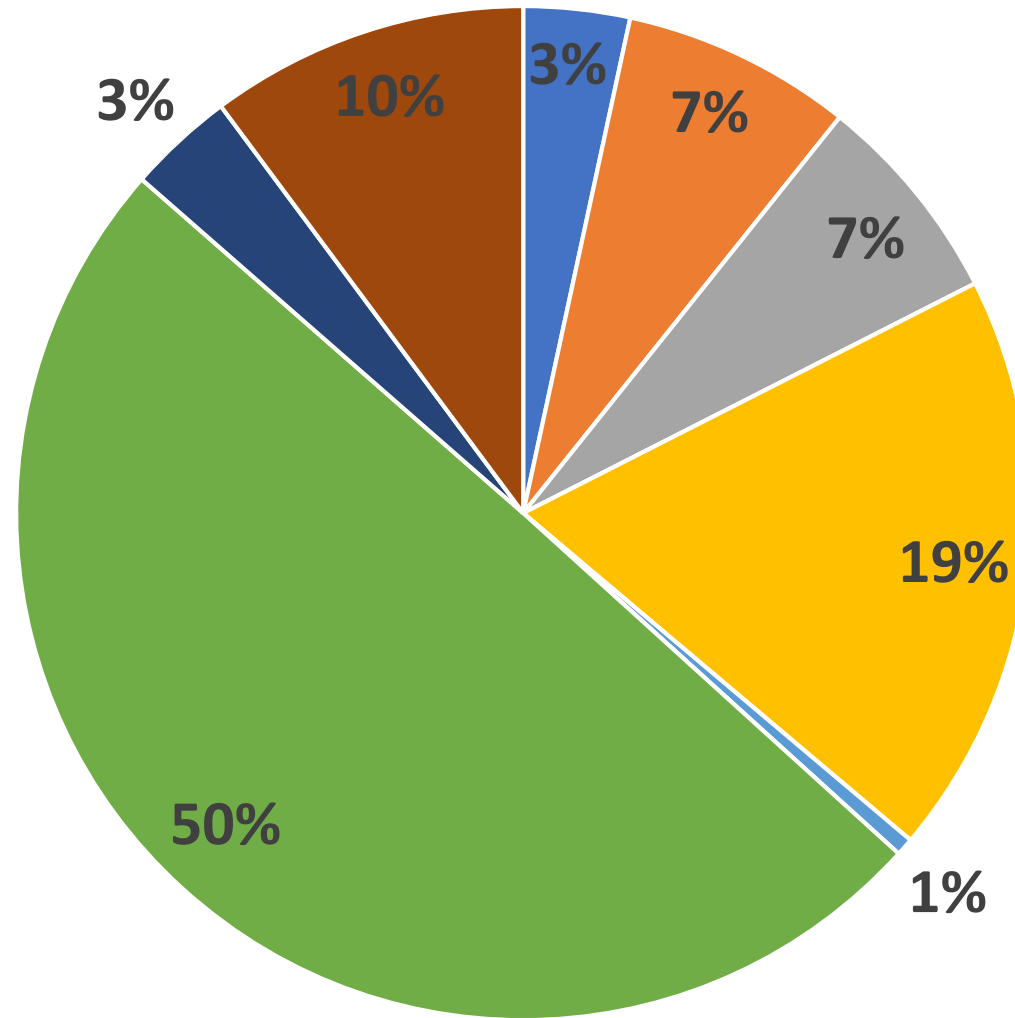


2019-2020 Uniform Blowing
Procedure Written PT

Participation

- Proficiency test sent to 254 participants, including associate members
- 177 Participants returned results (70% participation rate)
- All mandatory SCST members participated
- 37 AOSA members participated
- 6 CSAAC members participated

