2021 Rule Change Proposal 7

Purpose of Proposal: To add Carex vulpinoidea, fox sedge, to Volume 1, Table 2A of the AOSA Rules for

Testing Seeds.

Present Rule: None

Proposed Rule: Volume 1. Principles and Procedures

Table 2A. Weights for working samples.

Pure Seed Unit #	Chaffy (C) or Super Chaffy (SC) ^a	Kind of Seed	Minimum weight for purity analysis ^b	Minimum weight for noxious weed seed or bulk examination	Approximate number of seeds per gram ^c	Approximate number of seeds per ounce ^d
			Grams	Grams	Number	Number
42	С	Carex vulpinoidea Michx.				
		fox sedge	0.77	7.7	3,247	92,052

Harmonization statement: *Carex vulpinoidea* is not currently listed in the Federal Seed Act Regulations, the Canadian Methods and Procedures for Testing Seeds, or the International Rules for Seed Testing. This species is sold in the native seed industry in the United States. Adding a pure seed unit definition and working weights to the AOSA Rules will ensure standard testing procedures among laboratories.

Supporting Evidence: Carex vulpinoidea is native to the United States (except Utah) and Canada (southern provinces). It is a perennial sedge that grows in mounds of arching glossy foliage. The leaves are often evergreen. These foliage characteristics make this sedge desirable for landscaping usage.

Pure Seed Unit:





The procedures outlined in Section 13 of Volume 1 of the AOSA Rules for Testing Seeds were followed to determine the minimum weight for purity analysis and the approximate number of seeds per gram. Seed counts were conducted on seed lots received since 2010. The coefficient of variation for chaffy seeds (6.0) was not exceeded.

Table 1: Weight (grams) of eight 100 pure seed unit replicates of twenty seed lots of *Carex vulpinoidea*. The overall average weight for 100 seeds is 0.0308.

Lot No.	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Ave Weight	CV
1	0.0399	0.0406	0.0392	0.0401	0.0392	0.0391	0.0413	0.0404	0.0400	1.84
2	0.0435	0.0431	0.0421	0.0425	0.0425	0.0424	0.0432	0.0414	0.0426	1.48
3	0.0349	0.0359	0.0346	0.0353	0.0349	0.0342	0.0333	0.0351	0.0348	2.09
4	0.0363	0.0355	0.0345	0.0358	0.0355	0.0359	0.0351	0.0357	0.0355	1.43
5	0.0351	0.0361	0.0373	0.0357	0.0366	0.0372	0.0366	0.0360	0.0363	1.93
6	0.0364	0.0338	0.0352	0.0358	0.0357	0.0366	0.0363	0.0362	0.0358	2.37
7	0.0368	0.0362	0.0375	0.0372	0.0359	0.0363	0.0363	0.0365	0.0366	1.38
8	0.0375	0.0385	0.0378	0.0388	0.0368	0.0380	0.0372	0.0383	0.0379	1.67
9	0.0258	0.0259	0.0258	0.0254	0.0237	0.0245	0.0245	0.0262	0.0252	3.28
10	0.0259	0.0247	0.0257	0.0248	0.0257	0.0260	0.0259	0.0268	0.0257	2.46
11	0.0263	0.0256	0.0262	0.0263	0.0273	0.0252	0.0279	0.0256	0.0263	3.23
12	0.0291	0.0293	0.0283	0.0295	0.0286	0.0282	0.0283	0.0293	0.0288	1.72
13	0.0292	0.0296	0.0296	0.0280	0.0294	0.0301	0.0279	0.0299	0.0292	2.65
14	0.0246	0.0248	0.0250	0.0262	0.0238	0.0240	0.0244	0.0264	0.0249	3.57
15	0.0292	0.0287	0.0299	0.0289	0.0303	0.0296	0.0293	0.0281	0.0293	2.23
16	0.0258	0.0250	0.0246	0.0239	0.0252	0.0257	0.0253	0.0242	0.0250	2.56
17	0.0238	0.0235	0.0239	0.0232	0.0237	0.0228	0.0233	0.0234	0.0235	1.43
18	0.0272	0.0268	0.0270	0.0269	0.0267	0.0274	0.0261	0.0272	0.0269	1.40
19	0.0247	0.0251	0.0257	0.0255	0.0257	0.0252	0.0243	0.0247	0.0251	1.91
20	0.0267	0.0264	0.0268	0.0264	0.0267	0.0262	0.0257	0.0261	0.0264	1.31

References:

www.newmoonnursery.com/plant/Carex-vulpinoidea

https://plants.sc.egov.usda.gov/core/profile?symbol=CAVU2 ;Steve Hurst, hosted by the USDA-NRCS PLANTS Database

USDA-NRCS PLANTS Database / Hurd, E.G., N.L. Shaw, J. Mastrogiuseppe, L.C. Smithman, and S. Goodrich. 1998. *Field guide to Intermountain sedges*. General Technical Report RMS-GTR-10. USDA Forest Service, RMRS, Ogden.

Respectfully submitted: Kathy Mathiason, SDSU Seed Testing Laboratory, Box 2207A, Brookings, SD 57007. 605-688-6636 katherine.mathiason@sdstate.edu

Date Submitted: October 2, 2020 Date Amended: February 20, 2021