# **Scientific Name:** *Schizachne purpurascens* (Torr.) Swallen ssp. *purpurascens*

**Family:** *Poaceae* **Common Names:** false melic, false melic grass, purple oat grass

# **Plant Description**

Slender perennial, loosely tufted; culms erect from a short-decumbent base, 40 to 80 cm tall, very slender, sheaths closed; ligules 0.5 to 1.5 mm long; blades are flat; inflorescence an open lax panicle, the branches single or in pairs, more or less drooping, bearing 1 to 2 awned spikelets about 2 cm long, disarticulating above the glumes and between the florets; unequal glumes, shorter then adjacent lemma, purple at base; lemma lanceolate, long hairy callus; awns as long as lemma or longer (Moss 1983).

Seed: Dark brown, dry caryopsis, lanceolate, 1 to 2 mm long.

#### Habitat and Distribution

Common throughout Alberta. A woodland species, found in aspen, mixed wood and coniferous forests, in montane areas, openings in wooded regions (Tannas 1997).

Seral Stage: Early to mid seral.

Soil: Most commonly found on coarse textured soils in northeastern Alberta.

Distribution: British Columbia, District of Mackenzie to James Bay, northern Quebec, Newfoundland south to New Mexico, South Dakota, Great Lakes; Southern Alaska, southern Yukon (Moss 1983).

#### Phenology

A cool season grass that blooms in June (Prairie Originals 2009). Seed ripens in July.

## Pollination

Wind (Friedman and Barrett 2009).

## Seed Dispersal

Wind and animals. Awns can catch on passing mammals fur.

# Genetics

2n=20 (Moss 1983).



Open panicle of Schizachne purpurascens

#### **Symbiosis**

None known.

## Seed Processing

Collection: Can be harvested by hand into breathable bags.

Seed Weight: 1.70 g/1,000 seeds.

Harvest Dates: Harvested at the end of July in northeastern Alberta.

Cleaning: Air-dry seed heads in paper or Tyvek bags at 15 to 25°C. Remove large chaff and crush remaining material. Small chaff and dust can be removed by winnowing.

Storage Behaviour: Orthodox; seeds can be dried, without damage, to low moisture contents, their longevity increase (Royal Botanic Gardens Kew 2008).











Storage: Preliminary results show that viability drops rapidly after a year of cool dry storage. 90% viability following drying to 15% moisture content and freezing for 186 days at -20°C (Royal Botanic Gardens Kew 2008).

Longevity: No literature found.



## Propagation

Natural Regeneration: By seed (Friedman and Barrett 2009).

Germination: 90% germination in fresh seed. Pre-treatment: None required.

#### **Aboriginal/Food Uses**

No literature found.

## Wildlife/Forage Uses

Livestock: Poor protein levels with high amounts of fiber; only a moderately palatable food source (Tannas 1997). Has fair forage value for beef herds (Saskatchewan Agriculture, Food and Rural Revitalization n.d). Grazing Response: Increaser (Tannas 1997).

## **Reclamation Potential**

Of limited value in erosion control, *Schizachne* is not yet generally used in reclamation seed mixes (Tannas 1997).

#### **Commercial Resources**

No literature found.

## Notes

*S. purpurascens* is listed as 76% intact (less occurrences than expected) in the Alberta oil sands region (Alberta Biodiversity Monitoring Institute 2014).

Is a host for the larvae of the northern pearly-eye butterfly (*Enodia anthedon*)(Government of Canada 2010, Prairie Originals 2009).

## **Photo Credits**

Photo 1: Wild Rose Consulting, Inc. Photo 2: SB Johnny. 2008. Wikimedia common.

## References

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