

2004-2005 SCST Proficiency Testing Results

2004-2005 Proficiency Testing Samples

Kind	Examination
<i>Brassica oleracea var. capitata</i> (cabbage)	Purity & Germination
<i>Coriandrum sativum</i> (coriander)	Germination
<i>Viola tricolor</i> (pansy)	Germination

***Brassica oleracea var. capitata* contaminants**

Kind	Rate of Occurrence
<i>Brassica juncea</i> (brown mustard)	3
<i>Geranium dissectum</i> (cut-leaf geranium)	1
<i>Galium sp.</i> (bedstraw)	2
<i>Rumex crispus</i> (curly dock)	1

Sample Preparation

- According to the ISTA sample preparation protocol
- Homogeneity testing- 10 samples (of each kind) were randomly selected and tested by RSTs. The results were analyzed by the SCST Method Validation and Referee Committee and were found to be uniform.
- Samples sent February 7th, 2005
- Results due April 22nd, 2005

Analysis of Results

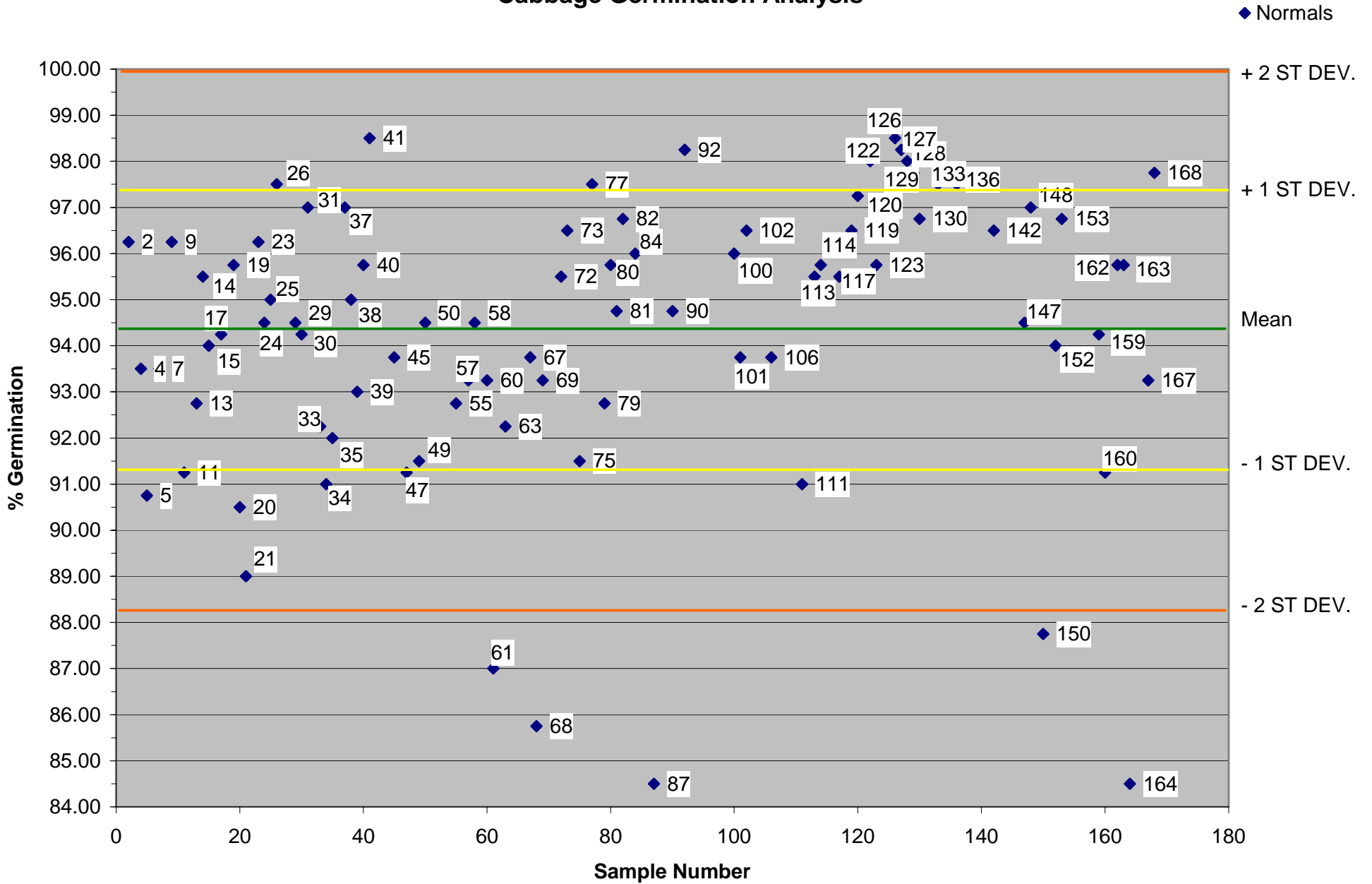
Germination *Brassica oleracea var. capitata* (cabbage)

