Report to the Oregon Processed Vegetable Commission
2008–2009

1. Title: Green Bean Breeding and Evaluation

2. Project Leaders: James R. Myers, Horticulture

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4. Project Status: Terminating 30 June, 2009

5. Project Funding:

$41459	breeding
$10,818	processing
$52,277	total

Breeding funds were used for a major portion of the support of a vegetable breeding technician, student labor, supplies, and research farm expenses. Processing funds were used for processing samples of experimental beans, laboratory analysis, and for student labor.

6. Objective: Breed improved Bush Blue Lake green bean varieties with:
   a. White and gray mold resistance
   b. Improved plant architecture
   c. High economic yield
   d. Improved pod quality (including straightness, color, smoothness, texture, flavor and quality retention, and delayed seed size development)

7. Report of Progress:

Varietal Development: The program continued with screening and selection in crosses among elite lines and commercial cultivars of green bean for varietal development. Much of our current focus is on incorporating white mold resistance into a BBL background. Additional selections from OSU x OSU crosses were advanced and increased for replicated trials. Advanced lines were screened in replicated white mold field nurseries. Two interspecific backcross inbred populations with white mold resistance from scarlet runner bean were screened in a field nursery, and mapping of molecular markers continues for these populations. Breeding lines were evaluated for root resistance in a field on the Vegetable Research Farm. Seed increase, roguing, and sub-line maintenance of the most promising lines was pursued aggressively this year. Growing conditions were generally good throughout the season although we had a cold start to the year. A mid August rain event brought on the white mold, and although it was not a significant problem in our yield trials this year, it did give us good disease pressure in our white mold nurseries, but increased the difficulty in seed harvest. In the past, we have not used fungicides to control this disease in plots where it is not wanted, but disease pressure over the past two years has built to the point where this may be necessary to obtain sufficient quantities of high quality seed for generation advance.

Background of green bean advanced breeding lines evaluated in trials at Corvallis in 2008	
Line No.	**Genetic background**
6137 – 6189	Minuette x Bush Blue Lake (BBL) crosses for improved architecture
6286 – 6393	Ascher DRK x BBL crosses to introgress WM resistance
6438 - 6502	B7354-6-2-2 x BBL crosses to introgress WM resistance. Origin of resistance appears to have been from *P. coccineus* from interspecific lines developed by D. Mok
6512 – 6552	Crosses between 5996 and BBL lines. 5996 possesses persistent color derived from Hypak.
6556 – 6595	Crosses between 5996 and Minuette derived architectural lines.
6599 – 6602	SB4247 x BBL crosses where SB4247 is a Rogers Brothers line with BBL traits combined with upright architecture
811/43-4 – 903/20-2	Interspecific backcross-inbred lines derived from a cross between 91G and PI 255956 white mold resistance *P. coccineus*

Yield Trials: We retained our current nursery structure of preliminary trials and a single advanced trial consisting mostly of commercial varieties for trial along with the most promising OSU lines. The two preliminary trials were planted May 29 and June 12, and the commercial yield trial, partially funded by seed companies, was planted June 25. Entries from one preliminary trial and those paid for by sponsoring seed companies in the commercial trial were processed at the OSU Pilot Plant for subsequent product evaluation. Preliminary trials had 60 full sieve and 16 small sieve experimental lines, with five check cultivars.

Both preliminary trials had good growing conditions and showed reasonable yields (Tables 1 & 2, 5 & 6). Grading room notes are in tables 3 & 4, 7 & 8. The text table above shows the experimental line number and the parents involved in the cross. The B7354-6-2-2 parent is a very low vigor, non productive BBL line that showed high levels of white mold resistance in our trials. Surprisingly, it is a good combiner in producing some of the highest yielding lines in the program. With increased vigor and biomass, these lines do not appear to possess significant levels of white mold resistance. OSU 6443 is perhaps the most outstanding performer in this group. It is similar in maturity to OR 54 but has had higher yield over the years it has been tested, and has very nice processing quality (see text table left). Lines from this group with similar performance are OSU 6501 and 6502. The 6512 – 6595 series involves crosses to OSU 5996, a breeding line with high quality persistent color pods, but lower yields and germination problems associated with the persistent color trait. Unfortunately, most of this material is lower yielding although there are a few lines (OSU 6530, 6531, and 6564) with yields similar to OR 91G. We will do substantial cullng of this group after 2009 as much of this material is being tested for the first year. From the SB4247 crosses, 6602 may have potential, but is again in its first year of testing. We also included eight

Three year average for selected OSU full sieve lines and checks

	Adjusted T/A[z]			
Line	2006	2007	2008	Overall AV
OR 91G	12.1	8.7	9.5	10.1
OR 54	10.7	11.0	11.5	11.0
5630	12.9	12.0	11.4	12.1
5669	10.4	10.6	9.7	10.2
6137	10.5	11.0	13.7	11.7
6189	9.4	10.0	9.4	9.6
6439	12.5	10.5	10.8	11.2
6440	11.8	10.9	12.0	11.5
6443	12.3	12.2	13.4	12.6
6463	8.8	10.7	11.9	10.5
6471	9.7	13.1	13.4	12.0
6479	12.5	12.1	11.2	11.9
6481	10.9	13.0	12.3	12.0
6493	9.2	12.3	12.5	11.3
6501	10.7	12.8	12.0	11.8
LSD 0.05	NS	3.0	NS	2.0

[z]Average of 2 trials per year; NS = not significant

of the lines developed from interspecific crosses with runner bean to bring in exotic sources of white mold resistance. These lines constitute the best material for white mold resistance from this population. As a group, they were not particularly high yielding, did not have the best quality, and showed some instability. It is unlikely that they will be useful directly as a cultivar but should prove valuable in transferring high levels of resistance into a more acceptable background.

Three year average for selected OSU small sieve lines and checks

	T/A[z]			
Line	2006	2007	2008	Over-all AV
6340	9.3	7.8	9.0	8.7
6442	8.8	10.3	9.2	9.4
6496	8.6	10.0	9.5	9.4
Savannah	5.5	8.8	8.4	7.5
LSD 0.05	3.4	NS	NS	2.0

[z]Average of 2 trials per year; NS = not significant

In the May 29 trial, 12 full sieve lines yielded significantly more than OR 91G, while in the June 12 trial, yield of OR 91G was only 7.1 T/A, while yield of experimental lines was higher resulting in all but four experimental lines yielding more than OR 91G (Table 5). Most experimental small sieve lines are in the 4 or 4-5 sieve category. Yields compared favorably to the check (Savannah) in the first trial with six having significantly higher yields (Table 6). In the second trial, Savannah yields were 10.3 T/A, and none of the experimental lines were significantly higher (Table 6). Over the past three years, three experimental lines continue to perform well. These are OSU 6340, 6442, and 6496 (text table above).

Indio Winter Nursery: Fifty nine checks and advanced lines, and 75 single pod descent (SPD) populations were sent to Indio, CA for evaluation (advanced lines) and generation advance (SPD lines). The nursery was planted on January 26 and harvested in mid-May. We were able to obtain information on performance under heat stress with a number of lines identified with partial heat tolerance (Table 9). Nearly all of the SDP lines are from crosses to the NY6020 source of white mold resistance. One pod per plant was collected from the SDP lines and returned to Oregon for planting in June. Over the past several years, we have had trials in both Hermiston, OR and Indio where we have been able to evaluate heat stress. With our current resources, we cannot do both trials in one season. Overall, the Indio trial is most preferable since we can obtain both data and obtain an off-season generation advance at this location. It is challenging, however, to get seed ready for the Indio trial following the fall harvest in Oregon.

Commercial Green Bean Trial: The commercial trial consisted of 21 entries from five seed companies, four checks, and one OSU experimental line (Tables 10 – 12, Figures 1 & 2). Savannah, from Harris Moran, was included as a small sieve check. Highest yielding among the full sieve entries was Huntington. This entry also has many BBL traits, but pod color may be too light to blend with OR 91G. This was the observation in the grading room, but needs to be assessed in processed material. One four sieve bean (BSC8577) had significantly higher yields than Savannah, and at 8 T/A, Selecta seemed to have relatively high yields for a very fine type (two sieve) bean. Seven entries in this trial were from South Africa. These generally showed high biomass production, which may represent adaptation to a lower fertility regime. Best of this group was BB 594.

Fusarium Root Rot Nursery: Two sets of material comprising 59 experimental lines and 81 advanced lines were screened in a root rot nursery. Trial was planted on June 20 with

two replications and plots were evaluated during September and October when plants were physiologically mature. Our most resistant check is a viny small seeded black accession (RR6950) which had an average score of 2.5 (Tables 13 & 14). The susceptible check is OSU 5446. No experimental line had levels of resistance similar to the resistant check, and only three had significantly better resistance than OR 91G. Twenty-seven lines had significantly better resistance than OSU 5446. For advanced lines, none had resistance comparable to RR6950, but 68 had significantly better resistance compared to OSU 5446. Next year, we will have a mapping population from the cross RR6950 x OSU 5446 to evaluate, and expect to start generating lines with much higher levels of resistance.

Breeding for White and Gray Mold Resistance: Disease pressure was extremely high beginning the latter part of August and continuing through September and October. A white mold trial was grown at the Vegetable Research Farm (Table 15) to evaluate advanced breeding lines. Incidence in most material was 100%, so we focused on severity, and an index calculated on incidence x severity. Most resistant material was again the standard checks, particularly NY6020 and G122. Ranking closely to these were several of the 91G x PI 255956 backcross inbred materials (800 & 900 numbers) Interestingly, several of the 5996 x Minuette derived line crosses showed moderate levels of resistance again this year (Table 15, entries 6554, and 6560) White mold index and lodging was highly correlated this year, but yield and white mold index and yield and lodging were not (text table, left). In a comparison of lines over two years (Table 16), the best experimental lines were 904/20-3, 6235 (resistance derived from NY6020), and several 6500 series lines. We have not yet had 904/20-3 in yield trials, (amount of seed has been limiting) but expect this to occur in 2009. Two lines that have been tested in yield trials that performed well in the white mold resistance trial were 853/6-9 and 861/13-14 (Table 16).

Correlations among white mold and yield variables for a white mold field screening trial, Corvallis, 2008.

	Yield	Lodging
White Mold Index	-0.049	0.229***
Yield		-0.003

***statistically significant at $p<0.0001$.

Molecular mapping to transfer resistance from Phaseolus coccineus *to* P. vulgaris: The best source of resistance to white mold resides in the related bean species, *P. coccineus* or scarlet runner bean. We have been developing backcross-inbred populations as a means of transferring resistance while regaining the snap bean type as rapidly as possible. One population (91G x PI255956) has been completed and four QTL for resistance were discovered. Approximately eight lines with significant levels of white mold resistance in a BBL background have been identified. The QTL needs to be confirmed through the evaluation of additional populations. To that end, the 91G x PI 433251B and M0162 x PI 433251B populations were advanced to the BC_2F_5 generation in the greenhouse in the spring of 2008 and to the BC_2F_6 generation in the field during the summer of 2008. An unreplicated field trial was performed, due to seed limitations, during the summer of 2008 on theBC_2F_5 generation. A straw test was performed on the remaining seed from the BC_2F_5 generation also during the summer of 2008 in the greenhouse. A second straw test was planted on 24 November 2008 to evaluate the BC_2F_6 generation. DNA was extracted from BC_2F_4 plants in the greenhouse during the spring of 2008. Parent lines were

screened with 172 SSR primers, 76 of which were found to be polymorphic on 3% agarose gel. Primers that amplified but did not appear polymorphic will be rescreened on polyacylamide gel during the winter of 2008-2009. The primers that showed polymorphism large enough to be detected on agarose gels are currently being scored on the entire population, with approximately 30 primers completed. RAPD primers were also screened on parental lines to check for polymorphism; 169 of the 250 primers screened so far have shown polymorphism. None of the RAPD primers have been scored on the entire population to date. Primers for candidate genes have also been developed and preliminary screening on parental lines shows polymorphism in 7. These include genes for a WRKY transcription factor, chitinase, phosphatase-2-C, defensin, COS1 (a histindine kinase involved in hyphal development), lippoxygenase and phenylalanine ammonia lyase.

8. Summary:

We continued to emphasize breeding for white mold resistance in 2008. As such, we focused on preliminary yield and quality trials where we could evaluate larger numbers of lines. Two preliminary trials were conducted, and an advanced trial of commercial entries was evaluated. OSU 6400 and 6500 series lines look very good for yield and processing quality, and some have partial white mold resistance. White mold pressure was severe in all but the mid season trial and we were able to obtain useful data on most of our breeding material. To date, we have identified some lines that are fairly close to a BBL type with partial resistance to white mold, but additional refinement is required. Our best full sieve candidate for release is OSU 6443.

