

## Indian Rice Grass

### Nomenclature

	Registered Names	previous ACIMS Names
<b>Scientific Name</b>	<i>Eriocoma hymenoides</i>	<i>Achnatherum hymenoides</i>
<b>Common Name</b>	Indian rice grass	Indian rice grass

ACIMS = Alberta Conservation Information Management System

**Germination History.** Generally shows good establishment when seeded in the field. Laboratory germination protocols are insufficiently developed for this species to provide good germination data; currently tetrazolium tests are used in proxy.

**Species Description.** A bunchgrass without rhizomes, Indian rice grass produces culms and branches which spread out from the crown as a basal rosette. Blades are up to 5 mm (3/16 inch) wide, thick, and firm.



Sheaths exhibit a fringe of hairs at the throat with a large 8 mm (5/16 inch) pointed ligule. The inflorescence is an open panicle, with each spikelet possessing whitish glumes with green nerves. The spikelets have one floret each which is round, inflated, solid, and brown at maturity, with long soft hair originating from its base (Tannas, 2003).

**Species Ecology.** Indian rice grass is a sandy soils specialist, preferring well drained open sites, active dunes, or sandy grasslands. The plant is commonly found in the prairies and sporadically in the parkland and boreal forest, where conditions are suitable.

**Species Agronomy.** For agricultural production, seed at 1,000 seeds/m<sup>2</sup> for good coverage and establishment. Seed no deeper than 0.5 cm (1/4 inch). Twenty-centimeter (7<sup>7/8</sup> inch) row spacing will produce a closed canopy that cannot be walked through as the inflorescence' knot together, 40 cm (15<sup>3/4</sup> inch) row spacing may produce an open canopy. At 20 cm spacing and 1,000 seeds/m<sup>2</sup>, 29 kg per hectare (26 lbs/acre) will be required. Though specific nutrient requirements are unknown, this species is considered well adapted to low nutrient soils. No fertilizer or soil amendments are recommended.

A plot of Indian rice grass may partially go to seed in its first year, with full yields realized in the second and subsequent years. Yields can range from 235 to 403 kg/ha (210 to 360 lbs/acre) or more. Indian rice grass is indeterminate, so not all the seed head is ready at the same time; it will

be ready for straight combining or swathing around the 25<sup>th</sup> of July. Plots can be combined twice, with the second pass following the first by a few days to allow for drying on the stem.

Weeding must be done early, before entanglement by open seed heads makes walking through the crop difficult. No herbicides have been proven safe for Indian rice 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.** A great colonizer of open sandy soils, Indian rice grass can be incorporated into any sandy soils seed mix. This species has high forage value, making it suitable for forage mixes used in sandy areas. The plant is beautiful and hardy, making it suitable for xeriscaping and naturalization horticulture.

Indian rice grass is considered a decreaser in rangelands so will decrease in abundance with increases grazing pressure.

**Market.** In Alberta, Indian rice grass sold for \$11.55 per pound in 2017, and C\$13.95 per pound in 2018.

## **Bibliography**

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