Participation Breakdown

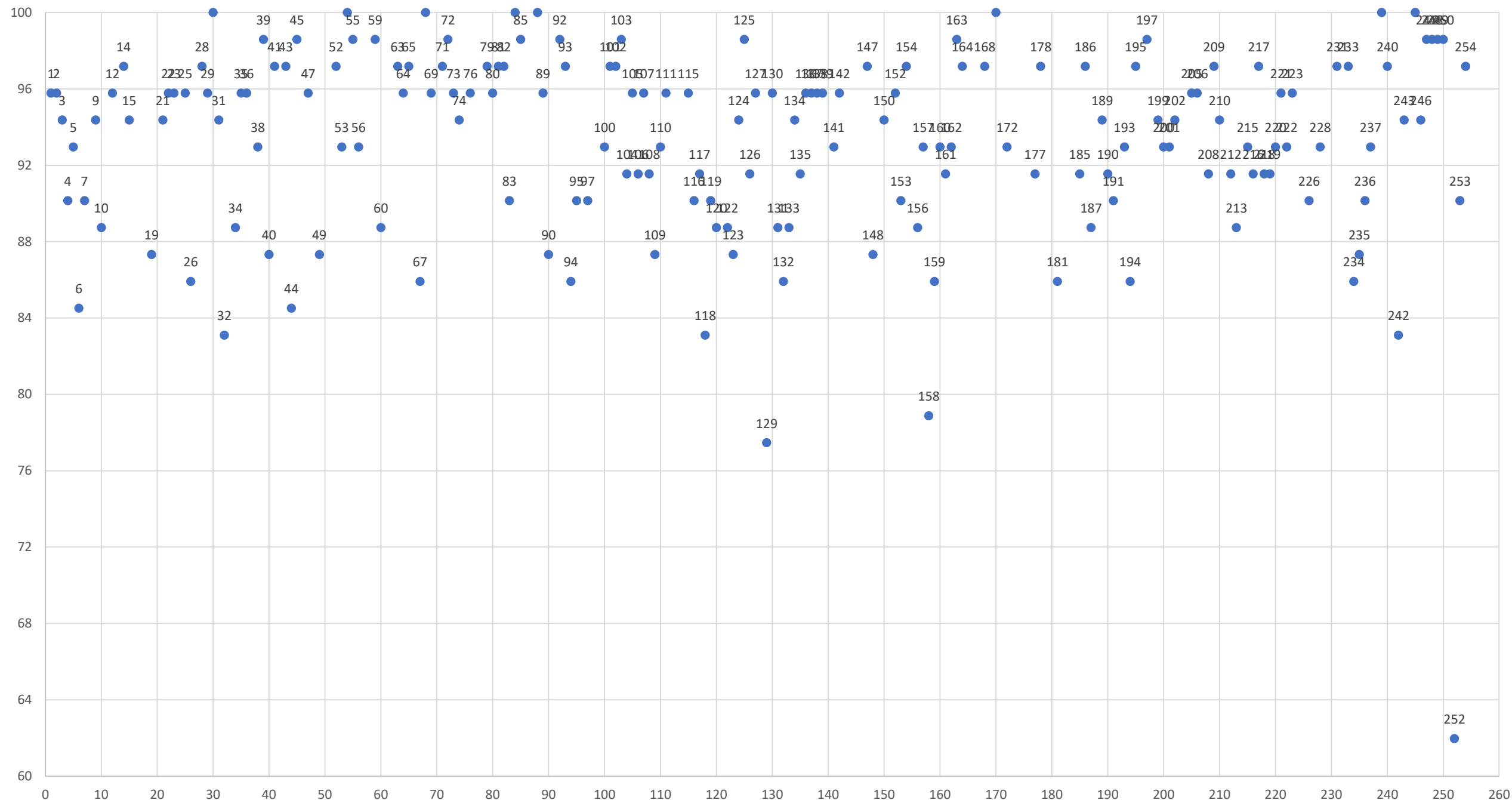


■ CSA Germ ■ CSA P&G ■ CVT ■ Not ■ PM ■ RST ■ RST/CSAAC ■ RST/CSA P&G

Results

- To be considered passing on written test must score above an 80%
 - Only 3 non accredited participants below an 80%.
 - One does not have access to AOSA Rules
- Average Score across all participants 93%
- Average score of AOSA participants 94%
- Average score of SCST participants 93%
- Average score of CSAAC participants 92%
- Average score of non accredited participants 93%

2019-2020 SCST UBP Written PT



Ambiguous questions

Everyone received credit for these questions

24. **T F** Before blowing a sample, remove weed seeds and other crops seeds as well as extraneous material that might cause clumping and interfere with the blowing process.

