

# **AOSA Special Tolerances**

# Features

- Generate(chaffy): generates tolerance values for a chaffy mixture.
- Generate(non): generates tolerance values for non chaffy mixture.
- Save: Produces a text file and an Excel file that contains all data displayed in table and CBC/RC combo tabs.
  - The text file is saved into the “textFileOutPuts” folder and the Excel file is saved into the “XLFileOutputs” folder.
  - The Excel file is ment as a convenience for those using computers that recognize the format. However, the text file is universal and can be used on any computer, hence its inclusion.
- Clear: Clears all entries and erases all stored data currently in tables and text areas.

**Note:** The “# seeds/1g” values used in this program can be found in Table 2A of the AOSA Rules Vol. 1.





- For the first text field, you want to enter the names of the components/crops being tested.
- The second text field is for the labeled/1st test values for the listed components/crops.
- The third text field is for the second test's values for the same components/crops.
- The last text field is for the number of seeds per gram of a mixture.
- **IMPORTANT:**
  - When entering data, put a single space between each entry. For the first text field, you will often encounter names that have spaces in them, such as "Ky. Bluegrass" or "Red Fescue." In these cases, enter them in such a way as to remove the space (for example: Red\_Fescue or redfescue or rf). If you don't, the program will confuse the number of expected entries.
  - Speaking of expected entries, the program will expect there to be an equal number of entries in each text field. If there are not, the program will return an error of type "Input Error" that will display itself in the bottom table.
  - Each entry in each of the lines corresponds to the same numbered entry of each of the other lines. For example, the third entry in line 1 is paired with the third entry in lines 2, 3, and 4.
  - You are able to enter anything into the first text field as names can be anything (letters, numbers, symbols). However, for the second, third, and fourth text field lines, only numbers can be entered. If you enter a non-numerical value, the program will return an error of type "Error: line x" where x is replaced by the text field line number.
  - You can type things into the output table directly, but the program does not account for said entries in computation. The things you wish to compute must be entered in the text fields specifically. As a tip, text you manually add to the output table will show up in the save file if you click save.



This will produce the output table that calculates all of the desired information for the AOSA Special Tolerances Test.

## AOSA Special Tolerances Test

Column A  
(Component/Crops)

Column B  
(Label/1st test (%))

Column C  
(2nd test (%))

Column G  
(# seeds/1g)

A (Component/Crops)	B (Label/1st test (%))	C (2nd test (%))	D (Deficiency)	E (Sum B+C)	F (Avg. E/2)	G (# seed/1g)	H (F x G)
Ky_Bluegrass	50.0	42.4	7.6	92.4	46.2	3065.0	141603.0
P_Ryegrass	25.0	29.8	-4.8	54.8	27.4	530.0	14522.0
Red_Fescue	10.0	8.8	1.2	18.8	9.4	900.0	8460.0
Redtop	6.0	6.4	-0.4	12.4	6.2	10695.0	66309.0
White_Clover	7.0	11.0	-4.0	18.0	9.0	1750.0	15750.0

If you look just above the table, you will notice tabs titled "CBC/RC." Each one of these contains an instance in which the deficiency value for one of the components/crops was a positive value.

## AOSA Special Tolerances Test

Column A  
(Component/Crops)

Column B  
(Label/1st test (%))

Column C  
(2nd test (%))

Column G  
(# seeds/1g)

Table **CBC/RC 1** CBC/RC 2 CBC/RC 3 CBC/RC 4 CBC/RC 5 CBC/RC 6 CBC/RC 7

Component being considered (cbc): Ky\_Bluegrass

	F	G	H
cbc:	46.2	3065.0	141603.0
rc:	52.0	2020.02	105041.0

The particle-weight ratio of the cbc: 1.52  
The cbc is lighter than the rc.  
Tolerance value: 3.6  
Out of tolerance.

If the test shows that only, for example, 2 of the components/crops result in positive deficiency values, the remaining tabs will simply be blank. I've been told it will be highly, highly unlikely there will ever be an instance in which more than 7 tabs would be needed, so there are 7 (incase you were wondering).

## AOSA Special Tolerances Test

Column A  
(Component/Crops) Ky.\_Bluegrass P.\_Ryegrass Red\_Fescue Redtop White\_Clover

Column B  
(Label/1st test (%)) 50 25 10 6 7

Column C  
(2nd test (%)) 42.4 29.8 8.8 6.4 11

Column G  
(# seeds/1g) 3065 530 900 10695 1750

User Manual

Generate (Chaffy)

Generate (Non)

Save

Clear

Table CBC/RC 1 CBC/RC 2 **CBC/RC 3** CBC/RC 4 CBC/RC 5 CBC/RC 6 CBC/RC 7

If you wish to save your results, simply click the save button and enter the title under which you want it saved. The program will save a text file and an Excel file that contains the table and all CBC/RC tabs into the “textFileOutputs” and “XLFileOutputs” folders respectfully in the AOSA Special Tolerances Folder.

