

This article was listed in Forest Nursery Notes, Winter 2008

32. Propagating ornamental grasses at small nurseries. MacKenzie, E. International Plant Propagators' Society, combined proceedings 2006, 56:494-495. 2007.

Propagating Ornamental Grasses at Small Nurseries[®]

Ewan MacKenzie

Exemplar Horticulture Ltd., 5947 ML Lehman Road, Abbotsford, British Columbia, Canada V4X 1V5

E-mail: exemplarhort@shaw.ca

BY SEED

We try to grow anything that comes true from seed by seeding, because we tend to get more compact and fuller plants that way. One exception is *Helictotrichon sempervirens*, since seeds are hard to find and germination is not good.

I prefer to have seeds sown in small-celled plug trays (e.g., 288s, 252s, or 128s) since they establish very quickly when transplanted into a 4-inch pot.

I have most of our seeding done by propagators that specialize in seeding and have efficient seeding machines. We get better consistency, and it works out to be more cost effective.

In most cases we multi-seed, putting up to five seeds per cell (see Table 1).

Most of our seeds come from regular seed companies. However, we do collect some of our own seed when seed is either too hard to find or too expensive.

COOL-SEASON GRASSES BY DIVISION (WINTER)

We have found that several cool-season grasses can be propagated quite nicely during the winter in our climate (U.S.D.A. Zone 7), with no heating required.

They are *Arrhenatherum elatius* var. *bulbosum* 'Variegatum', all *Festuca* taxa, and *H. sempervirens*.

We use either 4-inch or 1-gal stock plants that are short and compact and plant them into 50- or 72-cell plug trays. Care should be taken not to plant too deeply; this is probably the most common error when propagating these taxa. They do not do well in a heated greenhouse (above 15 °C).

COOL-SEASON GRASSES BY DIVISION (SPRING)

This group of cool-season grasses responds well to warmer temperatures (15–18°C) and longer days. They are *Calamagrostis*, *Carex*, *Deschampsia*, *Juncus*, and *Molinia*. We try to use short and compact stock plants. The *Calamagrostis* and *Molinia* species can be field-grown once again using relatively young plants (no more than a year old). Most of these will be put into a 50-cell tray. The *Calamagrostis* species work well put directly into 4-inch liners. Care should be taken not to plant too deep.

WARM-SEASON GRASSES BY DIVISION

As their name implies, these taxa respond very well to high temperatures (18–25°C) and light. They are perennial so they die back to dormant buds after the first hard frost in the fall. I find it best to propagate them when dormant during the winter (with heat and light) or just before they start to grow in the spring. They do not take well if propagated during the first flush of new growth in the spring, but will take well again mid-summer. I find it best to grow *Imperata* in containers (1- or 2-gal pots). The others divide better from in-ground stock not more than 1 year old. This group includes *Hakonechloa*, *Imperata*, *Miscanthus*, *Panicum*, and *Pennisetum*.

Table 1. The number of seeds per cell for various grass species.

Species	Number of seeds per cell
<i>Andropogon gerardii</i>	3
<i>Anemanthele lessoniana</i>	3-5
<i>Bouteloua gracilis</i>	3-5
<i>Briza media</i>	3
<i>Carex comans</i> 'Frosty Curls' (syn. <i>C. albula</i> 'Frosty Curls')	3-5
<i>Carex buechananii</i>	3-5 usually slower to germinate
<i>Carex comans</i> 'Bronze Perfection'	3-5
<i>Carex dipsacea</i>	3-5
<i>Carex flagellifera</i>	3-5
<i>Carex grayi</i>	1
<i>Carex tenuiculmis</i>	3-5 slow to germinate; try cold treatment
<i>Carex testacea</i>	3-5 slow to germinate; try cold treatment
<i>Chasmanthium latifolium</i>	1
<i>Cortaderia selloana</i> 'Pumila'	3
<i>Cortaderia richardii</i>	3
<i>Cortaderia sellaona</i> White	3
<i>Cortaderia sellaona</i> Pink	3
<i>Elymus magellanicus</i>	1
<i>Festuca amethystina</i>	3-5
<i>Helictotrichon sempervirens</i>	1 usually germinates poorly
<i>Koeleria glauca</i>	3-5
<i>Milium effusum</i> 'Aureum'	3-5
<i>Pennisetum alopecuroides</i>	3
<i>Pennisetum orientale</i>	3
<i>Pennisetum glaucum</i> 'Purple Majesty'	1
<i>Saccharum ravennae</i>	3
<i>Schizachyrium scoparium</i>	3
<i>Sorghastrum nutans</i> 'Indian Steel'	3
<i>Sporobolus heterolepis</i>	3-5
<i>Stipa gigantea</i>	3
<i>Stipa tenuissima</i>	3-5
<i>Uncinia rubra</i>	3-5