



# Maximize Seed Quality

By Annette Roy

Premier Pacific Seeds Ltd.

Canada is unique in the world in that seed sold in this country must meet a prescribed quality standard or grade. In fact, with very few exceptions seed must be sold by grade in Canada.

With respect to seed mixtures the grade standards were designed to ensure the quality typically required by the end user. In other words the tolerance for a particular weed or other contaminant known to be problematic in a lawn may be restricted in a graded lawn grass mixture but not in a forage or ground cover mixture where they may not impact the quality to the same degree for those end uses.

There is a common belief that when ordering a seed mixture for use as a ground cover, for erosion control or revegetation of disturbed sites, the purchaser should insist that the mix be a Common No. 1 Forage Mixture. The idea behind this practice is the assumption that the supplier always blends to only meet the minimum standard of a particular grade. In that case a Common No. 1 Forage Mixture could have 100 weed seeds per 25 grams and still meet grade whereas a Canada No. 1 Ground Cover Mixture could have 1/2 percent weed seeds by weight and still make the grade. The 1/2 percent by weight could represent significantly more weed seeds per 25 grams. **Premier Pacific Seeds Ltd. never** blends a seed mix to just meet minimum standards regardless of its end use. The reason for this is simple. We don't shop for nor do we buy junky seed lots. Lower quality seed may come at a lower cost but consider this; even seeding down a Common No. 1 Forage Mixture containing the allowable 100 weed seeds per 25 grams could result in 350 weeds per square meter at a low seeding rate. Simply ordering the forage grade is no assurance of quality.

There are also several reasons why we prefer to blend and grade for use. Forage seed blends are formulated to produce feed for livestock. Animals will graze the pasture or consume the hay or silage produced by it so a great deal of attention is paid to animal health and nutrition when formulating these blends. Endophyte enhanced seed varieties for example would never be used in a forage mix, but are very beneficial to a lawn or ground cover application. Endophyte is an internal plant fungus which produces toxic products that are related to lower livestock gains and reproductive problems in horses. In a turf or ground cover application however, high levels of endophyte in the grass enhances resistance to insect feeding and improves the stress tolerance of the plant. A mix that is formulated for ground cover use but is graded as a forage mixture could inadvertently be used for forage because it is labeled for that use and cause serious and costly animal health problems. This is just one example of many illustrating the importance of blending and labeling for end use.

The following summarizes the quality standards that must be met for the three most commonly used types of seed mixtures. This information is taken directly from Schedule I of the Seed Regulations:

### Canada No. 1 Lawn Grass Mixture

Maximum Number of Noxious Weed Seeds per 25 gr.		Maximum Percent By Weight				Maximum Percent Ergot Bodies	Minimum Percent Pure Seeds By Weight	Minimum Percent Germination of each Component
Noxious Weeds Excluding Couchgrass	Couchgrass	Total Weeds	White Clover	Bromegrass, Orchardgrass & Tall Fescue	Other Kinds			
<b>20</b>	<b>10</b>	<b>0.5</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>85</b>	<b>70</b>

### Canada No. 1 Ground Cover Mixture

Maximum Number of Noxious Weed Seeds per 25 gr.	Maximum Percent By Weight		Minimum Percent Pure Seed By Weight	Minimum Percent Germination of Each Component
	Total Weed Seeds	Other Kinds		
<b>25</b>	<b>0.5</b>	<b>3</b>	<b>85</b>	<b>70</b>

### Common No. 1 Forage Mixture

Maximum Number of Seeds per 25 gr. Except where otherwise stated						Maximum Percent Ergot Bodies	Minimum Percent Germination		
Primary	Primary Plus Secondary	Total Weeds	Sweet Clover	Other Crops	Brassica Crops Including S. alba		Reed Canary Grass	Kentucky Bluegrass & Canada Bluegrass	Each Other Component
<b>0</b>	<b>10</b>	<b>100</b>	<b>50</b>	<b>3% by Weight</b>	<b>8</b>	<b>1</b>	<b>55</b>	<b>70</b>	<b>75</b>

If you really want to ensure the quality of the seed mixes you are planting down you should always deal with a reputable seed house. It is your right to ask for the seed analysis certificates covering the seed lots being used in your mix for added insurance. And if you are really suspicious of that ultra low price, draw a sample of the seed mixed and send it to a seed lab. A weed check might cost \$65.00 but it could be worth it if you are concerned about the quality of seed you were responsible for acquiring.

If you have any questions regarding this or any seed related issues please call us.



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