

# 2024 Rule Proposal #1

**Purpose of Proposal:** Add PSU definition and working weights for *Trifolium michelianum* Savi, Balansa clover to the AOSA Rules for Testing Seeds. The species will only be added to AOSA Rules Volume 1 Table 2A.

**Present Rule:** New Rule; Not in the AOSA Rules for Testing Seeds Volume 1.

## Proposed Rule:

Pure Seed #	Chaffy Seed	Kind of seed	Minimum weight for Purity analysis	Minimum weight for noxious-weed seed or bulk examination	Approximate number of seeds per gram	Approximate number of seeds per ounce
2		<i>Trifolium michelianum</i> Savi clover, balansa; clover, big-flowered	2.4	24	1,091	30,936

## Harmonization/Impact statement:

This species is not currently listed in the Federal Seed Act Regulations or the Canadian Methods and Procedures for Testing Seeds. The International Rules for Seed Testing include *T. michelianum* Savi in Table 2C Part 1; Purity analysis weight of 2 grams and other seeds by number weight of 20 grams.

## Supporting Evidence: Table 1 – Seed counts

Kind: Balansa clover																
Species: <i>T. michelianum</i>																
Year	Lab #	rep 1	rep 2	rep 3	rep 4	rep 5	rep 6	rep 7	rep 8	Mean	Variance	STDEV	CoVar	seeds/#	seeds/gram	purity wt.
2020	47953	0.0865	0.0831	0.0808	0.0841	0.0851	0.0867	0.0858	0.0791	0.0839	7.56857E-06	0.002751	3.279027	540643.6	1191.895113	2.098
2020	51059	0.0925	0.0957	0.0927	0.0892	0.0859	0.0912	0.0877	0.0901	0.090625	9.585E-06	0.003096	3.416237	500524.1	1103.448276	2.266
2020	51062	0.0918	0.0845	0.0916	0.0957	0.0896	0.0893	0.0896	0.0907	0.09035	9.83714E-06	0.003136	3.471413	502047.6	1106.806862	2.259
2020	51063	0.0980	0.0980	0.0948	0.0968	0.0973	0.1015	0.1012	0.1005	0.098513	5.54411E-06	0.002355	2.390146	460449.2	1015.099607	2.463
2020	51165	0.1127	0.1120	0.1139	0.1136	0.1096	0.1109	0.1093	0.1102	0.111525	3.19357E-06	0.001787	1.602382	406724.9	896.6599417	2.788
2020	51656	0.0949	0.0938	0.0941	0.0934	0.0955	0.0960	0.0944	0.0973	0.094925	1.66786E-06	0.001291	1.360501	477850.9	1053.46326	2.373
2020	51657	0.0877	0.0937	0.0898	0.0910	0.0907	0.0901	0.0861	0.0901	0.0899	5.09429E-06	0.002257	2.510626	504560.6	1112.347052	2.248
2020	51658	0.0894	0.0891	0.0882	0.0904	0.0875	0.0940	0.0890	0.0886	0.089525	3.99643E-06	0.001999	2.233015	506674.1	1117.006423	2.238
2020	51659	0.0937	0.0962	0.0945	0.0945	0.0994	0.0970	0.0957	0.0929	0.095488	4.28411E-06	0.00207	2.167622	475036	1047.257494	2.387
2020	51660	0.0838	0.0904	0.0896	0.0927	0.0867	0.0901	0.0909	0.0909	0.089388	7.93839E-06	0.002818	3.152024	507453.5	1118.724654	2.235
2020	51725	0.1099	0.1127	0.1106	0.1133	0.1147	0.1124	0.1129	0.1169	0.112925	4.85357E-06	0.002203	1.950925	401682.5	885.5435023	2.823
2021	54307	0.0813	0.0802	0.0836	0.0832	0.0882	0.0841	0.0851	0.0810	0.083338	6.69696E-06	0.002588	3.105264	544292.8	1199.940003	2.083
2021	54308	0.0865	0.0825	0.0853	0.0835	0.0893	0.0841	0.0825	0.0852	0.084863	5.18268E-06	0.002277	2.682633	534511.7	1178.376786	2.122
2015	AGRI	0.0990	0.1030	0.1000	0.0980	0.1020	0.1030	0.1000	0.0980	0.100375	4.26786E-06	0.002066	2.058161	451905.4	996.26401	2.509
2022	67544	0.1090	0.1076	0.1098	0.1097	0.1055	0.1087	0.1037	0.1036	0.1072	6.68E-06	0.002585	2.410979	423134.3	932.8358209	2.68
2022	68714	0.0825	0.0805	0.0804	0.0828	0.0786	0.0793	0.0792	0.0796	0.080363	2.38554E-06	0.001545	1.921939	564442.4	1244.361487	2.009
2022	68563	0.0766	0.0796	0.0737	0.0791	0.0715	0.0740	0.0742	0.0738	0.075313	8.10982E-06	0.002848	3.781278	602290.5	1327.80083	1.883
2022	68564	0.0813	0.0889	0.0888	0.0901	0.0860	0.0866	0.0883	0.0848	0.08685	8.06571E-06	0.00284	3.270029	522279.8	1151.410478	2.171
2022	66548	0.0987	0.099	0.0958	0.098	0.0893	0.0953	0.0917	0.0917	0.0949	1.33798E-05	0.003658	3.852897	477788	1053.324556	2.373
													Average	494,963	1,091	2.4
														Seeds per ounce:		30,936

Avg. 2,500 seed weight = 2.4 grams

Avg. 25,000 seed weight = 24 grams

Table 1 is a result of a survey of laboratories. 2 laboratories participated.

The raw data was analyzed by Dr. Sabry Elias of Oregon State University and AOSA chair of the Statistics Committee. Results show a purity weight of 2.4 grams and a bulk exam weight of 24 grams

Pure Seed Unit numbers 2 and 9 are suitable for legumes. A Pure Seed Unit of 2 is recommended for *T. michelianum* as it is generally marketed as seeds without the pod intact.

Seed unit:



**Submitted by:** Rachel Henricks, 263 West 1<sup>st</sup> St. Halsey, Oregon 97348  
Phone: 541-369-2236 Fax: 1-541-636-2451 email: [Rachel.henricks@gmail.com](mailto:Rachel.henricks@gmail.com)

**Date Submitted:** 10/5/2023