year</sup> I.C. seed is about one quarter greater than on vines grown from standard seed <sup>(2.82)</sup> <sup>(2.56) for</sup> <sup>(3.50)</sup> <sup>(2.82)</sup>.

The first year I.C. seed of 1962/3 was beans of vines grown from standard seed 1961/2. The standard and second year I.C. seed of 1962/3 <sup>were</sup> beans of vines grown from I.C. seed 1961/2. The gross percentage I.C. beans on vines grown from standard seed more than doubled, and on vines from I.C. seed increased by one third. The expected enhancement of I.C. beans occurred more pronounced on vines grown from standard than from I.C. seed. Repeated selection of I.C. beans for seed of vines grown from I.C. seed decreases the prevalence of I.C. beans. 1962/3 gross percentages are 6.38 (standard), 4.76 (first year I.C.), 1.92 (second year I.C.). Repeated selection of standard beans for seed of vines grown from I.C. seed apparently increases the prevalence of I.C. beans.

X-Raying the dry seed reduces the plants ability to make I.C. beans.

Similar efforts using Scarlet Runner were unsatisfactory. This is a rather poorer plant to work with.

In all cases the reversed vines produced ~~1/2~~ <sup>nearly</sup> twice the percentage more I.C. beans than the normal vines.

~~1/2~~ <sup>1/2</sup> Details are in table II.

The standard seed of 1962/3 was derived from 1961/2 vines grown from 1959 I.C. beans.