## AOSA Special Tolerances Test

Column A  
(Component/Crops) Ky\_BlueGrass P\_Ryegrass Red\_Fescue Redtop White\_Clover

Column B  
(Label/1st test (%)) 50 25 10 6 7

Column C  
(2nd test (%)) 42.4 29.8 8.8 6.4 11

Column G  
(# seeds/1g) 3065 530 900 10695 1750

User Manual  
Generate (Chaffy)  
Generate (Non)  
**Save**  
Clear

Table CBC/RC 1 CBC/RC 2 CBC/RC 3 CBC/RC 4 CBC/RC 5 CBC/RC 6 CBC/RC 7

A (Component/Crops)	B (Label/1st test (%))	C (2nd test (%))	D (Deficiency)	E (Sum B+C)	F (Avg. E/2)	G (# seed/1g)	H (F x G)
Ky_BlueGrass	50.0	42.4	7.6	92.4	46.2	3065.0	141603.0
P_Ryegrass	25.0	29.8	-4.8	54.8	27.4	530.0	14522.0
Red_Fescue	10.0	8.8	1.2	18.8	9.4	900.0	8460.0
Redtop	6.0	6.4	-0.4	12.4	6.2	10695.0	66309.0
White_Clover	7.0	11.0	-4.0	18.0	9.0	1750.0	15750.0

	A	B	C	D	E	F	G	H	I
1	A (Component)	B (Label/1)	C (2nd test)	D (Deficit)	E (Sum B+)	F (Avg. E/G)	G (# seeds)	H (F x G)	
2									
3	Ky. Bluegrass	50	42.4	7.6	92.4	46.2	3065	141603	
4	P. Ryegrass	25	29.8	-4.8	54.8	27.4	530	14522	
5	Red Fescue	10	8.8	1.2	18.8	9.4	900	8460	
6	Redtop	6	6.4	-0.4	12.4	6.2	10695	66309	
7	White Clover	7	11	-4	18	9	1750	15750	
8									
9									
10									
11									
12									
13	Component being considered (cbc): Ky. Bluegrass								
14		F		G		H			
15	cbc:	46.2		3065		141603			
16	rc:	52		2020.02		105041			
17	The particle-weight ratio of the cbc: 1.52								
18	The cbc is lighter than the rc.								
19	Tolerance value: 3.6								
20	Out of tolerance.								
21									
22	-----								
23									
24	Component being considered (cbc): Red Fescue								
25		F		G		H			
26	cbc:	9.4		900		8460			
27	rc:	88.8		2682.25		238184			
28	The particle-weight ratio of the cbc: 2.98								
29	The cbc is heavier than the rc.								
30	Tolerance value: 3.65								
31	Within tolerance.								

The saved text file and Excel file should look something like these. The top text represents the table and the bottom text represents the CBC/RC outputs.

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test1 - Notepad
File Edit Format View Help
A          B          C          D          E          F          G          H
Ky. Bluegrass  50.0    42.4    7.6    92.4    46.2    3065.0    141603.0
P. Ryegrass   25.0    29.8    -4.8    54.8    27.4    530.0    14522.0
Red Fescue   10.0    8.8     1.2    18.8    9.4     900.0    8460.0
Redtop       6.0     6.4    -0.4    12.4    6.2    10695.0    66309.0
White_Clover  7.0     11.0   -4.0    18.0    9.0     1750.0    15750.0

Component being considered (cbc): Ky. Bluegrass
          F          G          H
cbc:    46.2          3065.0    141603.0
rc:     52.0          2020.02    105041.0
The particle-weight ratio of the cbc: 1.52
The cbc is lighter than the rc.
Tolerance value: 3.6
Out of tolerance.

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Component being considered (cbc): Red_Fescue
          F          G          H
cbc:    9.4          900.0    8460.0
rc:    88.8          2682.25    238184.0
The particle-weight ratio of the cbc: 2.98
The cbc is heavier than the rc.
Tolerance value: 3.65
Within tolerance.

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Lastly, if you want to clear all fields, simply click "Clear."

## AOSA Special Tolerances Test

Column A  
(Component/Crops)

Column B  
(Label/1st test (%))

Column C  
(2nd test (%))

Column G  
(# seeds/1g)

A (Component/Crops)	B (Label/1st test (%))	C (2nd test (%))	D (Deficiency)	E (Sum B+C)	F (Avg. E/2)	G (# seed/1g)	H (F x G)
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Red_Fescue	10.0	8.8	1.2	18.8	9.4	900.0	8460.0
Redtop	6.0	6.4	-0.4	12.4	6.2	10695.0	66309.0
White_Clover	7.0	11.0	-4.0	18.0	9.0	1750.0	15750.0





If you have any questions, concerns, complaints, or suggestions; you can reach me via email at [meyer95826@gmail.com](mailto:meyer95826@gmail.com). This program is intended as a free software to be used by anyone. As this is currently in beta, be aware there may be issues either in calculations or output although I have worked my hardest to resolve as many as possible. If you encounter any, you are more than welcome to contact me so that I may look into it.

Andrew Meyer