- **Could be true or false. You must remove extraneous material that might cause clumping and interfere but you don't have to remove weed and other crop prior to blowing unless they interfere with blowing.**

31. **T F** When Kentucky bluegrass is a pure seed component of a mixture, it must be separated from the mixture before it can be blown in the General type blower.

- **Is not mandatory to separate prior to blowing or it can be removed. There are two methods listed.**

More Difficult Questions

2. When is a complete recalibration, using a standard calibration sample, required to be performed? (select all that apply) **Most people selected a and b but not c and d**

a. Any time the purity separations are suspected of being inaccurate

b. When a blower has undergone repair

c. When the blower has been moved to a new location within the same room

d. When the screen in the blower sample cup has been replaced

You should always check equipment if you suspect results are inaccurate.

Section 3.2 Repair and maintenance of blower

- **The blower should be recalibrated any time alterations are made that may affect the blower performance. Oiling the blower, installation of a new screen, replacement of a tube, or moving the blower are examples of changes that would necessitate recalibration. Changes in the atmospheric pressure, humidity ($\pm 25\%$) and temperature ($\pm 60\text{C}$) may also alter the calibration point.**

More Difficult Questions

4. After completing the blowing procedure for Orchardgrass, which of the following are to be removed from the light portion? (select all that apply)

a. Pigweed seeds

b. Kentucky bluegrass seeds

c. Insect parts

d. Orchardgrass seeds

• Many also selected c. insect parts. The light portion is inert so there is no need to remove insect parts which are already classified as inert.

More Difficult Questions

5. After completing the blowing procedure for Kentucky bluegrass, which of the following are to be removed from the heavy portion? (select all that apply)

a. Yarrow seeds

b. Kentucky bluegrass seeds

c. Insect parts

d. Canada bluegrass seeds

• **Many did not select d. Canada bluegrass which would be an other crop.**

More Difficult Questions

6. The **exact same** equivalent air velocity value for the optimum calibration point obtained with the Kentucky bluegrass calibration sample shall be used for which of the following?

- a. All cultivars of Kentucky bluegrass
- b. Supina bluegrass (*Poa supina*)
- c. Rough bluegrass
- d. Canada bluegrass

Many also answered c. Rough bluegrass. Rough bluegrass does not use the exact same equivalent air velocity value. It uses the setting obtained with Kentucky bluegrass times 0.82

More Difficult Questions

7. Which seed kinds must use the blower gate opening value obtained using the Kentucky bluegrass calibration sample to calculate their equivalent air velocity value?

a. Side-oats grama

b. Weeping alkaligrass

c. Rough bluegrass

d. Blue grama

- **Section 5 Uniform Blowing Procedure. Some people did not select side-oats grama and weeping alkaligrass.**

More Difficult Questions

10. While calibrating your blower, what is an acceptable difference between the number of misplaced light and heavy seeds?

- a. 0-5
- b. 0-7
- c. 0-10
- d. 0-15

Section 4.1 General Blower

Continue the procedure, changing settings of the gate opening by 0.2 until the relative numbers of light and heavy seeds misplaced are about the same (0 to 10).