Total number of results returned: 85

- 75% were within one standard deviation of the mean
- 94% were within two standard deviations of the mean
- Outliers: 61, 68, 87, 150, 164

	Normal seedlings	Abnormal seedlings	Dead
Mean	94.31	2.86	2.82
+ 1 STDEV Above	97.3539	4.9724	4.5607
- 1 STDEV Below	91.2697	0.7512	1.0864
+ 2 STDEV Above	100.3959	7.0830	6.2978
- 2 STDEV Below	88.2276	-1.3594	-0.6507

Cabbage Germination Analysis



Pure Seed Analysis *Brassica oleracea var. capitata* (cabbage)

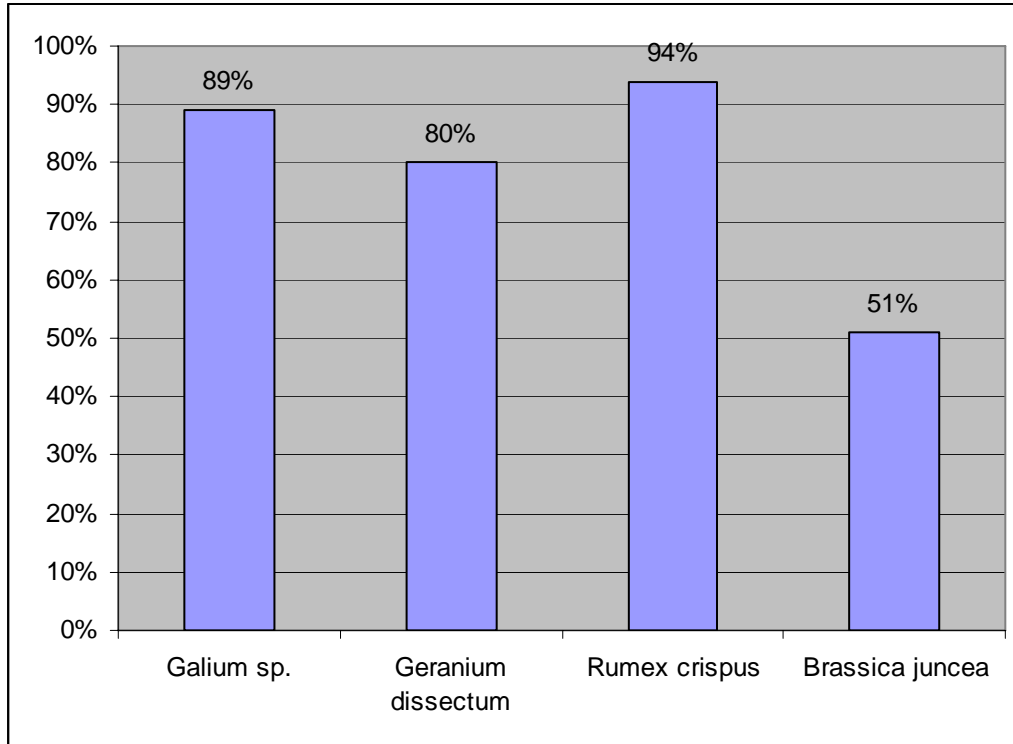
Total number of results returned: 81

- 99% were within one standard deviation of the mean
- 100% were within two standard deviations of the mean