Table 1. Performance of preliminary full sieve green bean lines, May 29 planting, Corvallis, 2008.[z]

Line	Days to Harvest	Est. Sieve Size	Stand	Percent Sieve Size[y] 1	2	3	4	5	6	%1-4 Sieve	Av Tons/Acre	Av Adj Tons/Acre[x]
91G	67	full	150	2.7	5.5	11.8	40.0	38.2	1.8	60.0	10.3	11.3
OR 54	70	full	150	1.5	4.5	11.4	31.1	43.9	7.6	48.5	12.1	12.0
5630	68	full	150	3.6	3.6	10.0	33.6	42.7	6.4	50.9	9.6	9.7
5669	69	full	143	4.2	7.3	11.5	31.3	39.6	6.3	54.2	8.7	9.0
6137	69	full	150	1.6	4.7	20.3	31.3	28.9	13.3	57.8	10.6	11.5
6174	70	5	150	3.3	7.6	13.0	31.5	35.9	8.7	55.4	8.4	8.9
6189	68	full	146	2.7	9.6	16.4	27.4	31.5	12.3	56.2	7.1	7.6
6286	67	5	149	3.0	7.9	12.9	33.7	33.7	8.9	57.4	9.3	10.0
6348	64	5	150	8.7	17.4	17.4	40.6	14.5	1.4	84.1	6.7	9.0
6393	70	5	150	3.0	7.1	13.1	32.3	37.4	7.1	55.6	8.6	9.1
6438	69	5	150	1.8	6.2	11.5	38.9	36.3	5.3	58.4	10.2	11.0
6439	69	5	150	4.2	7.5	12.5	35.8	35.8	4.2	60.0	11.0	12.1
6440	70	5	150	4.2	6.8	11.9	33.1	37.3	6.8	55.9	11.0	11.6
6443	70	full	145	4.2	7.6	13.6	36.4	34.7	3.4	61.9	11.0	12.4
6456	70	full	150	3.8	3.8	7.5	33.1	47.4	4.5	48.1	11.7	11.5
6463	70	5	150	2.3	5.4	10.0	30.8	46.2	5.4	48.5	11.7	11.6
6471	69	full	150	5.9	6.9	15.8	44.6	25.7	1.0	73.3	9.2	11.3
6479	70	5	150	2.9	5.8	10.1	33.8	40.3	7.2	52.5	12.0	12.4
6481	69	5	150	4.9	8.8	21.6	46.1	17.6	1.0	81.4	9.5	12.4
6493	71	full	150	0.8	4.2	8.5	33.1	47.5	5.9	46.6	10.6	10.3
6494	70	full	145	3.6	5.0	10.7	38.6	37.9	4.3	57.9	12.3	13.2
6501	70	5	144	5.0	7.4	13.2	39.7	30.6	4.1	65.3	10.7	12.3
6502	71	5	150	3.7	3.7	8.1	38.5	40.7	5.2	54.1	12.1	12.6
6512	68	full	149	7.3	6.3	10.4	26.0	33.3	16.7	50.0	8.5	8.5
6515	68	full	144	4.2	5.6	12.5	36.1	33.3	8.3	58.3	6.4	7.0
6517	64	full	98	5.1	8.5	11.9	39.0	25.4	10.2	64.4	5.1	5.9
6525	69	full	136	6.5	10.4	10.4	24.7	31.2	16.9	51.9	7.7	7.8
6527	70	full	89	6.5	6.5	10.4	28.6	35.1	13.0	51.9	7.6	7.7
6530	71	full	115	4.0	4.0	10.5	34.7	38.7	8.1	53.2	11.3	11.6
6531	71	5	150	5.0	5.0	10.9	41.6	35.6	2.0	62.4	9.0	10.0
6534	71	5	129	3.7	4.9	9.9	39.5	37.0	4.9	58.0	7.1	7.7
6535	70	full	124	2.9	5.8	9.6	25.0	37.5	19.2	43.3	9.2	8.6
6538	69	full	127	4.2	6.3	6.3	24.0	36.5	22.9	40.6	9.1	8.3
6541	69	5	142	2.1	6.3	12.5	33.3	38.5	7.3	54.2	8.6	9.0
6544	71	full	138	2.8	4.6	11.0	26.6	43.1	11.9	45.0	9.7	9.3
6545	67	full	141	5.8	5.8	15.4	34.6	30.8	7.7	61.5	5.5	6.1
6546	67	full	131	6.7	5.6	11.2	32.6	37.1	6.7	56.2	8.3	8.8
6550	67	5	89	9.6	13.5	13.5	23.1	28.8	11.5	59.6	4.8	5.3
6551	70	5	135	2.3	6.8	15.9	44.3	27.3	3.4	69.3	7.7	9.2
6552	67	5	103	5.2	12.1	13.8	34.5	27.6	6.9	65.5	5.0	5.8
6556	69	full	134	3.0	7.5	11.9	28.4	32.8	16.4	50.7	6.3	6.3
6557	71	5	150	2.3	5.7	10.2	39.8	38.6	3.4	58.0	8.2	8.8
6560	71	5	136	2.6	3.8	14.1	44.9	29.5	5.1	65.4	7.7	8.8
6561	70	full	116	3.8	7.5	13.8	30.0	33.8	11.3	55.0	7.6	7.9
6564	68	5	145	6.2	9.3	15.5	36.1	28.9	4.1	67.0	8.5	10.0
6566	71	full	76	4.9	3.9	4.9	32.4	33.3	20.6	46.1	7.9	7.6

Table 1. Performance of preliminary full sieve green bean lines, May 29 planting, Corvallis, 2008 (cont.)[z]

Line	Days to Harvest	Est. Sieve Size	Stand	Percent Sieve Size[y] 1	2	3	4	5	6	%1-4 Sieve	Av Tons/Acre	Av Adj Tons/Acre[x]
6567	69	5	92	3.1	7.7	12.3	38.5	30.8	7.7	61.5	6.0	6.7
6569	71	5	116	3.5	5.9	11.8	50.6	27.1	1.2	71.8	8.0	9.8
6573	69	full	150	3.4	4.5	12.4	43.8	33.7	2.2	64.0	8.4	9.6
6575	71	full	150	1.0	4.2	7.3	24.0	41.7	21.9	36.5	8.9	7.7
6576	71	full	148	2.5	6.2	9.9	27.2	35.8	18.5	45.7	7.5	7.2
6581	71	full	150	2.6	9.0	16.7	42.3	24.4	5.1	70.5	7.1	8.6
6594	71	5	96	11.7	10.0	18.3	33.3	23.3	3.3	73.3	5.5	6.7
6595	70	full	132	2.9	5.8	11.5	38.5	35.6	5.8	58.7	9.7	10.6
6599	68	full	143	5.9	6.9	9.9	20.8	29.7	26.7	43.6	9.2	8.7
6600	69	full	150	2.9	8.6	7.1	15.7	28.6	37.1	34.3	6.5	5.5
6602	71	full	150	2.5	4.1	9.1	34.7	42.1	7.4	50.4	11.0	11.0
811/43-4	71	full	150	2.0	4.1	7.1	25.5	48.0	13.3	38.8	9.4	8.4
826/48-3	69	full	150	4.5	9.1	18.2	26.1	29.5	12.5	58.0	7.8	8.5
828/48-5	69	full	150	8.1	6.8	12.2	24.3	39.2	9.5	51.4	7.0	7.1
836/3-15	68	full	150	2.4	6.1	12.2	30.5	41.5	7.3	51.2	7.4	7.5
853/6-9	71	full	148	4.5	4.5	7.6	19.7	34.8	28.8	36.4	6.3	5.4
861/13-14	69	full	150	2.9	4.4	7.4	16.2	38.2	30.9	30.9	5.8	4.7
903/20-2	71	full	133	6.1	7.6	12.1	22.7	34.8	16.7	48.5	6.1	6.0
LSD 0.05			21								2.3	2.4

[z]Mean of 2 replications; subplots of 5' were harvested from 20' plots in rows 30" apart.
[y]Percent calculated as % of total of 1-6 sieve beans.
[x]Tons/Acre adjusted to 50% 1-4 sieve.

Table 2. Performance of preliminary small sieve green bean lines, May 29 planting, Corvallis, 2008.[z]

Line	Days to Harvest	Est. Sieve Size	Stand	Percent Sieve Size[y]						%1-4 Sieve	Av Tons/Acre
				1	2	3	4	5	6		
6241	67	4-5	150	4.7	10.9	17.2	34.4	29.7	3.1	67.2	6.0
6329	64	4	138	14.1	25.0	21.9	31.3	6.3	1.6	92.2	5.7
6340	69	4-5	146	3.0	7.0	14.0	37.0	33.0	6.0	61.0	9.2
6442	68	4-5	150	5.7	11.4	17.1	38.1	25.7	1.9	72.4	9.4
6464	68	4-5	86	6.9	9.2	14.9	32.2	33.3	3.4	63.2	7.9
6496	69	4-5	143	5.2	7.8	20.0	42.6	23.5	0.9	75.7	10.8
6528	71	4-5	132	1.1	5.7	13.8	49.4	28.7	1.1	70.1	8.1
6533	67	4-5	128	5.5	12.3	19.2	37.0	24.7	1.4	74.0	6.7
6537	67	4-5	106	4.2	8.3	18.1	38.9	23.6	6.9	69.4	6.8
6549	70	4-5	106	6.6	11.8	21.1	42.1	17.1	1.3	81.6	6.7
6553	71	4-5	142	4.1	7.1	15.3	42.9	27.6	3.1	69.4	8.9
6555	69	4-5	71	5.2	8.6	20.7	41.4	22.4	1.7	75.9	5.6
6574	71	4-5	144	3.4	10.3	20.7	48.3	17.2	0.0	82.8	5.6
846/6-3	68	4	142	7.0	14.1	22.5	32.4	18.3	5.6	76.1	6.3
Savannah	71	4	150	17.9	19.2	34.6	26.9	1.3	0.0	98.7	6.4
LSD 0.05			26								1.5

[z]Mean of 2 replications; subplots of 5' were harvested from 20' plots in rows 30" apart.
[y]Percent calculated as % of total of 1-6 sieve beans.

Table 3. Notes on preliminary full sieve green bean lines, May 29 planting, Corvallis, 2008.[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
91G	16.0	5	round	5	5	5	7	7	Split set with seedy 6 sv
OR 54	15.5	6	round	5	5	7	7	7	Attractive and high yielding in this trial
5630	16.0	5	round	7	5	7	7	7	Nicer appearance than 91G.
5669	15.0	7	round	7	6	7	5	7	Pods tend to be short in this trial with some blanking.
6137	17.0	5	round/ oval mix	5	7	3	7	3	Bad oval mix. Not sent for processing
6174	14.5	6	round	7	5	7	5	7	Grading out full sieve when 4-5 sv expected. No obvious mixes.
6189	16.5	7	round	7	6	7	5	7	Very attractive bean; long straight smooth dark green pods. Shows battering in the grader.
6286	14.5	5	round	5	5	3	5	5	Somewhat junky; variable pod length, some blanking & pollywogs
6348	14.0	7	round	7	4	8	3	3	Strong floral flavor
6393	15.5	3	round	4	5	5	7	5	Contains oval stringy mix. Pods have zigzag shape.
6438	15.5	6	round	5	5	7	7	7	Contains a long podded stringy OT.
6439	15.5	5	round	5	5	7	5	7	Slight floral flavor. Oval mix.
6440	15.5	8	round	6	5	7	5	7	Contains a 4 sv light colored stringy oval mix.
6443	15.0	7	round	7	6	7	5	7	Straight, smooth pods
6456	15.5	7	round	6	5	5	5	7	Some very long pods in this line.
6463	15.0	7	round	7	6	5	8	7	Bitter edge to flavor. Fairly attractive but somewhat short pods.
6479	14.5	8	round	8	5	7	7	7	This line impressive in its uniformity. May have oval OT but otherwise very uniform.
6481	14.5	7	heart	5	5	7	5	7	Slight floral flavor. Oval tendency and flat mix. May be a bit young but does not grade properly because of mix.
6493	15.0	5	round	7	5	7	7	7	Oval mix.
6494	15.0	7	round	5	5	5	5	7	
6501	15.0	7	round	7	5	5	5	7	May have oval tendency.
6502	15.0	5	round	5	5	5	5	7	Segregating ovals.

