

Rule Change Proposal No. 9

Purpose

Change the minimum weights for purity analysis, noxious-weed seed and bulk examination in Table 1 (Weights for working samples) for *Nasturtium officinale* R. Br., watercress.

Present Rule

Table 1. Weights for working samples

Pure Seed Unit #	Kind of seed	Minimum weight for purity analysis Grams	Minimum weight for noxious-weed seed or bulk examination Grams	Approximate number of seeds per gram Number	Approximate number of seeds per ounce Number
2	<i>Nasturtium officinale</i> R. Br. watercress	1	25	5,170	146,625

Proposed Rule

Table 1. Weights for working samples

Pure Seed Unit #	Kind of seed	Minimum weight for purity analysis Grams	Minimum weight for noxious-weed seed or bulk examination Grams	Approximate number of seeds per gram Number	Approximate number of seeds per ounce Number
2	<i>Nasturtium officinale</i> R.Br. watercress	0.5	5	5170	146,625

Harmonization: See supporting evidence.

Supporting Evidence

Following the procedure for seed counts that is outlined in Appendix 4 of the AOSA Rules, three samples of *Nasturtium officinale* (watercress), a member of the Brassicaceae, had seed counts conducted. The mean purity weight for these three samples was 0.5 grams. The noxious weed-seed or bulk examination was calculated at ten times this value. These weights of 0.5 / 5 grams harmonize with the ISTA Rules, which also requires 0.5 grams for purity analysis and 5 grams for noxious-weed seed and bulk examination. Additional supporting evidence is stated in AOSA Rules for Testing Seeds, 2.3 a and c – weights for working samples. In (a) it is stated that the working weight for purity analysis is based on the approximate weight of 2,500 pure seed units. In (c) the purity working sample may be based on a sample containing approximately the equivalent weight of 2,500 pure seed units provided it is not less than two-tenths gram (0.2) analyzed. In determining the weight for a noxious-weed seed examination it is based on the approximate weight of 25,000 pure seed units (ten times the purity analysis weight).

With the supporting evidence the weights that are currently in Table 1 calculate to significant higher amounts of pure seed units to be examined. The proposed weights show that less pure seed units need to be examined plus the weights will harmonize with ISTA Rules.

Lot #	Mean Wt. (gm) Per 100 seeds	Minimum Purity Working Wt. (gm)	Minimum Noxious Working Wt. (gm)
1*	0.0214	0.535	5.35
2*	0.0178	0.445	4.45
3*	0.0208	0.520	5.20
Mean	0.0200	0.500	5.00

*based on 8 replicates of 100 seeds

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