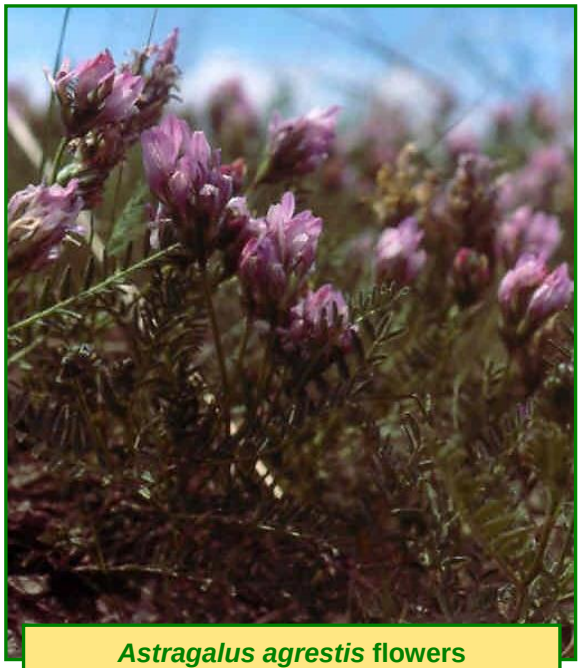
Scientific Name: *Astragalus agrestis* Dougl. ex G. Do
Family: *Fabaceae*

Common Names: cock's-head, field milkvetch, purple milkvetch



***Astragalus agrestis* flowers**

Plant Description

Rhizomatous perennial, forming mats, reclining to ascending 10 to 30 cm long; hairless to hairy branches with black and white hairs; leaves, alternate and pinnately compound; linear to oblong-lanceolate, notched leaflets 1 to 2 cm, silky hairs cover the leaves; raceme flower cluster, dense spherical heads 1 to 4 cm, erect-ascending, purplish or whitish flower (Tannas 1997).

Fruit: Pods, stalkless erect, egg shaped-oblong, 1cm, covered in black hairs (Tannas 1997).

Habitat and Distribution

Found in fescue grassland, moist or depressional grassland in the driest regions, in sandy soils, montane and alpine slopes and meadows (Tannas 1997).

Soil: Medium textured soil with a pH range 6.3 to 7.7. No tolerance to salinity (USDA NRCS Plants Materials Database 2011).

Distribution: Yukon, western District of Mackenzie to southern Hudson Bay south to California, New Mexico, Kansas, Iowa, Minnesota (Moss 1983).

Phenology

Summer bloom and growth period.

Pollination

Flowers are pollinated by bees and other insects.

Seed Dispersal

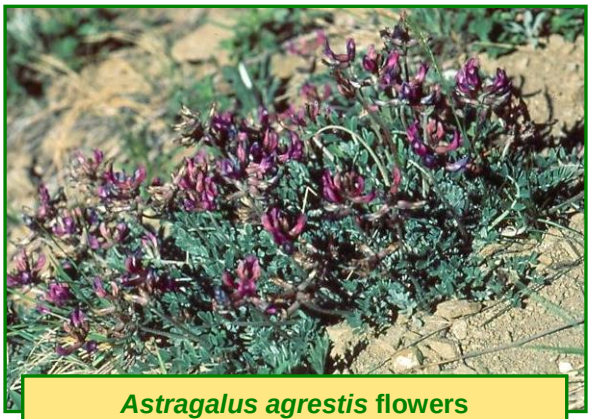
Seeds fall when pods dehisce.

Genetics

2n=16 (Moss 1983).

Symbiosis

Associated with nitrogen fixing bacteria.



***Astragalus agrestis* flowers**

Seed Processing

Collection: Collect seed head when flowers fade; allow drying (Dave's Garden n.d.).

Seed Weight: 260 seed/g or 3.84 g/1,000 seeds (USDA NRCS Plants Materials Database 2011).
Cleaning: Crush dried pods and winnow seed. Screen any remaining chaff.
Harvest Dates: Mid to late summer.
Storage Behaviour: Likely Orthodox.
Storage: Probable long term storage under IPGRI preferred conditions.
Longevity: No literature found.

Propagation

Natural Regeneration: Seed with slow to moderate spread rate. Mats spread out via rhizomes.
Germination: Many legumes benefit from scarification prior to germination.
Pre-treatment: Scarification.
Seeding Rate: Based on other *Astragalus* species, Pahl and Smreciu (1999) recommend a rate of 100 seeds/row m.

***Astragalus agrestis* seeds. Black line in picture is 5 mm**

Aboriginal/Food Uses

Food: Absorbs toxins such as selenium, making consumption undesirable.
Medicinal: No literature found.

Wildlife/Forage Usage

Wildlife/Livestock: Moderately palatable forage with high protein content (Tannas 1997). Can cause locoism due to toxic content absorbed.

Grazing Response: Increaser; does not survive in abused or altered range (Tannas 1997).

Reclamation Potential

As a nitrogen fixing species, *A. agrestis* could be beneficial in an early seed mix.

Notes

Synonym : *A. dasyglottis* Fisch ex DC. (ITIS n.d.).

Photo Credits

Photos 1&2: Wild Rose Consulting, Inc. 2011.
Photo 3: Tracey Slotta @ USDA-NRCS PLANTS Database.

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Dave's Garden, n.d. Purple milkvetch *Astragalus agrestis*. IN: Dave's garden Plant Files. http://davesgarden.com/guides/pf/go/76116/ [Last accessed October 8, 2013].

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