Table 3. Notes on preliminary full sieve green bean lines, May 29 planting, Corvallis, 2008 (cont).[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
6512	20.0	7	round	4	6	5	5	7	Extraordinarily long, straight pods Mix of extreme green with normal green. Very little seed dev in any sieve size.
6515	16.5	6	round to cb	8	8	5	9	7	Bitter edge to flavor. Pc type; pods fairly straight in lower sieves but 6 sv very curved.
6517	15.0	6	cb	7	7	5	5	7	Nice color and appearance.
6525	15.0	5	round	5	5	8	5	7	
6527	14.5	7	mix of round & oval	4	8	7	5	7	Almost all the 4, 5 & 6 sv are oval, 3 sv is a mix of round and oval. Not sent for processing. Very dark green pods.
6528	14.0	5	round	7	6	7	5	7	Long slender pods but curved, especially in 6 sv; slight floral note to flavor. Segregating pc.
6530	15.5	6	round	5	6	7	5	7	Pc type; good yield.
6531	15.0	7	oval	7	5	7	5	7	Strong floral note. Oval curved pods.
6534	14.5	4	round	7	6	7	3	7	Tendency to heart shape
6535	15.0	7	round	7	8	7	7	7	Very attractive pc type. Little seed dev in any sieve size.
6538	17.0	5	mix of round & oval	5	5	7	7	7	Very large pods and would probably go to 30% 1-4 sv or lower. May contain an oval mix; some pods rather junky.
6541	16.0	8	round	6	5	7	5	7	
6544	14.5	4	round to cb	5	5	7	9	5	Contains a more slender, darker green mix; strong floral note; curve tendency especially In 6 sv.
6545	15.5	5	round	5	5	5	7	5	Mix of iw and ig and different pod types - long slender & short with round seeds. Doesn't seem to have any exceptional qualities to justify cleaning up.
6546	14.5	7	round	8	5	7	7	5	Segregating for strings. Very smooth attractive ap-pearance; color might be slightly lighter than 91G.

Table 3. Notes on preliminary full sieve green bean lines, May 29 planting, Corvallis, 2008 (cont).[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
6550	14.0	6	mix of round & oval	4	7	7	5	7	Short, rather rough pods with blanks & pollywogs but nice color. Would need to rogue ovals.
6551	16.0	4	round	7	4	7	5	5	Tough pods; color too light; pods have persistent curve.
6552	13.5	5	round	7	5	5	5	7	Pods somewhat short.
6556	15.0	8	round	7	5	5	7	5	Segregating for ovals
6557	12.0	7	round	7	7	7	7	5	Strong floral note. Short fat Minuette type.
6560	14.5	7	round to cb	3	7	7	7	7	Strong floral note. Extreme green with a lighter color mix.
6561	16.0	7	round	7	8	5	5	7	Mild pleasant flavor. Oval mix and light color pod mix. Not seedy in any sieve size. A very attractive bean.
6564	15.0	7	round	6	6	7	7	5	Mix of pod color & shiny vs dull.
6566	14.0	4	heart	5	5	7	3	5	Oval mix; very large sv mix; may also have color mix. Small sv pods junky. Shiny pods; strong floral note.
6567	14.5	5	oval	5	4	5	5	7	Junky mix of many types, mostly oval with different pod lengths. Not sent for processing
6569	14.0	9	heart	7	4	7	3	5	Oval mix, color mix, segregating strings.
6573	14.0	5	oval	5	5	7	7	7	Very oval, very tough. DISCARD
6575	14.0	7	round	3	7	7	5	7	Strong floral note. Extreme green; pods very bumpy; junky in 4 sv.
6576	14.0	7	round	3	8	7	3	5	Floral note; bumpy pods; extreme green type.
6581	15.5	4	round	5	4	5	7	5	Floral note. Blanking & pod tips hooked.
6594	13.0	7	round	5	5	3	7	7	Extreme green color mix; oval mix.
6595	16.5	5	round	7	5	7	7	7	Mix of off types - strings, ovals and dark green pod color. Hooked pods. Overall probably a discard.
6599	15.0	7	oval	5	5	3	5	5	Strong reverse curve; very oval, heart shape at best.
6600	15.5	6	round	5	6	5	7	7	Not over mature for its sieve size. May have a matur-ity mix

Table 3. Notes on preliminary full sieve green bean lines, May 29 planting, Corvallis, 2008 (cont).[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
6602	15.5	6	round	7	6	7	7	7	Good yield; concentrated set of 4 & 5 sv, slight floral note.
811/43-4	14.5	5	round	5	5	8	7	7	Plot contains purple flowered plants with flat beans; pods with many blanks, junky especially in smaller sv sizes. Surprisingly good flavor.
826/48-3	15.0	6	mix of round & oval	5	5	7	7	5	Contains a flat mix. Not a bad bean if cleaned up.
828/48-5	16.0	5	oval-round	5	4	7	3	5	Perfumy flavor. Flat mix and oval tendencies but could be cleaned up.
836/3-15	15.5	6	mix of round & oval	5	5	4	7	5	Segregating for ovals and multiple pod types. Not bad in appearance apart from pod shape.
853/6-9	14.0	4	round	5	5	3	3	3	Many blanks especially in tips, 3 & 4 sv very short & junky.
861/13-14	16.0	3	oval to flat	3	3	5	5	7	Mostly oval with some tending to flats. Little seed development in any sieve size.
903/20-2	20.0	6	round	7	5	5	5	7	Segregating ovals; very long pods; tough skin.

[z]Trial as a whole had an early season split set.
[y]Scores based on a 1-9 scale with 9 straightest
[x]Cross section: cb = crease-back
[w]Scores based on a 1-9 scale with 9 smoothest
[v]Scores based on a 1-9 scale with 9 darkest
[u]OT = off-type; sv = sieve; pc = persistent color; ig = immature green seed; iw = immature white seed.

Table 4. Notes on preliminary small sieve green bean lines, May 29 planting, Corvallis, 2008.[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet-ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
6241	12.5	7	round	7	5	7	7	7	Short pods but nice appearance.
6329	13.5	5	round	5	5	7	7	5	
6340	14.5	7	round	7	5	7	7	7	Oval mix. Harvested a day past prime.
6442	15.0	8	round	7	6	5	7	7	Very attractive - long straight smooth pods.
6464	14.5	7	round	6	5	7	7	5	Attractive pods. May have full sieve mix.
6496	15.0	7	round	7	5	7	8	7	
6533	14.0	7	round	7	3	7	5	7	Nice appearance except color too light.
6537	15.0	7	round	7	7	7	3	5	Pc type; perfumey flavor; very straight in smaller sieve sizes. Nice bean
6549	16.0	5	round	7	7	8	5	7	Long slender attractive bean.
6553	14.5	7	round to cb	7	6	5	5	7	Floral note; pc
6555	16.5	5	round	6	7	7	8	5	Bitter with a floral accent. Segregating for ovals. Long slender attractive pods.
6574	14.5	7	round	8	9	5	5	7	Floral note; uniform; one of the darkest beans in the trial.
846/6-3	14.0	5	oval	5	5	6	5	5	Mostly oval, fairly short, junky pods; perfumy flavor.
Savannah	13.0	6	round	8	7	7	3	7	Floral flavor.

[z]Trial as a whole had an early season split set.
[y]Scores based on a 1-9 scale with 9 straightest
[x]Cross section: cb = crease-back
[w]Scores based on a 1-9 scale with 9 smoothest
[v]Scores based on a 1-9 scale with 9 darkest
[u]Pc = persistent color.

Table 5. Performance of preliminary full sieve green bean lines, June 12 planting, Corvallis, 2008.[z]

Line	Days to Harvest	Est. Sieve Size	Stand	Percent Sieve Size[y] 1	2	3	4	5	6	%1-4 Sieve	Av Tons/Acre	Av Adj Tons/Acre[x]
91G	63	full	140	14.3	10.4	10.4	23.4	31.2	10.4	58.4	7.1	7.7
OR 54	64	full	140	10.0	14.0	18.0	34.0	20.0	4.0	76.0	8.6	10.9
5630	64	full	140	5.9	8.5	11.9	44.1	27.1	2.5	70.3	10.9	13.1
5669	64	full	140	12.2	11.2	12.2	32.7	26.5	5.1	68.4	8.8	10.4
6137	64	full	139	3.3	6.6	17.8	39.5	26.3	6.6	67.1	13.6	15.9
6174	67	5	140	6.4	9.1	13.6	38.2	30.9	1.8	67.3	10.1	11.8
6189	64	full	140	7.4	9.3	13.0	30.6	29.6	10.2	60.2	10.2	11.2
6286	62	5	140	8.7	12.5	14.4	26.0	31.7	6.7	61.5	9.3	10.4
6348	61	5	140	9.7	15.1	15.1	28.0	30.1	2.2	67.7	8.4	9.9
6393	64	5	140	6.9	10.8	18.6	42.2	19.6	2.0	78.4	9.0	11.6
6438	63	5	140	15.3	15.3	18.4	27.6	20.4	3.1	76.5	8.4	10.6
6439	64	5	140	18.6	15.1	15.1	25.6	17.4	8.1	74.4	7.6	9.4
6440	64	5	140	10.5	15.2	21.0	33.3	19.0	1.0	80.0	9.5	12.3
6443	64	full	140	11.8	11.0	16.9	27.9	26.5	5.9	67.6	12.2	14.4
6456	64	full	140	7.2	7.2	9.6	32.0	37.6	6.4	56.0	11.0	11.6
6463	64	5	140	14.3	12.6	12.6	26.9	28.6	5.0	66.4	10.5	12.2
6471	67	full	140	3.9	7.2	14.5	38.2	32.2	3.9	63.8	13.5	15.4
6479	64	5	140	18.8	14.1	14.1	32.9	16.5	3.5	80.0	7.7	10.0
6481	64	5	140	11.9	15.8	25.7	34.7	10.9	1.0	88.1	9.2	12.1
6493	68	full	140	5.1	8.8	16.9	36.0	27.2	5.9	66.9	12.4	14.6
6501	63	5	140	13.0	20.7	28.3	31.5	5.4	1.1	93.5	8.1	11.7
6502	67	5	140	6.0	9.4	17.4	38.3	28.9	0.0	71.1	14.3	17.3
6510	67	5	129	9.3	13.0	18.5	38.0	20.4	0.9	78.7	9.6	12.3
6512	64	full	140	7.2	8.1	9.0	30.6	32.4	12.6	55.0	10.4	11.0
6515	67	full	135	4.0	6.5	15.3	37.9	31.5	4.8	63.7	10.9	12.4
6517	63	full	127	4.7	8.1	17.4	31.4	32.6	5.8	61.6	9.6	10.3
6525	67	full	99	3.4	7.6	12.7	39.0	33.9	3.4	62.7	10.5	11.9
6530	67	full	134	4.1	6.8	9.5	24.3	43.2	12.2	44.6	13.1	12.4
6531	64	5	130	8.8	10.6	24.8	46.0	8.8	0.9	90.3	9.6	13.4
6534	64	5	140	5.3	8.4	21.1	48.4	15.8	1.1	83.2	8.6	11.5
6535	64	full	137	7.0	10.4	13.9	29.6	32.2	7.0	60.9	10.5	11.7
6538	64	full	140	10.5	13.7	14.7	26.3	26.3	8.4	65.3	8.4	9.7
6541	64	5	139	15.4	9.4	15.4	33.3	23.9	2.6	73.5	9.9	12.3
6542	68	full	110	6.3	10.6	19.7	35.2	24.6	3.5	71.8	12.9	15.7
6544	67	full	123	4.4	7.1	15.0	34.5	33.6	5.3	61.1	10.0	11.1
6546	62	full	128	4.8	8.7	13.5	34.6	33.7	4.8	61.5	9.7	10.8
6550	63	5	88	11.7	10.8	15.3	31.5	27.0	3.6	69.4	9.9	11.8
6551	64	5	136	24.1	12.7	13.9	36.7	12.7	0.0	87.3	7.1	9.8
6552	63	5	105	9.3	10.5	14.0	39.5	25.6	1.2	73.3	7.7	9.5
6556	64	full	121	18.5	18.5	20.4	22.2	18.5	1.9	79.6	5.4	7.0
6557	67	5	140	3.3	4.1	11.5	38.5	37.7	4.9	57.4	10.7	11.5
6560	67	5	134	9.1	12.1	17.2	41.4	18.2	2.0	79.8	9.1	11.9
6561	67	full	121	5.8	7.7	10.6	26.0	34.6	15.4	50.0	9.3	9.3
6564	63	5	131	13.4	11.6	16.1	32.1	23.2	3.6	73.2	9.9	12.2
6567	64	5	91	5.5	9.2	20.2	44.0	20.2	0.9	78.9	9.9	12.8

Table 5. Performance of preliminary full sieve green bean lines, June 12 planting, Corvallis, 2008 (cont.)[z]

Line	Days to Harvest	Est. Sieve Size	Stand	Percent Sieve Size[y] 1	2	3	4	5	6	%1-4 Sieve	Av Tons/Acre	Av Adj Tons/Acre[x]
6569	67	5	85	3.8	7.5	14.2	49.1	23.6	1.9	74.5	9.3	11.6
6575	67	full	140	5.3	7.9	12.3	27.2	43.0	4.4	52.6	10.3	10.6
6576	68	full	140	3.5	6.3	10.4	22.9	46.5	10.4	43.1	12.9	12.0
6581	68	full	140	6.9	5.5	11.0	35.9	34.5	6.2	59.3	12.9	14.0
6587	67	full	110	7.6	10.2	16.1	37.3	25.4	3.4	71.2	10.4	12.5
6594	67	5	125	8.4	10.9	16.8	42.0	21.8	0.0	78.2	11.0	14.0
6595	64	full	140	9.7	10.7	16.5	41.7	17.5	3.9	78.6	9.1	11.8
6600	64	full	140	17.9	14.1	14.1	33.3	12.8	7.7	79.5	7.6	9.8
6602	67	full	140	4.5	9.0	13.5	36.1	34.6	2.3	63.2	12.4	14.0
826/48-3	67	full	140	7.7	10.8	17.7	33.1	23.1	7.7	69.2	11.6	13.8
828/48-5	63	full	140	12.3	13.8	13.8	24.6	27.7	7.7	64.6	6.1	7.0
836/3-15	64	full	140	9.5	12.2	13.5	31.1	29.7	4.1	66.2	6.8	7.9
853/6-9	68	full	140	17.4	17.4	21.7	24.6	15.9	2.9	81.2	6.4	8.4
861/13-14	64	full	140	8.0	8.0	10.7	24.0	34.7	14.7	50.7	6.6	6.7
897/18-1	68	full	128	10.2	13.3	21.4	36.7	16.3	2.0	81.6	8.9	11.7
903/20-2	67	full	135	12.8	11.7	14.9	20.2	29.8	10.6	59.6	8.5	9.4
904/20-3	67	full	126	14.6	14.6	18.8	27.1	14.6	10.4	75.0	4.4	5.4
LSD 0.05			27								3.6	4.3

[z]Mean of 2 replications; subplots of 5' were harvested from 20' plots in rows 30" apart.
[y]Percent calculated as % of total of 1-6 sieve beans.
[x]Tons/Acre adjusted to 50% 1-4 sieve.

