

Rule Change Proposal - 6

Purpose: To correct the improper assignment of pure seed unit definition for *Tripsacum dactyloides* (eastern gamagrass) by adding a new pure seed unit definition.

Present rule:

Table 2.4 Weights for working samples.

Pure Seed Unit #	Kind of seed	Minimum weight for purity analysis ^a	Minimum weight for noxious-weed seed or bulk examination	Approximate number of seeds per gram ^b	Approximate number of seeds per ounce ^c
		Grams	Grams	Number	Number
2	<i>Tripsacum dactyloides</i> (L.) L. Eastern gamagrass	205	500	12	340

Table 3A. Pure seed unit definitions

PSU Number	Description of Pure Seed Unit
2	<p>Seed with at least a portion of the seed coat attached. Broken seed larger than one-half the original size with at least a portion of the seed coat attached.</p> <p>Special considerations:</p> <ul style="list-style-type: none"> * For Fabaceae: Cotyledons that are broken apart but held together by the seed coat shall be classified as pure seed. Cotyledons that have separated and are not held together by the seed coat are regarded as inert matter irrespective of whether or not the radicle-plumule axis and/or more than half of the seed coat may be attached. * Wing, when present, is removed and considered inert matter. * Pericarp (fruit wall), when present on seeds of <i>Desmodium tortuosum</i>, <i>Hedysarum boreale</i>, and <i>Purshia tridentata</i> is removed and considered inert matter. * Weevil-infested vetch (<i>Vicia</i> spp.) and pea (<i>Pisum sativum</i>) seeds, irrespective of the amount of insect damage, are to be considered pure seed, unless they are broken pieces one-half the original size or less. * Chalcid-damaged seeds in Fabaceae that are puffy, soft, or dry and crumbly are considered inert matter.

Proposed Rule:

Table 2.4 Weights for working samples.

Pure Seed Unit #	Kind of seed	Minimum weight for purity analysis ^a	Minimum weight for noxious-weed seed or bulk examination	Approximate number of seeds per gram ^b	Approximate number of seeds per ounce ^c
		Grams	Grams	Number	Number
51	<i>Tripsacum dactyloides</i> (L.) L. Eastern gamagrass	205	500	12	340

Table 3A. Pure seed unit definitions

PSU Number	Description of Pure Seed Unit
51	<p>Pistillate rame segment consisting of a pistillate spikelet with attached rame internode, whether or not a caryopsis is present.</p> <p>Piece of pistillate rame segment larger than one-half of the original size unless no caryopsis is present.</p> <p>Caryopsis or piece of broken caryopsis larger than one-half of the original size.</p> <p>Special consideration:</p> <ul style="list-style-type: none"> • Two or more pistillate rame segments as described above attached together are to be separated into single segments. • Attached structures such as stem segments and staminate spikelets are to be removed and classified as inert matter.

APPENDIX 4: Glossary of Terms for Pure Seed Units

Rame: [A disarticulating inflorescence branch that forms the basic unit of a typical Andropogoneae inflorescence. \[Refer to Barkworth, M. E., K. M. Capels, S. Long, and M. B. Piep. 2003. Flora of North America, Volume 25, Magnoliophyta: Commelinidae \(in part\): Poaceae, part 2. Oxford University Press. 783 pp.\]](#)

Rame internode: [A segment of an inflorescence branch in the Andropogoneae. \[Note: the dispersal unit usually consists of a spikelet pair and a rame internode that extends from the sessile spikelet to the next most distal sessile spikelet. In *Tripsacum* a single spikelet is present in each pistillate segment of the proximal portion of the inflorescence branch while pairs of staminate spikelets are present in the distal portion of the inflorescence branch. Also see rame.\]](#)

Harmonization and impact statement: This species is not covered by the Federal Seed Act, the Canadian Food Inspection Agency Methods and Procedures for Testing Seeds, or the International Seed Testing Association Rules for Seed Testing.

