

2021 Rule Change Proposal 6

Purpose of Proposal: To add *Carex sprengei*, Sprengel's 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	C	<i>Carex sprengei</i> Dewey ex Spreng. Sprengel's sedge	5	50	485	13,750

Harmonization statement: *Carex sprengei* 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 sprengei* is a perennial sedge that is also known as long-beaked sedge. It is native to most of the northern half of the United States and to the southern half of Canada. It serves a dual purpose: landscaping due to its ornamental seed head and food source for migrating songbirds when seeds drop in the autumn.

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 2011. The coefficient of variation for chaffy seeds (6.0) was not exceeded.

Table 1: Weight (grams) of eight 100 pure seed unit replicates of thirteen seed lots of *Carex sprengei*. The overall average weight for 100 seeds is 0.2061.

Lot No.	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Ave Weight	CV
1	0.2674	0.2618	0.2619	0.2607	0.2618	0.2655	0.2577	0.2592	0.2620	1.13
2	0.2052	0.1872	0.1999	0.1874	0.1819	0.1847	0.1930	0.2056	0.1931	4.53
3	0.1837	0.1983	0.1842	0.2036	0.1876	0.1780	0.1899	0.1940	0.1899	4.13
4	0.1517	0.1550	0.1637	0.1661	0.1641	0.1649	0.1548	0.1594	0.1600	3.23
5	0.1999	0.2005	0.1914	0.1993	0.2059	0.2044	0.1976	0.2036	0.2003	2.14
6	0.2048	0.1961	0.1929	0.1848	0.1898	0.1890	0.1933	0.1884	0.1924	2.97
7	0.2080	0.2148	0.2196	0.1967	0.2126	0.2205	0.2143	0.2271	0.2142	3.98
8	0.1433	0.1369	0.1374	0.1369	0.1424	0.1393	0.1384	0.1415	0.1395	1.72
9	0.2351	0.2272	0.2295	0.2246	0.2297	0.2253	0.2267	0.2269	0.2281	1.37
10	0.2309	0.2246	0.2086	0.2041	0.2145	0.2028	0.2144	0.1980	0.2122	4.95
11	0.1961	0.2075	0.2164	0.2043	0.2027	0.2149	0.1976	0.1915	0.2039	4.05
12	0.3016	0.3124	0.3018	0.3079	0.2993	0.3054	0.3038	0.3066	0.3049	1.28
13	0.1749	0.1779	0.1817	0.1746	0.1782	0.1828	0.1869	0.1716	0.1786	2.62

References:

<https://www.minnesotawildflowers.info/grass-sedge-rush/sprengei-sedge>

<https://www.prairiemoon.com/carex-sprengelii-long-beaked-sedge-prairie-moon-nursery.html>

<https://plants.sc.egov.usda.gov/core/profile?symbol=CASP7>

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