Table 6. Performance of preliminary small sieve green bean lines, June 12 planting, Corvallis, 2008.[z]

Line	Days to Harvest	Est. Sieve Size	Stand	Percent Sieve Size[y] 1	2	3	4	5	6	%1-4 Sieve	Av Tons/Acre
6241	63	4-5	140	5.1	8.9	19.0	34.2	25.3	7.6	67.1	7.2
6329	62	4	139	12.2	12.2	16.2	37.8	18.9	2.7	78.4	6.4
6340	64	4-5	140	12.2	14.3	20.4	33.7	16.3	3.1	80.6	8.7
6442	64	4-5	140	15.2	14.3	15.2	28.6	23.8	2.9	73.3	9.0
6464	63	4-5	105	15.2	19.0	20.3	31.6	13.9	0.0	86.1	7.3
6496	64	4-5	124	15.6	20.0	24.4	28.9	10.0	1.1	88.9	8.2
6528	64	4-5	140	6.5	12.2	28.5	45.5	7.3	0.0	92.7	10.8
6533	63	4-5	140	7.3	9.2	15.6	43.1	23.9	0.9	75.2	9.9
6537	63	4-5	135	7.8	13.3	24.4	40.0	13.3	1.1	85.6	8.3
6539	64	4-5	81	8.8	14.0	21.1	35.1	17.5	3.5	78.9	7.8
6549	67	4-5	120	6.0	9.8	24.1	52.6	7.5	0.0	92.5	11.7
6553	64	4-5	140	4.3	9.4	27.4	50.4	7.7	0.9	91.5	9.9
6554	68	4-5	140	4.4	7.9	16.7	48.2	21.1	1.8	77.2	10.1
6555	64	4-5	119	8.2	12.4	20.6	42.3	16.5	0.0	83.5	9.0
6574	67	4-5	132	14.5	21.7	22.9	30.1	8.4	2.4	89.2	7.4
846/6-3	64	4	140	19.3	15.8	17.5	24.6	19.3	3.5	77.2	5.6
Savannah	67	4	140	4.4	13.3	46.0	35.4	0.9	0.0	99.1	10.3
LSD 0.05			29								3.2

[z]Mean of 2 replications; subplots of 5' were harvested from 20' plots in rows 30" apart.
[y]Percent calculated as % of total of 1-6 sieve beans.

Table 7. Notes on preliminary full sieve green bean lines, June 12 planting, Corvallis, 2008.[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
91G	17.0	5	round	5	5	7	7	7	Quite a difference between the two reps for yield and maturity
OR 54	16.0	6	round	5	5	5	7	7	Getting seedy without sizing up.
5630	15.0	7	round	5	5	8	7	7	Segregating for ovals & strings; prime in one more day.
5669	14.0	5	round	5	5	7	7	7	Getting seedy without sizing up.
6137	17.0	6	round	4	7	3	7	5	Slight floral note; segregating ovals; shiny dark green large pods.
6174	15.0	5	round	5	6	7	7	7	Light colored, oval, stringy mix.
6189	15.0	5	round	5	6	7	5	7	Slight floral note.
6286	15.0	6	round	6	5	7	7	7	Oval mix in smaller sieve sizes and stringy mix in 5 & 6 sv.
6348	13.5	5	round	5	5	5	7	5	Has larger sieve size oval/flat mix; not a bad looking bean for its earliness.
6393	15.5	4	round	7	5	5	8	7	Oval mix; segregating for strings.
6438	16.0	5	round	5	5	7	7	7	Oval mix.
6439	16.0	5	round	5	5	7	5	7	Heart shaped in lower sieves.
6440	14.5	7	round	6	5	6	5	7	Getting seedy without sizing up.
6443	15.0	6	round	6	5	5	7	7	Nice looking bean with consistently high yields.
6456	15.5	7	round	7	5	7	7	7	Attractive bean.
6463	15.0	5	round	5	5	7	7	7	
6471	15.0	5	round	5	5	8	7	7	
6479	15.0	6	heart	7	5	7	5	7	May have oval tendencies.
6481	15.0	6	heart	5	5	7	5	7	Mix of round (not many), heart and oval.
6493	16.5	6	round	6	5	5	5	7	
6501	14.5	4	oval/round	5	5	7	7	7	Picked too young but not worth picking again; ~50% ovals.
6502	16.0	5	round	5	5	8	5	7	Very seedy 6 sv; getting seedy without sizing up
6510	16.0	6	round	6	7	8	7	7	Very attractive dark green bean with very dark green seeds. Very seedy 6 sv; getting seedy without sizing up.
6512	15.5	5	round	3	7	7	5	7	Does not seem to pick easily; many pods with pedicles and some with racemes still attached; might be a problem with clusters. Pc type with extreme green mix, particularly in higher sieve sizes.

Table 7. Notes on preliminary full sieve green bean lines, June 12 planting, Corvallis, 2008 (cont).[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth-ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
6515	16.5	7	round to cb	7	7	7	7	7	Strong floral note; pc type; very nice appearance.
6517	15.0	7	round to cb	7	7	6	7	6	Very attractive pc type; stringy mix; some cb pods are falling into the next sieve size smaller bin.
6525	15.0	5	round to cb	5	5	7	7	7	
6530	15.0	7	round	6	5	7	7	7	Segregating strings?
6531	15.0	8	oval	7	4	7	7	7	Very smooth and straight but most pods too light and oval; does not grade properly.
6534	16.0	5	round	5	4	7	7	7	Too light; heart tendency. Harvested young.
6535	17.0	6	round to cb	5	7	7	7	7	Pc type. Does not form strings but has a bit of fiber in dorsal suture.
6538	15.5	7	round	7	5	6	8	7	Oval mix; segregating strings.
6541	14.5	7	round	5	4	7	7	7	Light color; 3 sv looks junky; very seedy 6 sv; getting seedy without sizing up.
6542	14.0	7	round	5	6	7	7	7	Round but with oval/heart mix.
6544	14.5	7	round	6	5	7	7	7	Floral note.
6546	15.0	5	round	7	5	7	5	7	Very long with some pods up to 19 cm; may be too light in color.
6550	14.5	7	heart	4	7	5	5	7	Heart shaped with oval tendencies; segregating strings. Pc type with good pod color but rough.
6551	15.5	5	round	7	4	5	5	7	Long slender pods; very seedy 5 sv; getting seedy without sizing up.
6552	15.5	7	round	7	5	7	7	7	Long and slender; 91G color but pc type
6556	15.5	5	round	5	4	8	5	7	Tendency to reverse curve; getting seedy without sizing up.
6557	15.0	6	round	5	5	7	3	7	
6560	14.0	6	round	5	6	7	5	7	Floral note; getting seedy without sizing up.
6561	16.0	5	round to cb	5	7	5	7	5	Strong reverse curve; pc type; segregating ovals.
6564	15.5	6	round	5	5	7	9	7	Heart mix, dark green pod mix.
6567	13.0	8	round	7	4	7	7	7	Pc type but very light pods; oval mix.
6569	15.5	5	round	5	5	8	5	7	Segregating strings & ovals; tough skin.

Table 7. Notes on preliminary full sieve green bean lines, June 12 planting, Corvallis, 2008 (cont).[z]

Line	Pod Length (cm)	Pod Straight - ness[y]	Pod Cross Section[x]	Pod Smooth - ness[w]	Pod Color[v]	Flavor Sweet -ness	Flavor Beani- ness	Flavor Astrin- gency	Notes[u]
6575	15.5	6	round	5	5	5	5	5	Strong floral note.
6576	14.0	5	round	5	6	7	7	7	Slight floral note.
6581	15.0	4	round to cb	5	4	7	3	5	Not grading correctly because of cb beans (large beans falling into smaller sieve size).
6587	17.0	7	round	7	7	7	7	8	Some fiber in suture but not a full fledged string. Long, slender, dark green and smooth.
6594	16.0	7	heart	5	5	7	7	7	Strong floral note; tendency to ovals.
6595	15.0	7	heart to round	5	5	7	7	7	Tendency to ovals; color mix; long and straight.
6600	16.0	6	round	5	5	7	5	7	Getting seedy without sizing up.
6602	15.5	7	round	6	5	8	7	7	Nice BBL type; good yield.
826/48-3	14.5	4	oval	5	5	7	7	7	Oval with flat mix.
828/48-5	14.0	5	round	3	5	7	3	7	Flat mix; segregating strings; average looking BBL type.
836/3-15	15.0	4	round	5	6	5	5	7	Blond pod OT.
853/6-9	15.5	5	heart	5	5	7	5	7	Line is characterized by chlorotic downward cupped leaves. Many sterile plants, but a few with near normal fertility; many junky pods in 3 & 4 sv; getting seedy with-out sizing up.
861/13-14	16.0	4	round	4	4	5	5	7	Segregating for ovals.
897/18-1	13.0	5	round to cb	5	5	3	7	5	Short pods; getting seedy without sizing up.
903/20-2	17.0	5	round	5	5	7	5	7	Strong floral note; very long slender pods.
904/20-3	15.0	5	round	5	5	5	5	7	BBL type.

[z]Heat in mid trial caused some entries to become seedy without sizing up.
[y]Scores based on a 1-9 scale with 9 straightest
[x]Cross section: cb = crease-back
[w]Scores based on a 1-9 scale with 9 smoothest
[v]Scores based on a 1-9 scale with 9 darkest
[u]OT = off-type; Cb = crease back; sv = sieve; pc = persistent color; BBL = Bush Blue Lake.

Table 8. Notes on preliminary small sieve green bean lines, June 12 planting, Corvallis, 2008.[z]

Line	Pod Length (cm)	Pod Straight-ness[y]	Pod Cross Section[x]	Pod Smooth-ness[w]	Pod Color[v]	Flavor Sweet-ness	Flavor Beani-ness	Flavor Astrin-gency	Notes[u]
6241	13.5	5	oval to round	7	5	8	5	7	Oval tendency or mix and light color mix.
6329	14.0	6	heart to round	7	5	5	5	5	Probably picked a day before prime. Nice looking bean for its earliness; reverse curve.
6340	14.5	6	heart to round	5	5	7	5	7	4 & 5 sv are getting seedy without sizing up.
6442	15.5	5	heart	5	5	7	5	7	Segregating for strings and tendency to ovals; should discard.
6464	13.5	6	round	7	5	5	5	5	4 & 5 sv are getting seedy without sizing up.
6496	14.0	6	heart	6	5	7	5	7	4 & 5 sv are getting seedy without sizing up.
6528	14.5	6	round	7	5	8	7	7	Segregating pc type; appears to be a 4 sv bean in this trial.
6533	14.5	7	round	7	4	5	5	7	Color too light.
6537	14.5	7	round	7	7	7	5	7	Floral note; pc type; dull pods; segr. for ovals.
6539	11.5	4	oval	4	7	5	5	7	Shiny dark green pods; badly oval and short; discard.
6549	15.5	8	round to cb	7	6	7	5	7	Very attractive long slender pc type; appears to be a 4 sv bean in this trial
6553	15.0	5	round	5	5	7	5	7	Tough skin; 4 sv bean in this trial.
6554	15.0	7	round	6	7	7	5	7	Slight floral note.
6555	14.5	8	round to cb	8	7	7	7	7	Very attractive pods; pc type; very uniform.
6574	14.0	7	round	5	8	5	7	7	Segr. ovals; getting seedy without sizing up
846/6-3	14.0	5	round	5	4	5	5	7	Oval mix.
Savannah	13.0	8	round	9	6	7	5	7	Slight floral note; segregating oval OT.