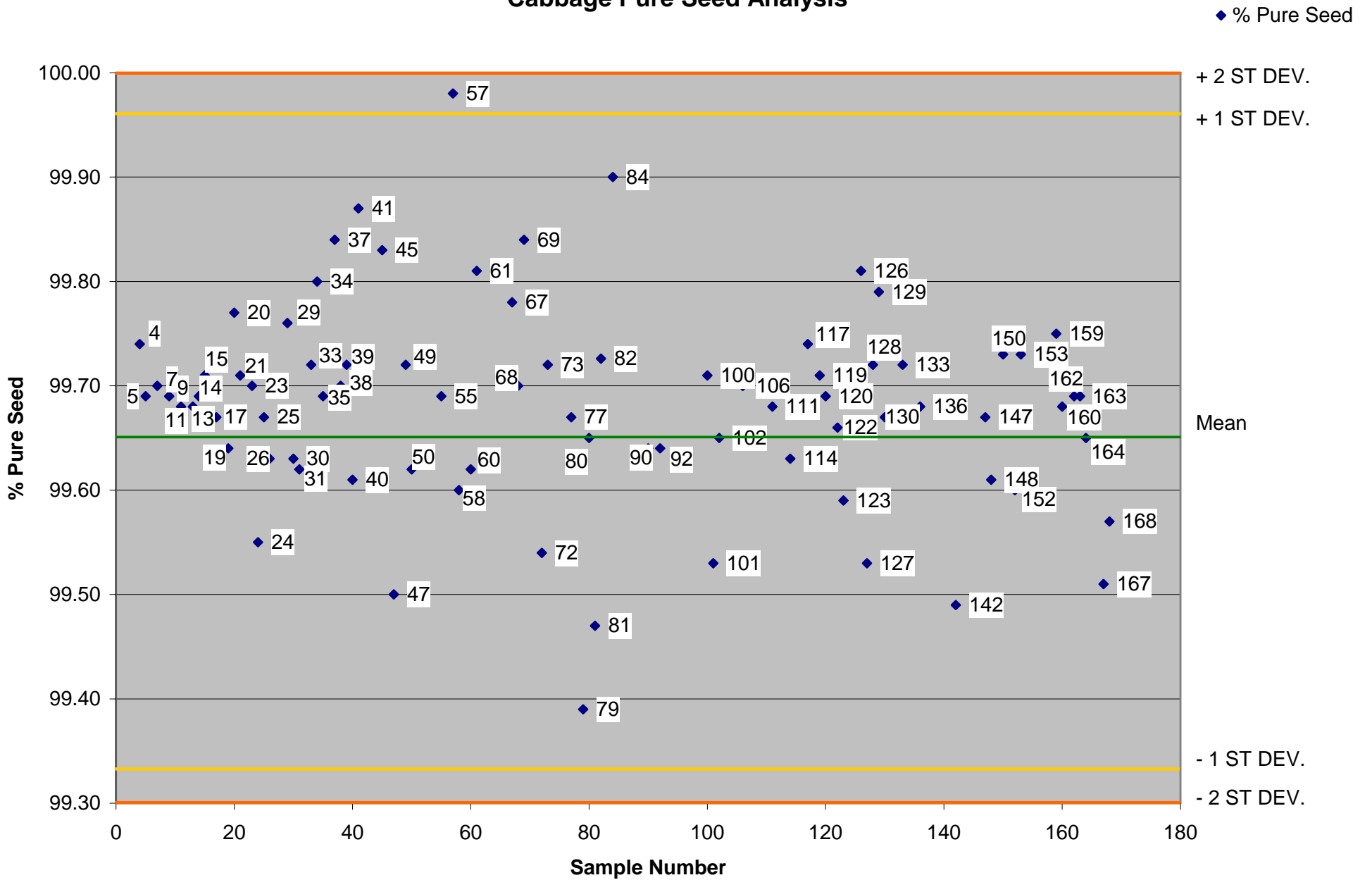
	Pure Seed
Mean	99.65
+ 1 STDEV Above	99.96
- 1 STDEV Below	99.33
+ 2 STDEV Above	100.28
- 2 STDEV Below	99.02

Percent of participants that successfully retrieved the contaminants:

Species	
Galium sp.	89%
Geranium dissectum	80%
Rumex crispus	94%
Brassica juncea	51%



Cabbage Pure Seed Analysis



Germination Analysis *Coriandrum sativum* (coriander)

