

June Grass

Nomenclature

	Registered Names	2018 ACIMS Names
Scientific Name	<i>Koeleria macrantha</i>	<i>Koeleria macrantha</i>
Common Name	June grass	June grass

ACIMS = Alberta Conservation Information Management System

Species Description. June grass is a low-growing perennial bunchgrass that reproduces only by seed. Plants are 21 to 36 cm (8¹/₄ to 14¹¹/₆₄ inches) in height, have mostly basal leaves, and are pale green in colour. Leaves are 3.5 to 6.4 cm (1³/₈ to 2¹/₂ inches) in length and have a membranous ligule with an uneven top (fringe). Leaf blades are 6 to 17 cm (2³/₈ to 6¹¹/₁₆ inches) long and are scabrous (rough). Auricles are absent. The seed heads are compact (dense) and range from 5.2 to 7 cm (2¹/₁₆ to 2³/₄ inches) in length. The 4 to 5 mm (³/₁₆ inch) long spikelets contain two to three florets and are greenish white in colour. The glumes have a clear margin, are equal in length, and do not exceed the first floret. Awns are absent (Tannas, 2003).



Species Ecology. June grass is found across Alberta in virtually all ecoregions. The plant is circumboreal in distribution and can tolerate a variety of environmental conditions, including drought, cold, and high altitude. It is commonly found in wild communities at approximately 1 to 5% cover.

Species Agronomy. This seed is too small to be adequately handled by traditional agricultural equipment; specialty or modified equipment is required. Flower harvesters with wind turned down work well. To promote establishment in the field, seeds should be covered with a very light layer of soil (i.e., dusted in). Seed carriers like chicken grit, sand or vermiculite help in the flow of seeds through seeders to soil.

For agricultural production, seed at 1,000 seeds/m² for good coverage and establishment. Seed no deeper than 0.6 cm (¹/₄ inch). At this seeding rate, 2.13 kg per hectare (1.9 lbs per acre) will be required. Twenty-centimetre row spacing (7⁷/₈ inches) will produce an open canopy. A plot of June grass may partially go to seed in its first year, with full yields of 80 to 150 kg/ha (70 to 134 lbs/acre) realized in the second and subsequent years. Typically, June grass will be ready for straight combining by the 25th of July.

Though specific nutrient requirements are unknown, this species is considered well adapted to low nutrient soils. No fertilizer or soil amendments are recommended.

No herbicides have been developed for June grass as a crop. If broadcast spraying, employ herbicides intended for use on forage grasses, ensure the crop is at the five-leaf stage or later, and test the herbicide on a small area before applying to the entire crop. Spot spray non-selective herbicides within plots for control of rhizomatous weedy grasses.

Revegetation Uses. June grass was the species most frequently included in reclamation seed mixes in Powter et al. (2018).

June grass was developed for reclamation seed mixes but can also be used in fire resistance, transportation, and naturalization mixes. As a low growing bunchgrass, it can be used in xeriscaped gardens, and in low maintenance lawn/turf mixes.

June grass exhibits good value as a forage and is considered an increaser species in rangelands.

Market. Several Alberta vendors supply common June grass seed. The price per pound was approximately \$44 per kg (\$20 per lb) in 2017, and 87.90 per kg (\$39.95 per lb) in 2018. One pound of June grass consists of approximately 1,635,000 seeds. By comparison, one pound of oats contains only 12,285 seeds.

Bibliography

Powter, C.B., M. McKenzie and C.C. Small, 2018. Inventory of Native Species Seed Mixes in Alberta: December 2018 Update. InnoTech Alberta, Edmonton, Alberta. 207 pp.

<https://www.cclmportal.ca/resource/inventory-native-species-seed-mixes-alberta-december-2018-update>

Tannas, K., 2003. Common Range Plants of the Western Rangelands. Volume 1. Grasses, Grass-like species. Alberta Agriculture, Food and Rural Development. 356 pp.