[z]Heat in mid trial caused some entries to become seedy without sizing up.
[y]Scores based on a 1-9 scale with 9 straightest
[x]Cross section: cb = crease-back
[w]Scores based on a 1-9 scale with 9 smoothest
[v]Scores based on a 1-9 scale with 9 darkest
[u]OT = off-type; pc = persistent color; sv = sieve

Table 9. OSU snap bean notes, Indio, California, 2008[z]

Entry	Heat Tolerance[y]	Yield[x]	Notes[w]
91G	3	4	Split set
OR 54	4	6	Pollywogs
5163	5	5	
5256	4	4	Late; pollywogs
5620	4	5	Blanks & pollywogs
5630	5	6	Early; blanks
5635	5	7	Split set
5651	6	7	
5669	4	6	Split set
5835	3	5	
5996	5	6	
6137	5	5	
6174	5	7	
6185	5	5	
6189	3	4	
6229	6	5	Late
6235	6	4	
6241	5	5	
6257	4	5	Fiber; strings
6259	2	3	
760	2	2	Extreme split set
762	6	5	
787	4	6	Split set
800	5	5	
805	5	5	
814	4	6	Pollywogs; split set
817	3	4	Split set
822	2	3	Very late; split set; pollywogs
825	2	4	Late; split set
828	3	4	Late; split set; blanks
835	3	4	Split set
836	4	5	
837	4	6	
838	3	5	Late
840	4	4	
841	4	6	Split set
845	3	4	Extreme split set
846	3	4	Blanks; split set
849	4	4	
850	3	3	
851	2	?	Extreme split set
853	2	3	Blanks; extreme split set
860	3	4	Split set
861	3	4	Pollywogs; split set
884	6	6	Early; looks good
894	2	3	Split set

Table 9. OSU snap bean notes, Indio, California, 2008 (cont.)[z]

Entry	Heat Tolerance[y]	Yield[x]	Notes[w]
897	3	3	Medium late; split set
903	3	3	Medium late; split set
904	2	2	Late; split set; pollywogs
906	3	4	Split set
908	5	6	Early
912	2	3	Pollywogs; split set
913	4	5	
917	5	5	Early
919	4	4	Split set
B8209/5	4	5	
B8210/5	4	5	Short fat pods
B8211/5	4	6	Segregating for pod fiber
B8212/5	3	4	Pollywogs
B8213/5	5	6	Split set
B8214/5	3	4	Segregating for pc?
B8215/5	4	6	Late
B8216/5	4	4	Late; looks good
B8217/5	4	6	Long pods; split set
B8218/5	4	6	
B8219/5	3	6	Pollywogs & blanks
B8220/5	4	6	
B8221/5	5	5	
B8222/5	5	5	Late
B8223/5	3	5	Late
B8224/5	4	5	Pollywogs; pod fiber
B8225/5	3	4	Pollywogs & blanks
B8226/5	4	4	Good plant architecture
B8227/5	4	5	
B8228/5	4	6	
B8229/5	4	4	
B8230/5	3	5	Split set
B8231/5	5	7	Pollywogs & blanks
B8232/5	6	6	Segregating for pc
B8233/5	6	6	Late; pollywogs & blanks
B8234/5	5	6	Late; pollywogs & blanks
B8235/5	4	5	Late
B8236/5	5	5	Late
B8237/5	5	6	
B8238/5	5	6	
B8239/5	5	7	Late
B8240/5	4	4	Late; pollywogs & blanks
B8241/5	5	6	Late
B8242/5	6	5	
B8243/5	6	6	
B8244/5	5	6	Pollywogs

Table 9. OSU snap bean notes, Indio, California, 2008 (cont.)[z]

Entry	Heat Tolerance[y]	Yield[x]	Notes[w]
B8245/5	6	6	
B8246/5	4	5	
B8247/5	3	4	Late
B8248/5	4	4	
B8249/5	5	5	
B8250/5	7	5	
B8254/2	4	4	
B8255/2	5	5	Late
B8256/2	5	5	Late
B8258/2	5	6	
B8259/2	5	6	
B8260/2	7	7	Segregating for pod fiber
B8261/2	7	7	
B8262/2	6	6	
B8263/2	5	6	
B8264/2	5	6	
B8265/2	4	4	Good plant architecture
B8266/2	5	4	Good plant architecture
B8267/2	6	5	
B8268/2	8	7	Pod fiber
B8269/2	8	5	
B8270/2	7	6	Late; split set; fiber
B8271/2	8	7	Segregating for pod fiber
B8272/2	8	7	Segregating for pod fiber
B8273/2	8	7	Segregating for pod fiber
B8274/2	7	6	Segregating for pod fiber
B8276/2	7	7	
B8277/2	7	7	
B8278/2	8	7	Early
B8279/2	7	7	Early
B8280/2	7	6	
B8281/2	6	8	Early
B8282/2	7	8	Early
B8283/2	7	8	Early
B8284/2	6	7	Early; very compact
B8285/2	6	8	Early
B8286/2	7	7	
B8287/2	6	6	Blanks
B8288/2	6	6	Blanks

[z]Planted 26 January. Notes taken 9 May.
[y]Scores based on 1-9 scale with 9 = tolerant.
[x]Scores based on 1-9 scale with 9 = high.
[w]Pc = persistent chlorophyll.

Table 10. Performance of commercial green bean varieties, June 25 planting, Corvallis, 2008.

Variety	Source	AV Stand	Intended Use	Days	Percent Sieve Size[z]							Tons/Acre Sieve Size						Graded Total[y]
					1	2	3	4	5	6	1-4	1	2	3	4	5	6	
91G	OSU	150	full sieve	61	11.8	13.4	21.9	40.1	12.8	0.0	87.2	0.96	1.09	1.78	3.26	1.04	0.00	8.13
				64	7.5	7.0	11.2	36.0	36.9	1.4	61.7	0.70	0.65	1.04	3.35	3.44	0.13	9.31*
				65	7.7	5.3	9.6	31.1	45.0	1.4	53.6	0.70	0.48	0.87	2.83	4.09	0.13	9.09
OR 54	OSU	146	full sieve	65	6.1	7.4	12.7	34.4	34.0	5.3	60.7	0.65	0.78	1.35	3.65	3.61	0.57	10.61
				66	5.2	7.1	12.4	39.0	32.9	3.3	63.8	0.48	0.65	1.13	3.57	3.00	0.30	9.14*
				69	4.2	3.8	6.6	20.2	52.3	12.9	34.8	0.52	0.48	0.83	2.52	6.53	1.61	12.48
5630	OSU	150	full sieve	62	10.4	12.4	22.8	45.5	8.4	0.5	91.1	0.91	1.09	2.00	4.00	0.74	0.04	8.79
				65	7.8	8.3	14.7	45.0	23.9	0.5	75.7	0.74	0.78	1.39	4.26	2.26	0.04	9.48*
				69	5.2	4.1	6.7	33.0	47.9	3.0	49.1	0.61	0.48	0.78	3.83	5.57	0.35	11.61
6443	OSU	150	full sieve	65	5.6	7.8	15.1	42.7	28.4	0.4	71.1	0.57	0.78	1.52	4.31	2.87	0.04	10.09
				66	6.0	6.5	13.4	36.1	35.2	2.8	62.0	0.57	0.61	1.26	3.39	3.31	0.26	9.40*
				69	5.3	4.1	6.0	24.1	48.5	12.0	39.5	0.61	0.48	0.70	2.78	5.61	1.39	11.57
Huntington	Syngenta	150	full sieve	64	7.8	11.0	20.6	43.6	17.0	0.0	83.0	0.74	1.04	1.96	4.13	1.61	0.00	9.48
				66	6.0	7.3	11.6	37.8	36.5	0.9	62.7	0.61	0.74	1.17	3.83	3.70	0.09	10.14*
				69	6.2	5.4	5.4	20.0	58.5	4.6	36.9	0.70	0.61	0.61	2.26	6.61	0.52	11.31
PLS 5050-3	Pureline	150	full sieve	58	14.3	22.7	31.1	28.6	3.4	0.0	96.6	0.74	1.17	1.61	1.48	0.17	0.00	5.18
				62	4.3	5.3	12.8	46.0	28.9	2.7	68.4	0.35	0.44	1.04	3.74	2.35	0.22	8.13*
				64	5.1	3.7	7.5	40.2	39.3	4.2	56.5	0.48	0.35	0.70	3.74	3.65	0.39	9.31
PLS 5059-7B-07	Pureline	147	full sieve	58	24.4	26.8	25.6	20.7	2.4	0.0	97.6	0.87	0.96	0.91	0.74	0.09	0.00	3.57
				62	7.6	8.3	18.1	43.1	20.8	2.1	77.1	0.48	0.52	1.13	2.70	1.31	0.13	6.26
				64	4.7	5.8	15.2	42.1	31.0	1.2	67.8	0.35	0.44	1.13	3.13	2.31	0.09	7.44*
Spartacus	Seminis	150	full sieve	62	5.6	6.2	11.2	36.0	37.9	3.1	59.0	0.39	0.44	0.78	2.52	2.65	0.22	7.00
				64	4.5	3.4	5.6	26.8	51.4	8.4	40.2	0.35	0.26	0.44	2.09	4.00	0.65	7.79*
				65	2.8	2.8	5.6	25.7	52.0	11.2	36.9	0.22	0.22	0.44	2.00	4.05	0.87	7.79
Titan	Seminis	150	5 sieve	64	3.8	7.6	16.3	52.7	18.5	1.1	80.4	0.30	0.61	1.31	4.22	1.48	0.09	8.00
				66	2.2	4.5	9.0	42.7	40.4	1.1	58.4	0.17	0.35	0.70	3.31	3.13	0.09	7.74*
				69	4.2	3.3	5.2	22.5	58.2	6.6	35.2	0.39	0.30	0.48	2.09	5.39	0.61	9.27
Ulysses	Seminis	150	5 sieve	58	10.1	15.5	24.8	38.8	10.9	0.0	89.1	0.57	0.87	1.39	2.18	0.61	0.00	5.61
				61	6.3	5.7	11.9	43.4	31.4	1.3	67.3	0.44	0.39	0.83	3.00	2.18	0.09	6.92*
				63	4.3	3.8	6.5	33.2	48.4	3.8	47.8	0.35	0.30	0.52	2.65	3.87	0.30	8.00

Table 10. Performance of commercial green bean varieties, June 25 planting, Corvallis, 2008 (cont.).