More Difficult Questions

12. Blower calibration shall be confirmed with an anemometer:

a. Daily

b. Weekly

c. Each time a sample requires the UBP

d. All of the above

- **Section 4.3 Maintaining calibration. Blower calibration shall be confirmed with an anemometer each time a sample requires the uniform blowing procedure using steps a through d in section 4.1,**

More Difficult Questions

14. What portion of the sample do you blow?

a. All of the submitted sample

b. Noxious and Purity

c. Purity only

d. Noxious only

- **Some people answered b. Noxious and purity. The purpose of the uniform blower is to separate inert and pure seed so only the purity needs to be blown.**

More Difficult Questions

17. Find the cross-over point for this sample of Kentucky bluegrass:

a. 10

b. 10.13

c. 10.03

d. 10.15

Blower setting	Average number of light florets in heavy fraction	Average number of heavy florets in light fraction
9.90	10	0
10.00	7	3
10.10	5	4
10.20	3	5

- Only 50% of people got this one correct. Most people followed the formula but did not read the paragraph below the formula.

Question 17 continued

$$\text{SetLO} + [(\text{SetHI} - \text{SetLO}) \times \frac{(\text{LtLO} - \text{HvLO})}{(\text{LtLO} - \text{HvLO}) - (\text{LtHI} - \text{HvHI})}] = \text{KMR}$$

$$10.10 + ((10.20 - 10.10) \times \frac{(5 - 4)}{(5 - 4) - (3 - 5)}) = 10.13$$

The KMR would be rounded off to 10.15 since the manometer setting can only be read to the nearest 0.05. The same principle and formula applies to General type blowers for establishing uniform blowing points.

More Difficult Questions

- 19. **T** F The calibration sample must be exposed to open room atmosphere for approximately sixteen hours or overnight.
- **Section 2.4 Preconditioning. The calibration sample should be exposed to open room atmosphere for approximately sixteen hours or overnight before using.**

More Difficult Questions

- 23. T **F** The 'Pensacola' Bahiagrass MCS can also be used to determine the blower setting for 'Argentine' Bahiagrass.
- **The Uniform blowing point is only set for the crops specified in Section 6 of Handbook 2**

More Difficult Questions

25. **T** F A high quality thermometer-hygrometer combination should be kept in the blower room and temperature and humidity should be recorded each time the blower or the standard stained sample is calibrated.

- **As stated in Section 3.2 Repairs and maintenance A high quality thermometer-hygrometer combination should be kept in the blower room and temperature and humidity should be recorded each time the blower or the standard stained sample is calibrated. Changes in the atmospheric pressure, humidity ($\pm 25\%$) and temperature ($\pm 60\text{C}$) may also alter the calibration point. Therefore it is important to monitor the temperature and humidity**

More Difficult Questions

26. T **F** The “General” type blower cannot be used to blow seed kinds that do not have a MCS.

- **The general type blower can be used to assist in separating other crop species that do not have blowing points but the seeds still need to be checked for pure seed and inert based off the pure seed unit definition in Table 2A of AOSA Rules for Testing Seeds.**

More Difficult Questions

27. **T** F The factors stated in the AOSA Rules for Testing Seeds Vol. 1 apply only to the General blower with which the factors were developed. The factors cannot be used on other blowers using a single calibration point as a reference.

- **Section 7.2. Determining blowing point for species without calibration samples. The factors stated in the AOSA Rules for Testing Seeds Vol. 1 apply only to the General blower with which the factors were developed. The factor cannot be used on other blowers using a single calibration point as a reference.**

More Difficult Questions

- 30. **T** F For the General-type seed blower, the air-gate intake opening must always be to the left side of the air gate



- If air gate opening is to the right the air setting will not be accurate.



More Difficult Questions

33. T **F** The blowing point of rough bluegrass is calculated by using the uniform blowing point of orchardgrass multiplied by a factor of 0.82

- **The blowing point of rough bluegrass is calculated by using the uniform blowing point of Kentucky bluegrass.**

More Difficult Questions

35. T **F** It is necessary to reconfirm the blower calibration before every sample.

- Section 4.3 maintaining calibration
- When blowing several samples of the same kind consecutively, it is not necessary to reconfirm the blower calibration provided the air gate setting is not changed. However, if the kind under consideration is changed (e.g., from Kentucky bluegrass to orchardgrass), the EAV value for the new kind under consideration shall be confirmed with an anemometer