## Forage Factsheet - Sainfoin

Species Name: Sainfoin - Onobrychis viciaefolia

Origin: Europe, Asia, Russia and Turkey.

Longevity: 5 + years . Sainfoin stand longevity is dependent on growing conditions and management.

Uses: Pasture, hay, stockpiling.

Optimal time of use: Cut sainfoin hay at 75-100% bloom. Sainfoin maintains its quality into full bloom. Graze sainfoin in the spring and early summer. Fall grazing can occur after the first killing frost.

<u>Recovery after use:</u> To maximize stand longevity, allow a full season of rest after use. Graze sainfoin in the early bud to early bloom stage. Leave 12 inches (30 cm) of stubble to maximize stand longevity. Sainfoin should not be grazed or hayed during the six weeks prior to the first killing frost.

<u>Yield:</u> Sainfoin yields approximately 1625 lbs/acre (1846 kg/ha) in the Brown soil zone, 5930 lbs/acre (6738 kg/ha) in the Dark Brown soil zone, and 5170 lbs/acre (5875 kg/ha) in the Black and Grey soil zones. Recommended initial stocking rates for established fields are 0.7 AUM/acre (1.75 AUM/ha) in the Brown soil zone, and 0.8 AUM/acre (2 AUM/ha) in the Dark Brown, Black and Grey soil zones.

<u>Palatability/Nutritional Value:</u> Sainfoin is palatable to all types of livestock. Sainfoin has an average digestibility of 63% and crude protein of 18% during early bloom. Sainfoin is similar to alfalfa in feed value and digestibility but sainfoin stems remain more palatable and digestible through maturity. Sainfoin does not cause bloat in livestock.

Competitiveness: Sainfoin is a fair competitor.

<u>Winter Hardiness</u>: Sainfoin has good winter hardiness. Haying or grazing within six weeks of the first killing frost significantly decreases winter hardiness.

**Drought Tolerance:** Sainfoin has moderate drought tolerance.

Erosion Control: Sainfoin has fair erosion control potential.

<u>Ease of Establishment:</u> Sainfoin seedlings are vigorous and grow quickly. Sainfoin seeds must be scarified to make the hard seed coat permeable to moisture for germination to occur.

Suggested Mixtures: Sainfoin is effective in mixes with bunch grasses but is out-competed when included with rhizomatous grasses.

<u>Salinity Tolerance:</u> Sainfoin is not recommended for use on saline sites.

Flooding Tolerance: Sainfoin withstands wet or saturated soils for approximately one week in the spring.

<u>Soil Texture:</u> Sainfoin is suited to well drained soils of all soil textures. It is well adapted to thin and gravelly sites. Sainfoin requires approximately 11.8 inches (30 cm) of annual precipitation for consistent production.

Acidity Tolerance: Sainfoin tolerates soil pH as low as 6.0.

<u>Management Considerations:</u> Inoculate and scarify sainfoin seeds prior to seeding. Fertilize according to soil test results. Sainfoin is typically an inferior nitrogen fixer, which appears to be associated with it's lack of a suitable strain of nitrogen-fixing bacteria.

Source: Saskatchewan Forage Council, 2007. Dryland Forage Species Adaptation CD.