Variety	Source	AV Stand	Intended Use	Days	Percent Sieve Size[z]							Tons/Acre Sieve Size						Graded Total[y]
					1	2	3	4	5	6	1-4	1	2	3	4	5	6	
Weapon	Seminis	150	5 sieve	62	7.4	11.1	24.1	47.5	9.9	0.0	90.1	0.52	0.78	1.70	3.35	0.70	0.00	7.05
				64	6.6	8.4	16.9	47.0	19.9	1.2	78.9	0.48	0.61	1.22	3.39	1.44	0.09	7.22*
				65	6.8	6.8	13.7	42.9	28.6	1.2	70.2	0.48	0.48	0.96	3.00	2.00	0.09	7.00
SB 4359	Sygenta	150	4-5 sieve	58	9.7	13.8	26.9	42.1	7.6	0.0	92.4	0.61	0.87	1.70	2.65	0.48	0.00	6.31
				61	4.8	5.9	15.5	50.3	22.5	1.1	76.5	0.39	0.48	1.26	4.09	1.83	0.09	8.13*
				63	3.8	5.5	12.6	49.7	27.3	1.1	71.6	0.30	0.44	1.00	3.96	2.18	0.09	7.96
SB 4372	Syngenta	150	4 sieve	64	9.0	15.7	36.7	38.0	0.6	0.0	99.4	0.65	1.13	2.65	2.74	0.04	0.00	7.22
				65	7.8	13.5	31.8	45.3	1.6	0.0	98.4	0.65	1.13	2.65	3.78	0.13	0.00	8.35*
				69	4.5	5.3	11.9	59.4	18.9	0.0	81.1	0.48	0.57	1.26	6.31	2.00	0.00	10.61
PLS 4940-07	Pureline	131	4 sieve	62	5.8	7.9	25.4	57.7	3.2	0.0	96.8	0.48	0.65	2.09	4.74	0.26	0.00	8.22*
				63	6.5	8.6	20.5	58.9	5.4	0.0	94.6	0.52	0.70	1.65	4.74	0.44	0.00	8.05
				65	4.9	4.9	14.6	56.1	19.5	0.0	80.5	0.44	0.44	1.31	5.00	1.74	0.00	8.92
BSC 8577	Brotherton	150	4 sieve	64	5.7	14.4	49.3	30.1	0.4	0.0	99.6	0.57	1.44	4.92	3.00	0.04	0.00	9.96
				65	4.8	9.9	30.6	53.2	1.6	0.0	98.4	0.52	1.09	3.35	5.83	0.17	0.00	10.96*
				69	3.2	6.1	20.4	64.9	5.4	0.0	94.6	0.39	0.74	2.48	7.87	0.65	0.00	12.14
BSC 8617	Brotherton	150	4 sieve	58	23.8	30.5	30.5	15.2	0.0	0.0	100.0	1.09	1.39	1.39	0.70	0.00	0.00	4.57
				62	7.7	15.4	41.0	34.6	1.3	0.0	98.7	0.52	1.04	2.78	2.35	0.09	0.00	6.79*
				64	6.1	10.0	40.0	42.8	1.1	0.0	98.9	0.48	0.78	3.13	3.35	0.09	0.00	7.83
BB 588	Pannar	150	4 sieve	64	5.8	13.7	39.5	40.5	0.5	0.0	99.5	0.48	1.13	3.26	3.35	0.04	0.00	8.27
				66	5.4	8.8	24.9	60.0	1.0	0.0	99.0	0.48	0.78	2.22	5.35	0.09	0.00	8.92*
				69	3.8	5.1	12.8	70.5	7.7	0.0	92.3	0.39	0.52	1.31	7.18	0.78	0.00	10.18
BB 589	Pannar	150	4 sieve	64	5.3	12.1	37.9	44.2	0.5	0.0	99.5	0.44	1.00	3.13	3.65	0.04	0.00	8.27
				66	4.4	7.4	27.1	60.1	1.0	0.0	99.0	0.39	0.65	2.39	5.31	0.09	0.00	8.83*
				69	3.5	5.3	14.6	71.2	5.3	0.0	94.7	0.35	0.52	1.44	7.00	0.52	0.00	9.83
BB 590	Pannar	150	4 sieve	64	4.8	14.4	42.3	38.0	0.5	0.0	99.5	0.44	1.31	3.83	3.44	0.04	0.00	9.05
				66	4.1	8.6	26.2	58.8	2.3	0.0	97.7	0.39	0.83	2.52	5.66	0.22	0.00	9.61*
				69	3.5	6.7	17.7	67.3	4.7	0.0	95.3	0.39	0.74	1.96	7.44	0.52	0.00	11.05
BB 591	Pannar	150	4 sieve	64	6.1	12.2	42.8	38.3	0.6	0.0	99.4	0.48	0.96	3.35	3.00	0.04	0.00	7.83
				66	4.9	8.8	24.0	59.3	2.9	0.0	97.1	0.44	0.78	2.13	5.26	0.26	0.00	8.87*
				69	4.3	6.5	13.4	65.5	10.3	0.0	89.7	0.44	0.65	1.35	6.61	1.04	0.00	10.09

Table 10. Performance of commercial green bean varieties, June 25 planting, Corvallis, 2008 (cont.).

Variety	Source	AV Stand	Intended Use	Days	Percent Sieve Size[z]							Tons/Acre Sieve Size						Graded Total[y]
					1	2	3	4	5	6	1-4	1	2	3	4	5	6	
BB 592	Pannar	150	4 sieve	64	6.6	14.2	48.1	30.6	0.5	0.0	99.5	0.52	1.13	3.83	2.44	0.04	0.00	7.96
				66	5.3	8.7	28.0	57.0	1.0	0.0	99.0	0.48	0.78	2.52	5.13	0.09	0.00	9.00*
				69	3.6	6.2	17.9	69.2	3.1	0.0	96.9	0.30	0.52	1.52	5.87	0.26	0.00	8.48
BB 593	Pannar	149	4 sieve	64	9.9	24.3	65.8	0.0	0.0	0.0	100.0	0.48	1.17	3.18	0.00	0.00	0.00	4.83
				66	6.6	9.4	29.8	53.0	1.1	0.0	98.9	0.52	0.74	2.35	4.18	0.09	0.00	7.87*
				69	3.5	6.0	21.1	64.8	4.5	0.0	95.5	0.30	0.52	1.83	5.61	0.39	0.00	8.66
BB 594	Pannar	150	4 sieve	66	4.1	7.1	30.6	58.2	0.0	0.0	100.0	0.35	0.61	2.61	4.96	0.00	0.00	8.53
				69	4.2	6.0	15.8	72.6	1.4	0.0	98.6	0.39	0.57	1.48	6.79	0.13	0.00	9.35*
				71	2.6	4.3	11.7	73.6	7.8	0.0	92.2	0.26	0.44	1.17	7.40	0.78	0.00	10.05
Bullion	Seminis	150	4 sieve	64	5.4	12.2	29.7	50.7	2.0	0.0	98.0	0.35	0.78	1.91	3.26	0.13	0.00	6.44
				65	5.4	6.0	21.6	62.3	4.8	0.0	95.2	0.39	0.44	1.57	4.52	0.35	0.00	7.26*
				69	4.8	4.2	7.9	54.5	28.5	0.0	71.5	0.35	0.30	0.57	3.92	2.04	0.00	7.18
Savannah	Harris Moran	150	4 sieve	66	8.3	19.4	45.6	26.7	0.0	0.0	100.0	0.65	1.52	3.57	2.09	0.00	0.00	7.83
				69	7.4	12.9	31.2	48.0	0.5	0.0	99.5	0.65	1.13	2.74	4.22	0.04	0.00	8.79*
				71	5.4	10.4	27.1	55.2	1.8	0.0	98.2	0.52	1.00	2.61	5.31	0.17	0.00	9.61
Selecta	Seminis	150	2 sieve	62	49.7	50.3	0.0	0.0	0.0	0.0	100.0	3.78	3.83	0.00	0.00	0.00	0.00	7.61*
				64	48.1	51.9	0.0	0.0	0.0	0.0	100.0	3.31	3.57	0.00	0.00	0.00	0.00	6.87
				69	33.3	66.7	0.0	0.0	0.0	0.0	100.0	2.65	5.31	0.00	0.00	0.00	0.00	7.96

[z]Percent calculated as % of total of 1-6 sieve beans.

[y]Total tons/acre of the graded beans, including sieve sizes 1-6. Values will be lower than those reported in Table 11 because some beans are lost in the grading process. Analysis of variance (Table 11) was calculated using the harvest marked with *.

Table 11. Statistical comparison of yields of commercial green bean lines, Corvallis, 2008[z].

Line	Intended Use	T/A Unadjusted	T/A Adjusted[y]
91G	full sieve	9.7	10.9
OR 54	full sieve	10.8	12.0
5630	full sieve	9.8	12.4
6443	full sieve	9.9	11.1
Huntington	full sieve	10.8	12.2
PLS 5050-3	full sieve	8.6	10.2
PLS 5059-7B-07	full sieve	7.8	9.2
Spartacus	full sieve	8.2	7.4
Titan	5 sieve	8.1	8.8
Ulysses	5 sieve	7.4	8.7
Weapon	5 sieve	7.6	9.8
SB 4359	4-5 sieve	8.5	8.5
SB 4372	4 sieve	8.8	8.8
PLS 4940-07	4 sieve	8.5	8.5
BSC 8577	4 sieve	11.4	11.4
BSC 8617	4 sieve	7.1	7.1
BB 588	4 sieve	9.4	9.4
BB 589	4 sieve	9.1	9.1
BB 590	4 sieve	10.2	10.2
BB 591	4 sieve	9.3	9.3
BB 592	4 sieve	9.3	9.3
BB 593	4 sieve	8.2	8.2
BB 594	4 sieve	9.9	9.9
Bullion	4 sieve	7.7	7.7
Savannah	4 sieve	9.0	9.0
Selecta	2 sieve	8.0	8.0
LSD 0.05		1.7	1.8

[z]Based on one selected harvest for each variety (marked with * on Table 10), which was usually the harvest closest to optimal based on that variety's intended use (50% 1-4 sieve for full sieve). Yields are field yields of 1-6 sieve beans.

[y]Full sieve and 5 sieve beans were adjusted to 50% 1-4 sieve; all others were unadjusted.

Table 12. Notes on June 25 commercial bean trial, Corvallis, Oregon, 2008.

Line	Pod Length (cm)	Pod Straight-ness[z]	Pod Cross Section	Pod Smooth-ness[y]	Pod Color[x]	Flavor[w]				Notes[v]
						Sweet-ness	Astrin-gency	Beani-ness	Perfumi-ness	
91G	15.5	5	round	5	5	7	7	7	1	
OR 54	16.0	5	round	5	5	5	7	5	1	Getting seedy without sizing up
5630	15.0	5	round	5	5	7	7	5	1	Contains stringy OT; getting seedy without sizing up
6443	16.0	6	round - cb	5	5	7	7	7	1	OR 54 type with possibly better quality.
Huntington	14.0	5	round - cb	6	4	8	7	7	1	
PLS 5050-3	15.5	5	round - cb	7	4	5	5	7	3	Color too light to blend with 91G; this bean grades more as a 5 sv than as a full sv.
PLS 5059-7B-07	13.5	7	round - cb	7	4	7	7	5	3	Color too light to blend with 91G; short pods for a full sieve; getting seedy without sizing up.
Spartacus	15.0	6	round - cb	8	5	8	7	3	3	Pc type with medium length, straight, dark green pods.
Titan	14.5	6	round - cb	7	5	5	7	7	1	Pc type; very little seed devel-opment in any sv size.
Ulysses	14.0	7	round - cb	8	5	5	3	5	3	Attractive pc type with very little battering in the grader.
Weapon	13.5	6	round - cb	7	4	7	7	3	3	Color too light to blend with 91G; very straight, uniform bean; pu-bescent pods that catch senesc-ing leaves and flowers; may ac-count for higher incidence of white mold observed in this line.

Table 12. Notes on June 25 commercial bean trial, Corvallis, Oregon, 2008 (cont.).

Line	Pod Length (cm)	Pod Straight-ness[z]	Pod Cross Section	Pod Smooth-ness[y]	Pod Color[x]	Flavor[w]				Notes[v]
						Sweet-ness	Astrin-gency	Beani-ness	Perfumi-ness	
SB 4359	15.0	8	round	8	7	5	7	7	1	Very nice smooth shiny dark green pods; BBL flavor; color too dark to blend with 91G.
SB 4372	15.5	7	round	7	7	5	5	7	5	Long slender dark green pod; slight fiber in suture.
PLS 4940-07	15.5	6	round	5	5	7	7	7	5	Long and slender with shiny pods; segregating ovals.
BSC 8577	13.0	6	round to crease-back	7	4	7	7	7	3	Short podded; light color.
BSC 8617	13.5	7	round	5	4	8	7	7	3	Color too light to blend with 91G.
BB 588	14.5	7	round	7	5	7	5	7	7	Shiny smooth pods
BB 589	14.5	6	round	7	4	7	7	3	7	Shiny smooth pods; contains ovals
BB 590	14.5	6	heart	7	4	3	5	5	5	Oval tendency.
BB 591	14.5	7	heart	7	4	5	5	7	7	Oval tendency.
BB 592	14.0	8	heart	7	5	7	7	5	3	Oval tendency.
BB 593	14.0	6	round	7	4	7	7	5	7	Strong oval tendency.
BB 594	14.5	7	heart	7	5	7	7	5	1	Smooth straight pods with good color; nicest bean of this series.
Bullion	14.0	8	heart	8	6	5	8	5	3	Dark green shiny pc type pods; smooth, straight.
Savannah	14.0	7	round	7	6	5	7	7	3	
Selecta	12.0	8	round	6	5	7	7	9	1	Tough skin; some pods becom-ing bumpy.

[z]Scores based on a 1-9 scale with 9 straightest; [y]Scores based on a 1-9 scale with 9 smoothest; [x]Scores based on a 1-9 scale with 9 darkest; [w]Scores based on a 1-9 scale with 9 strongest; [v]Notes taken on prime harvest date; white mold infection developed in this trial over time, which reduced yields as trial progressed with later maturing varieties being most affected; sv = sieve; BBL = bush blue lake; pc = persistent color; OT = off-type.

