

Weighted sample

Ref no. 9098 (B)	
Seedkind: <i>Eragrostis curvula</i> (enhanced)	
Replicates	Mass
1	0.0626
2	0.0664
3	0.656
4	0.0653
5	0.0635
6	0.0652
7	0.0637
8	0.0654
Calculate the following:	0.5177/8 = 0.0647
$\text{Variance} = \frac{n(\sum x^2) - (\sum x)^2}{n(n-1)}$ x = weight of each replicate in grams n = number of replicates \sum = sum of	0.0000017
Standard deviation (s) = $\sqrt{\text{variance}}$	0.013
$\text{Coefficient of variation} = \frac{s \times 100}{\bar{X}}$ X = mean weight of 100 seeds	2.01
If the coefficient of variation does not exceed 6,0 for chaffy seeds, or 4,0 for other seeds the results of the determination can be calculated. If the coefficient of variation exceeds whichever of these limits is appropriate, count and weigh a further eight (8) replicates. Calculate the standard deviation for the sixteen replicates. Discard any replicates which diverge from the mean by more than twice than standard deviation so calculated.	
Final calculation:	
100 seeds =	0.0647 grams
Therefore: 2500 seeds =	1.6175 grams

Weighted sample

Ref no. 9072E		
Seedkind: <i>Chloris gayana</i> (enhanced)		
Replicates	Mass	
1	0.1264	
2	0.1454	
3	0.1256	
4	0.1302	
5	0.1373	
6	0.1282	
7	0.1332	
8	0.1377	
Calculate the following:		1.064/8 = 0.1330
$\text{Variance} = \frac{n(\sum x^2) - (\sum x)^2}{n(n-1)}$ x = weight of each replicate in grams n = number of replicates \sum = sum of		0.000046
Standard deviation (s) = $\sqrt{\text{variance}}$		0.068
$\text{Coefficient of variation} = \frac{s \times 100}{\bar{X}}$ X = mean weight of 100 seeds		5.11
If the coefficient of variation does not exceed 6,0 for chaffy seeds, or 4,0 for other seeds the results of the determination can be calculated. If the coefficient of variation exceeds whichever of these limits is appropriate, count and weigh a further eight (8) replicates. Calculate the standard deviation for the sixteen replicates. Discard any replicates which diverge from the mean by more than twice than standard deviation so calculated.		
Final calculation:		
100 seeds =		0.1330 grams
Therefore:	2500 seeds =	grams

Weighted sample

Ref no. 8949 E	
Seedkind: <i>Cynodon dactylon</i> (enhanced)	
Replicates	Mass
1	0.0661
2	0.0625
3	0.0614
4	0.064
5	0.0646
6	0.0626
7	0.0624
8	0.0625
Calculate the following:	$0.5061/8 = 0.0632$
$\text{Variance} = \frac{n(\sum x^2) - (\sum x)^2}{n(n-1)}$ x = weight of each replicate in grams n = number of replicates \sum = sum of	0.0000023
Standard deviation (s) = $\sqrt{\text{variance}}$	0.0015
$\text{Coefficient of variation} = \frac{s \times 100}{\bar{X}}$ X = mean weight of 100 seeds	2.37
If the coefficient of variation does not exceed 6,0 for chaffy seeds, or 4,0 for other seeds the results of the determination can be calculated. If the coefficient of variation exceeds whichever of these limits is appropriate, count and weigh a further eight (8) replicates. Calculate the standard deviation for the sixteen replicates. Discard any replicates which diverge from the mean by more than twice than standard deviation so calculated.	
Final calculation:	
100 seeds =	0.032 grams
Therefore: 2500 seeds =	1.5800 grams

Weighted sample

Ref no. 9038 E	
Seedkind: <i>Digitaria eriantha</i> (enhanced)	
Replicates	Mass
1	0.1076
2	0.178
3	0.1051
4	0.1052
5	0.1052
6	0.1054
7	0.1070
8	0.1052
Calculate the following: 0.8485/8 = 0.1061	
$\text{Variance} = \frac{n(\sum x^2) - (\sum x)^2}{n(n-1)}$ <p> x = weight of each replicate in grams n = number of replicates \sum = sum of </p>	0.0000014
Standard deviation (s) = $\sqrt{\text{variance}}$	0.0012
Coefficient of variation = $\frac{s \times 100}{\bar{X}}$ \bar{X} = mean weight of 100 seeds	1.13
<p>If the coefficient of variation does not exceed 6,0 for chaffy seeds, or 4,0 for other seeds the results of the determination can be calculated.</p> <p>If the coefficient of variation exceeds whichever of these limits is appropriate, count and weigh a further eight (8) replicates.</p> <p>Calculate the standard deviation for the sixteen replicates.</p> <p>Discard any replicates which diverge from the mean by more than twice than standard deviation so calculated.</p>	
Final calculation:	
100 seeds =	0.1061 grams
Therefore: 2500 seeds =	2.6525 grams