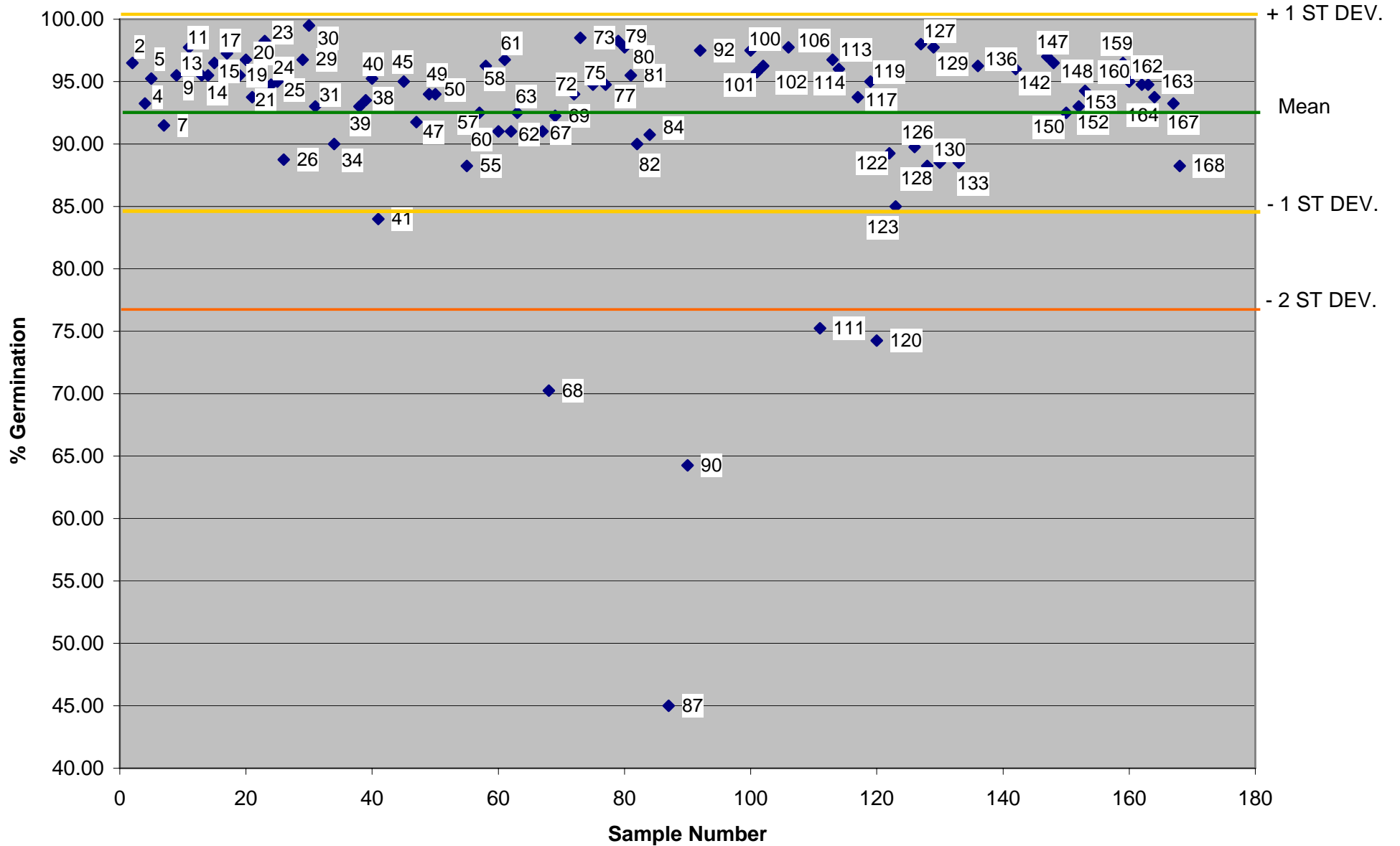
Total number of results returned: 83

- 93% were within one standard deviation of the mean
- 94% were within two standard deviations of the mean
- Outliers: 68, 87, 90, 111, 120

	Normal seedlings	Abnormal seedlings	Dead
Mean	92.3464	2.8946	4.7440
+ 1 STDEV Above	100.2902	6.1109	12.0653
- 1 STDEV Below	84.4025	-0.3217	-2.5774
+ 2 STDEV Above	108.2341	9.3272	19.3867
- 2 STDEV Below	76.4587	-3.5381	-9.8987

Coriander Germination Analysis

◆ Normals



Germination Analysis *Viola tricolor* (pansy)

Total number of results returned: 85

- 69% were within one standard deviation of the mean
- 96% were within two standard deviations of the mean
- Outliers: 26, 119, 101

	Normal seedlings	Abnormal seedlings	Dead
Mean	84.1088	4.5912	11.3000
+ 1 STDEV Above	89.3252	7.5127	15.6939
- 1 STDEV Below	78.8925	1.6696	6.9061
+ 2 STDEV Above	94.5416	10.4343	20.0878
- 2 STDEV Below	73.6761	-1.2519	2.5122

Pansy Germination Analysis

◆ Normals