Table 13. Fusarium root rot infection, experimental lines, Corvallis, 2008[z]

Entry	Score[y] Rep 1	Rep 2	Rep 3	Average	Maturity	Lodging[x]	Notes
RR6950	2.5	2.0	3.0	2.5	medium		Vining
RR4270	4.0	4.5	5.0	4.5	very late	2.2	
B7735-68	4.5	6.0	4.0	4.8	early	1.7	
NY5517	4.0	6.5	4.5	5.0	early	2.5	
B7030-24	5.5	4.0	6.0	5.2	medium	2.3	
B7732-27	5.0	4.0	7.0	5.3	medium	2.2	
B7732-1	5.0	6.0	5.5	5.5	medium	1.7	
B7733-29	5.5	5.0	6.0	5.5	late	2.7	
B7733-36	5.0	5.0	6.5	5.5	late	1.3	Poor stand
B7732-41-9	5.0	6.0	6.0	5.7	late	2.0	
B7733-11	5.0	5.0	7.0	5.7	medium	2.0	Poor stand
B7735-19	5.0	5.0	7.0	5.7	medium	1.7	
B7738-45	5.0	6.5	5.5	5.7	late	2.2	
B7738-40	6.5	5.0	6.0	5.8	medium	1.3	
B7239-5-4	6.0	5.5	6.5	6.0	medium	2.0	
B7732-41-6	6.5	5.0	6.5	6.0	medium	2.5	
B7733-35	5.0	6.0	7.0	6.0	medium	2.2	
B7732-24	7.0	5.0	6.5	6.2	medium	2.7	
B7733-6	6.5	5.5	6.5	6.2	late	1.8	Stand somewhat reduced
B7735-39	7.0	5.0	6.5	6.2	medium	2.0	
B7735-65	6.0	6.5	6.0	6.2	medium	2.5	
B7735-9	7.0	5.0	6.5	6.2	medium	2.3	
B7735-2	6.5	6.0	6.5	6.3	medium	1.5	
B7735-20	6.0	6.0	7.0	6.3	medium	2.3	
B7735-69	7.0	7.0	5.0	6.3	medium	2.0	
B7735-73	7.0	6.5	5.5	6.3	medium	2.0	
91G	6.0	7.0	6.5	6.5	medium	2.3	
B7732-3-1	6.5	6.5	6.5	6.5	late	2.0	
B7735-61	6.0	6.5	7.0	6.5	medium	2.0	
B7738-38	6.5	7.0	6.0	6.5	late	1.7	
B7735-32	7.0	6.0	7.0	6.7	medium	2.2	
B7735-35	7.0	6.0	7.0	6.7	medium	2.5	
B7735-74	7.0	7.0	6.0	6.7	medium	2.0	
B7739-16	7.0	6.5	6.5	6.7	medium	1.7	
B7735-51	5.0	6.5	8.5	6.7	medium	1.7	
B7126-33-1-2	7.5	6.5	6.5	6.8	late	1.7	
B7735-11	7.5	6.5	6.5	6.8	medium	2.0	
B7735-30	7.0	6.5	7.0	6.8	medium	1.3	
B7735-48	7.0	7.0	6.5	6.8	late	1.5	Stand somewhat reduced
B7735-59	7.5	6.5	6.5	6.8	medium	2.0	
B7738-4	6.5	7.0	7.0	6.8	late	2.2	
B7739-32	6.5	7.0	7.0	6.8	late	2.2	
FR266	6.5	6.5	7.5	6.8	late	2.2	
B7732-41-3	8.0	7.0	6.0	7.0	medium	1.8	
B7735-23	8.0	7.0	6.0	7.0	medium	2.5	

Table 13. Fusarium root rot infection, experimental lines, Corvallis, 2008 (cont.)[z]

Entry	Score[y] Rep 1	Rep 2	Rep 3	Average	Maturity	Lodging[x]	Notes
B7735-70	7.0	7.0	7.0	7.0	medium	2.3	
B7738-29	7.5	6.5	7.0	7.0	medium	2.3	
B7732-41-10	6.5	8.0	7.0	7.2	medium	2.7	
5630	8.0	7.0	7.0	7.3	medium	1.7	
B7733-30	8.0	7.0	7.0	7.3	medium	2.7	
B7735-18	8.0	6.5	7.5	7.3	medium	2.7	
B7735-43	8.0	7.0	7.0	7.3	medium	2.5	
B7735-53	8.0	7.0	7.0	7.3	medium	1.7	
B7738-42	7.5	7.5	7.0	7.3	late	2.2	
B7732-41-11	8.0	7.5	7.0	7.5	medium	2.0	
5446-1	7.0	8.0	8.5	7.8	early	3.0	
LSD 0.05				1.2		0.7	

[z]Planted June 20; mean of 3 replications. Notes were taken at 50% buckskin maturity for each entry.
[y]Scores based on 1-9 scale with 1 = none or very light surface infection and 9 = roots mostly dead and plants stunted.
[x]Scores based on 1-3 scale with 1 = upright and 3 = prostrate.

Table 14. Fusarium root rot infection, advanced lines, Corvallis, 2008[z]

Entry	Score[y] Rep 1	Rep 2	Average	Maturity	Lodging[x]	Notes
RR6950	2.0	3.0	2.5	medium	vining	
RR4270	4.0	5.0	4.5	very late	2.2	
6631	5.0	6.5	5.8	early	2.5	
6647	6.0	6.0	6.0	medium	1.5	Stand somewhat reduced
6597	6.5	6.0	6.3	early	1.8	
6613	6.0	6.5	6.3	medium	2.0	
6621	6.0	6.5	6.3	late	2.5	
6670	6.5	6.0	6.3	medium	1.5	Stand somewhat reduced
6598	6.5	6.5	6.5	medium	1.5	
6600	6.5	6.5	6.5	medium	1.8	
6602	7.0	6.0	6.5	medium	1.5	
6607	6.5	6.5	6.5	medium	2.0	
6612	6.5	6.5	6.5	late	2.5	
6614	6.5	6.5	6.5	medium	1.8	
6641	6.5	6.5	6.5	very late	1.5	
6642	6.5	6.5	6.5	very late	2.3	
6643	6.5	6.5	6.5	very late	1.8	
6645	6.0	7.0	6.5	medium	1.0	
6653	5.5	7.5	6.5	late	2.0	
6654	6.5	6.5	6.5	medium	2.5	
6667	6.5	6.5	6.5	medium	2.0	
6673	6.0	7.0	6.5	medium	2.8	
91G	7.0	6.0	6.5	medium	2.3	
6596	6.5	7.0	6.8	medium	2.0	
6601	7.0	6.5	6.8	medium	1.3	
6603	6.5	7.0	6.8	medium	2.8	
6608	6.5	7.0	6.8	medium	2.3	
6609	6.5	7.0	6.8	medium	2.3	
6615	7.0	6.5	6.8	medium	2.3	
6616	7.0	6.5	6.8	medium	2.0	
6617	7.0	6.5	6.8	medium	2.8	
6629	7.0	6.5	6.8	medium	1.8	
6633	7.0	6.5	6.8	late	1.3	
6640	7.0	6.5	6.8	late	2.5	
6650	6.5	7.0	6.8	late	1.5	
6656	6.5	7.0	6.8	late	1.3	
6657	6.5	7.0	6.8	late	1.3	
6669	7.0	6.5	6.8	late	1.0	
6674	6.5	7.0	6.8	late	2.0	
6677	6.5	7.0	6.8	late	1.8	
6604	7.0	7.0	7.0	medium	1.8	
6605	7.0	7.0	7.0	medium	2.3	
6610	7.0	7.0	7.0	medium	2.5	
6611	6.5	7.5	7.0	medium	2.5	
6619	7.0	7.0	7.0	medium	2.3	
6622	7.0	7.0	7.0	late	2.3	

Table 14. Fusarium root rot infection, advanced lines, Corvallis, 2008 (cont.)[z]

Entry	Score[y] Rep 1	Rep 2	Average	Maturity	Lodging[x]	Notes
6623	7.5	6.5	7.0	late	2.3	
6625	7.0	7.0	7.0	late	2.0	
6626	7.0	7.0	7.0	medium	2.3	
6635	7.0	7.0	7.0	late	1.0	
6637	7.0	7.0	7.0	late	2.0	
6638	7.5	6.5	7.0	late	2.3	
6658	7.5	6.5	7.0	late	1.8	
6659	7.0	7.0	7.0	early	2.5	
6660	7.0	7.0	7.0	medium	2.5	
6661	7.0	7.0	7.0	late	1.3	Stand somewhat reduced
6665	7.0	7.0	7.0	medium	2.0	
6671	7.0	7.0	7.0	medium	2.0	
6675	7.0	7.0	7.0	late	2.3	
6599	7.0	7.5	7.3	early	2.5	
6624	6.5	8.0	7.3	late	2.5	
6636	7.0	7.5	7.3	late	1.0	
6646	7.0	7.5	7.3	medium	1.5	
6649	7.5	7.0	7.3	early	1.5	
6652	6.5	8.0	7.3	early	2.0	
6663	7.5	7.0	7.3	medium	2.5	
6666	7.5	7.0	7.3	late	2.0	
5630	7.0	7.5	7.3	medium	1.7	
6618	7.0	8.0	7.5	early	3.0	
6620	7.5	7.5	7.5	medium	2.0	
6634	7.5	7.5	7.5	late	1.0	
6648	7.0	8.0	7.5	early	1.8	
6662	7.0	8.0	7.5	medium	1.5	
6668	8.0	7.0	7.5	late	1.8	
6606	7.0	9.0	8.0	early	1.8	
6664	8.0	8.0	8.0	early	2.5	
5446	8.0	8.5	8.3	early	3.0	
6630	8.5	8.5	8.5	early	3.0	
LSD 0.05			0.9		0.7	

[z]Planted June 20; mean of 2 replications. Notes were taken at 50% buckskin maturity for each entry.
[y]Scores based on 1-9 scale with 1 = none or very light surface infection and 9 = roots mostly dead and plants stunted.
[x]Scores based on 1-3 scale with 1 = upright and 3 = prostrate.

Table 15. Results from a white mold screening trial, Corvallis, 2008[z]

Entry	Stand[y]	White Mold Index[x]	White Mold Check Comparisons[x] G 122	M016 2	91G	White Mold Incidence[w]	White Mold Severity[v]	Maturity	Lodging[u]	Estimated Yield Potential[t]
NY1-6020-5	100	4.9			**	7.4	0.6	medium late	1.9	1.8
PI 290990-4-1	100	4.9			**	9.8	0.5	early	1.9	1.5
G122	100	5.3			**	8.5	0.6	medium	1.4	2.3
L192	100	5.5			**	9.5	0.6	late	1.8	1.6
PI 207130-2-4	100	5.5			**	9.5	0.6	late	1.8	2.1
NY1-6020-4	100	7.0			**	9.0	0.8	medium	2.5	1.9
NYBS6637	100	9.0			**	10.0	0.9	late	1.1	2.0
904 wmgx25-20-3	100	11.0			**	10.0	1.1	late	1.3	1.8
MO162	100	11.3			**	10.0	1.1	early	2.4	1.4
ExRico 23	100	12.0			**	10.0	1.2	medium late	type II	2.0
897 wmgx25-18-1	100	13.8			**	10.0	1.4	late	1.6	2.4
6235	100	15.0			**	10.0	1.5	medium	2.5	2.0
6554	100	16.0			**	9.8	1.6	medium	1.9	1.8
6560	100	18.8			**	10.0	1.9	medium late	2.0	2.4
903 wmgx25-20-2	100	18.8			**	10.0	1.9	medium early	1.5	2.0
6557	100	20.0	^		**	10.0	2.0	medium late	1.9	1.9
856 wmgx25-7-2	100	20.0	^		**	10.0	2.0	medium	2.1	1.9
861 wmgx25-13-14	100	20.0	^		**	10.0	2.0	medium late	2.3	2.3
6393	100	21.1	^		**	9.9	2.1	medium	2.1	2.1
6574	100	21.3	^		**	10.0	2.1	medium late	2.3	1.9
6241	98	22.5	^		**	10.0	2.3	medium early	2.8	1.9
6587	100	22.5	^		**	10.0	2.3	late	1.5	2.4
762 wmgx25-2-6	100	22.5	^		**	10.0	2.3	medium early	2.8	2.3
853 wmgx25-6-9	100	22.5	^		**	10.0	2.3	late	1.6	1.8
6573	100	23.8	^		**	10.0	2.4	medium	1.8	2.3
836 wmgx25-3-15	100	23.8	^		**	10.0	2.4	medium late	2.3	1.8
6174	95	25.0	^		**	10.0	2.5	medium	2.1	2.6
6576	100	25.0	^		**	10.0	2.5	medium late	1.4	2.1
811 wmgx25-43-4	100	25.0	^		**	10.0	2.5	medium	2.0	1.8

Table 15. Results from a white mold screening trial, Corvallis, 2008 (cont.)[z]