Supporting evidence: *Tripsacum* is a monoecious plant in which the staminate and pistillate spikelets are found in the same inflorescence, with the continuous line of solitary pistillate spikelets located proximally and the continuous line of staminate

spikelet pairs located distally along the rame (inflorescence branch). Pistillate spikelets are embedded in the hardened axes of the rame. The lower glume of each pistillate spikelet is coriaceous and conceals the upper glume, sterile floret, and pistillate floret (containing the caryopsis) embedded in a hollow area of the rame internode. Inflorescence branches usually disarticulate between the pistillate spikelets at the rame nodes and at the base of the staminate segment of the inflorescence. The lower most pistillate spikelet in the rame sometimes remains attached to the subtending stem fragment, while the distal pistillate spikelet and associated rame internode will sometimes have the lower most staminate spikelets attached. In such cases these should be separated and the stem and staminate spikelets classified as inert matter. Two or more attached pistillate segments should likewise be separated. It is not practical during the purity analysis to determine whether or not a caryopsis is present within each pistillate segment.

The terms rame and rame internode are utilized in the treatment of members of the Andropogoneae provided by Barkworth, et al. (2003).

Reference

Barkworth, M. E., K. M. Capels, S. Long, and M. B. Piep. 2003. Flora of North America, Volume 25, Magnoliophyta: Commelinidae (in part): Poaceae, part 2. Oxford University Press. 783 pp.

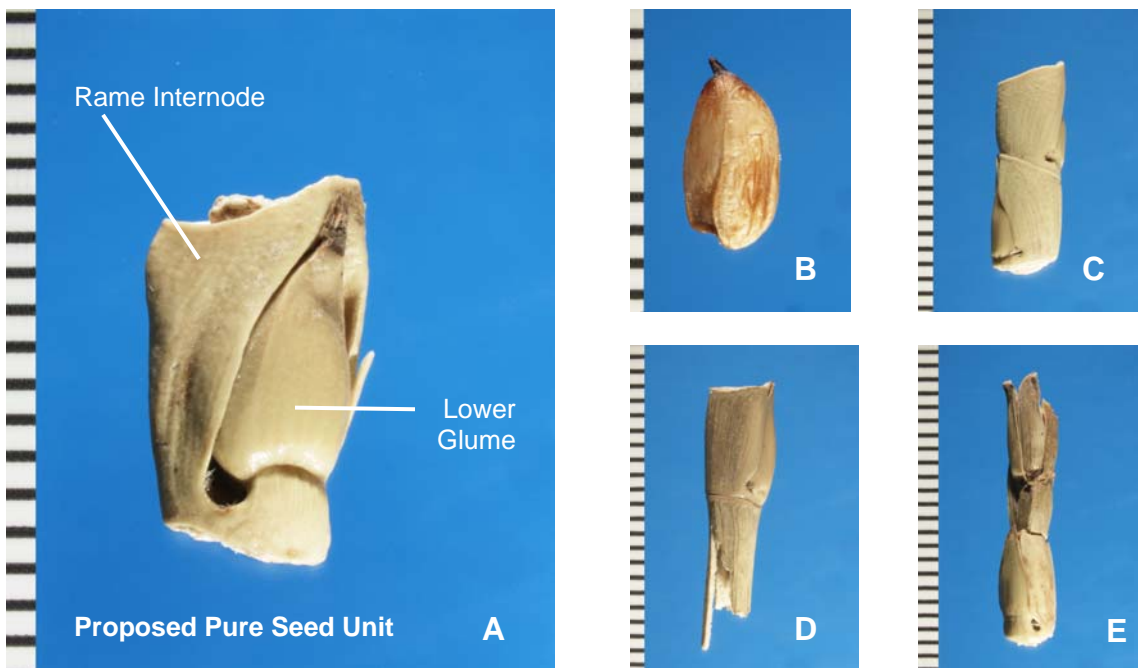


Figure 1. *Tripsacum dactyloides* (eastern gamagrass). A – Pistillate spikelet, embedded in the indurate rame axis; the lower glume coriaceous concealing the upper glume and sterile and fertile florets (proposed pure seed unit). B – Caryopsis (proposed pure seed unit). C – Two rame segments showing the alternation of spikelet and rame internode in the inflorescence. D – Basal pistillate spikelet subtended by stem fragment. E – Pistillate spikelet with distally attached staminate spikelets.

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