Entry	Stand[y]	White Mold Index[x]	White Mold Check Comparisons[x] G 122	M016 2	91G	White Mold Incidence[w]	White Mold Severity[v]	Maturity	Lodging[u]	Estimated Yield Potential[t]
826 wmgx25-48-3	100	25.0	^		**	10.0	2.5	medium early	3.0	2.3
6555	99	26.3	^	^	**	10.0	2.6	medium	2.0	1.9
6594	100	26.3	^	^	**	10.0	2.6	medium late	2.1	2.4
6515	100	27.5	^	^	**	10.0	2.8	medium late	1.6	2.1
6545	100	27.5	^	^	**	10.0	2.8	medium	1.8	1.8
6575	90	27.5	^	^	**	10.0	2.8	medium late	1.5	2.4
846 wmgx25-6-3	100	27.5	^	^	**	10.0	2.8	late	2.0	2.3
6530	100	28.0	^	^	**	10.0	2.8	medium	2.6	2.1
6561	98	28.3	^	^	**	10.0	2.8	medium late	2.3	2.4
6440	100	28.5	^	^	**	9.8	2.9	medium early	2.5	2.1
6286	100	28.8	^	^	**	10.0	2.9	medium early	3.0	2.1
6340	100	28.8	^	^	**	10.0	2.9	medium	2.3	2.1
6510	100	28.8	^	^	**	10.0	2.9	medium	2.0	2.0
6528	100	28.8	^	^	**	10.0	2.9	late	2.1	2.0
6544	100	28.8	^	^	**	10.0	2.9	medium	1.9	1.9
6452	100	30.0	^	^	**	10.0	3.0	medium	1.8	1.8
6464	93	30.0	^	^	**	10.0	3.0	medium early	1.6	2.3
6556	98	30.0	^	^	**	10.0	3.0	medium late	2.4	2.1
828 wmgx25-48-5	100	30.0	^	^	**	10.0	3.0	late	2.4	1.9
6549	100	31.3	^	^	**	10.0	3.1	medium	1.5	2.3
6551	100	31.3	^	^	**	10.0	3.1	medium	2.5	2.1
6439	100	31.8	^	^	**	10.0	3.2	medium	2.4	2.3
6567	100	32.1	^	^	**	9.8	3.3	medium early	1.9	1.6
6443	100	32.5	^	^	**	10.0	3.3	medium early	2.3	2.1
6493	100	32.5	^	^	**	10.0	3.3	medium	2.3	1.9
6517	100	32.5	^	^	**	10.0	3.3	medium	1.8	2.3
6569	100	32.5	^	^	**	10.0	3.3	medium late	2.3	2.4
6595	100	32.5	^	^	**	10.0	3.3	medium late	2.6	2.0
5669	100	32.5	^	^	**	10.0	3.3	medium	2.4	2.1

Table 15. Results from a white mold screening trial, Corvallis, 2008 (cont.)[z]

Entry	Stand[y]	White Mold Index[x]	White Mold Check Comparisons[x] G 122	M016 2	91G	White Mold Incidence[w]	White Mold Severity[v]	Maturity	Lodging[u]	Estimated Yield Potential[t]
6348	100	33.8	^	^	**	10.0	3.4	medium early	2.9	2.6
6438	100	33.8	^	^	**	10.0	3.4	medium early	2.3	2.5
6449	100	33.8	^	^	**	10.0	3.4	medium late	2.3	1.8
6479	100	33.8	^	^	**	10.0	3.4	medium late	2.5	1.9
6501	100	33.8	^	^	**	10.0	3.4	medium late	1.6	1.9
6525	100	33.8	^	^	**	10.0	3.4	medium late	1.9	2.3
6546	100	33.8	^	^	**	10.0	3.4	medium	2.5	2.1
6137	100	35.0	^	^	**	10.0	3.5	medium early	2.5	2.1
6527	100	35.0	^	^	**	10.0	3.5	medium late	2.0	2.5
6534	100	35.0	^	^	**	10.0	3.5	late	1.4	1.6
814 wmgx25-44-3	100	35.0	^	^	**	10.0	3.5	medium late	2.4	1.6
6496	100	36.3	^	^		10.0	3.6	medium	2.3	2.3
6537	100	36.3	^	^		10.0	3.6	medium	2.3	2.3
6552	100	36.3	^	^		10.0	3.6	medium	2.3	2.0
6553	100	36.3	^	^		10.0	3.6	late	2.1	2.1
5613	100	37.5	^	^		10.0	3.8	medium	2.5	2.0
6442	100	37.5	^	^		10.0	3.8	medium	2.8	2.1
6463	100	37.5	^	^		10.0	3.8	early	2.9	1.8
6531	100	37.5	^	^		10.0	3.8	medium early	2.0	1.8
Savannah	100	37.5	^	^		10.0	3.8	medium late	2.6	2.4
6512	100	38.8	^	^		10.0	3.9	medium	2.5	1.9
6535	100	38.8	^	^		10.0	3.9	medium	2.0	2.5
6541	100	38.8	^	^		10.0	3.9	medium early	2.5	1.6
6564	100	38.8	^	^		10.0	3.9	medium early	2.6	2.4
825 wmgx25-47-4	100	38.8	^	^		10.0	3.9	medium early	2.1	2.3
817 wmgx25-45-1	100	39.1	^	^		9.8	4.0	medium	2.3	1.8
5630	100	40.0	^	^		10.0	4.0	medium	2.3	2.6
OR 54	100	41.3	^	^		10.0	4.1	medium early	2.4	1.8
6456	100	42.5	^	^		10.0	4.3	medium	2.6	2.4

Table 15. Results from a white mold screening trial, Corvallis, 2008 (cont.)[z]

Entry	Stand[y]	White Mold Index[x]	White Mold Check Comparisons[x] G 122	M016 2	91G	White Mold Incidence[w]	White Mold Severity[v]	Maturity	Lodging[u]	Estimated Yield Potential[t]
6566	100	42.5	^	^		10.0	4.3	medium	2.9	1.8
6481	100	43.8	^	^		10.0	4.4	medium	2.3	1.9
6502	100	43.8	^	^		10.0	4.4	medium early	2.1	1.8
6581	100	45.0	^	^		10.0	4.5	late	2.0	1.9
6538	100	46.3	^	^		10.0	4.6	medium	2.0	1.9
6542	100	46.3	^	^		10.0	4.6	late	1.8	2.0
Pierroton	100	46.3	^	^		10.0	4.6	medium	1.3	2.5
6189	100	47.5	^	^		10.0	4.8	medium early	1.9	2.0
6489	100	47.5	^	^		10.0	4.8	medium early	2.5	2.4
6533	100	47.5	^	^		10.0	4.8	medium late	2.4	1.8
6539	100	47.5	^	^		10.0	4.8	medium early	1.8	2.4
6550	100	47.5	^	^		10.0	4.8	medium early	2.6	2.1
6471	100	50.0	^	^		10.0	5.0	medium early	2.3	2.0
91G	100	50.0	^	^		10.0	5.0	medium early	2.9	2.5
6485	100	51.3	^	^		10.0	5.1	medium early	2.9	2.0

[z]Planted June 27.
[y]Visual assessment in percent with 100 = perfect stand.
[x]Index = incidence x severity; ** indicates significantly better than this check ($p<0.05$); ^ indicates significantly worse than this check ($p<0.05$).
[w]Scores based on a 1-10 scale with 1 = low incidence, no symptoms observed and 10 = high incidence, all plants in plot infected.
[v]Scores based on a 1-9 scale with 9 = severe infection.
[u]Scores based on a 1-3 scale with 1 = upright and 3 = prostrate.
[t]Scores based on a 1-3 scale with 3 = good yield potential.

Table 16. Comparison of field disease index averages from a white mold screening trial, two years combined, Corvallis, 2008[z]

Entry	2007	2008	Overall AV
L192	7.4	5.5	6.5
NY1-6020-4	6.3	7.0	6.7
G122	11.0	5.3	8.2
PI207130-2-4	11.3	5.5	8.4
NY1-6020-5	12.2	4.9	8.6
PI290990-4-1	19.6	4.9	12.3
NYBS6637	20.3	9.0	14.7
Ex Rico	17.8	12.0	14.9
904/20-3	20.0	11.0	15.5
6235	18.2	15.0	16.6
6554	19.3	16.0	17.7
6587	13.7	22.5	18.1
6560	18.8	18.8	18.8
6561	9.8	28.3	19.1
6557	18.2	20.0	19.1
6574	18.4	21.3	19.9
6576	17.6	25.0	21.3
853/6-9	21.0	22.5	21.8
861/13-14	25.0	20.0	22.5
6464	16.2	30.0	23.1
6569	14.0	32.5	23.3
6393	25.5	21.1	23.3
6556	20.7	30.0	25.4
M0162	39.6	11.3	25.5
6573	27.7	23.8	25.8
903/20-2	33.3	18.8	26.1
826/48-3	27.2	25.0	26.1
6555	26.0	26.3	26.2
897/18-1	42.1	13.8	28.0
811/43-4	31.9	25.0	28.5
828/48-5	27.5	30.0	28.8
856/7-2	38.0	20.0	29.0
836/3-15	34.7	23.8	29.3
6595	27.0	32.5	29.8
762/2-6	38.4	22.5	30.5
6594	35.0	26.3	30.7
6575	35.0	27.5	31.3
6564	25.0	38.8	31.9
6567	32.9	32.1	32.5
6581	20.3	45.0	32.7
Savannah	29.8	37.5	33.7
846/6-3	44.0	27.5	35.8
6137	38.3	35.0	36.7
6174	49.5	25.0	37.3

Table 16. Comparison of field disease index averages from a white mold screening trial, two years combined, Corvallis, 2008 (cont.)[z]

Entry	2007	2008	Overall AV
6241	54.5	22.5	38.5
6493	47.0	32.5	39.8
6440	51.9	28.5	40.2
6479	48.0	33.8	40.9
6485	31.4	51.3	41.4
817/45-1	45.6	39.1	42.4
6443	55.0	32.5	43.8
6566	48.0	42.5	45.3
6501	57.4	33.8	45.6
6340	65.0	28.8	46.9
814/44-3	60.0	35.0	47.5
6439	64.4	31.8	48.1
6456	55.0	42.5	48.8
825/47-4	58.8	38.8	48.8
5669	68.0	32.5	50.3
6286	73.0	28.8	50.9
6348	68.0	33.8	50.9
6471	53.0	50.0	51.5
6481	60.0	43.8	51.9
OR 54	63.0	41.3	52.2
5613	70.0	37.5	53.8
5630	69.3	40.0	54.7
91G	60.0	50.0	55.0
6489	63.0	47.5	55.3
AV	36.4	27.3	31.8
LSD @ .05	24.0	14.7	20.8

[z]Scores are disease index scores obtained by multiplying scores for incidence x severity; higher numbers indicate more severe infection.

Figure 1. Commercial Bean Adjusted T/A 2008 - Full Sieve Varieties

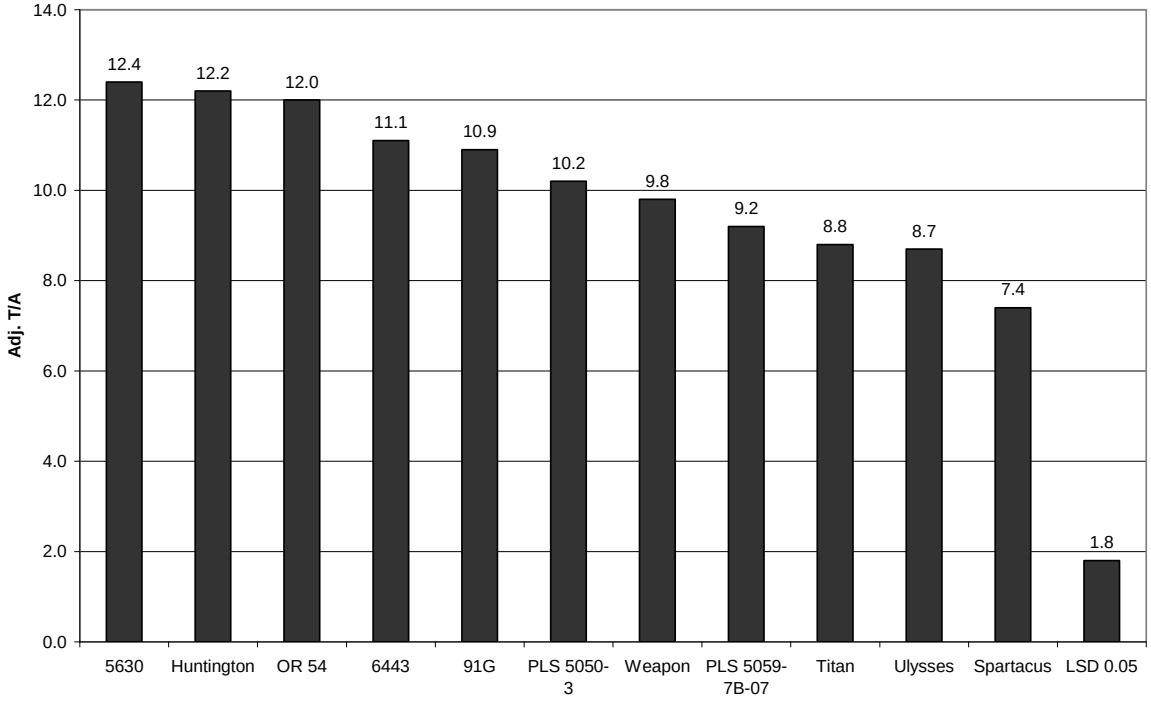

Figure 2. Commercial Bean T/A 2008 - Small Sieve Varieties