Crown vetch must be rotationally grazed. It should be well-established before grazing, in the early bloom stage, and not grazed lower than four inches.

Summary Points

Crown vetch does not cause bloat, is drought tolerant, and once established, will tolerate low fertility soils.

History/Primary Use/
Site Adaptation

Crown vetch originated around the Mediterranean Sea, and was commercially available in the U.S. by 1890.

Crown vetch is primarily used for ground cover on highway embankments, spoil areas and disturbed sites. It is also used for hay and pasture, and is well suited for renovation of cool-season grass pasture.

Crown vetch is best adapted to fertile, well-drained sites. Once established, it will tolerate some infertility and acidity.

Characteristics

Crown vetch is a perennial legume and derives part of its common name from the arrangement of its florets in an umbel resembling a crown. It has a deep, penetrating taproot and numerous lateral roots. Creeping stems are from two feet to six feet long, and it has pinkish lavender to white clusters of flowers.

Establishment

Seed: 1/4 inch deep, using inoculated seed which has not been exposed to sunlight, and is planted within 12 hours after inoculation. A specific strain of bacteria culture is required for proper inoculation. Water sweetened with sugar will make the inoculum mix more adhesive.

Management

Harvest for hay at 1/2 bloom. Crown vetch will dominate all grasses if not harvested. Do not cut before it is four inches tall. Hay yields are three to four tons per acre. Curing is difficult due to thick, heavy stems, and it is difficult to mow due to plant prostration.
General Information
Crownvetch is a cool-season, perennial legume which may be utilized for livestock grazing, hay production, wildlife habitat, seed production or erosion control.

Following are some pros and cons associated with crownvetch.

Livestock Grazing: Palatability is high in early growing stages, but becomes poor at full maturity because of bitterness from high glycoside content. Protein value can reach 18 percent with optimum fertility and if grazing is properly managed.

Hay Production: Yields range from three to four tons per acre. Curing hay may be a problem because of thick, heavy stems.

Wildlife Habitat: Crownvetch provides excellent escape cover and nesting for rabbits and quail. It also is an excellent source of food for deer, turkey and rabbits during its young and tender growth stages.

Seed Production: Seed is difficult to harvest because seeds mature at different times. Harvesting methods involve a combine or seed stripper.

Erosion Control: Crownvetch makes an excellent cover for road banks, farm pond levees, mine spoils and other disturbed areas.

Adaptability
Crownvetch has a wide range of climatic adaptations, but its performance has been much superior on well-drained soils. Crownvetch is tolerant of both low pH and low fertility, but is highly responsive to lime, phosphorus and potassium. Growth usually peaks around the end of May to early June. Varieties available include Emerald, Penngift, and Chemung. Seedlings of Emerald and Chemung are more vigorous than Penngift. Chemung and Emerald

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usually have taller growth and broader leaves than Penngift. Chemung appears to be better adapted to low fertility sites.

**Characteristics**

Crownvetch produces creeping stems two to six feet long, and grows to a height of three to four feet. It looks similar to a young alfalfa plant in seedling stages.

Adult plants produce long, narrow, finger-like seed pods, and the plant may extend to a length of 10 feet or more.

Crownvetch is compatible with orchard grass and fescue. It will not tolerate wet soils or shade, but is very drought tolerant. It is a nonbloating legume, and it is a good source of nitrogen for associated grasses.

**Establishment**

Check with the Natural Resources Conservation Service or University Extension for proper seeding rates.

Lime and fertilizer should be applied according to a soil test. The seed should be inoculated. Use a no-till drill on undisturbed soil. On bare soil, disk, roll and then broadcast or drill the seed.

Chemical weed control will encourage a good stand.

**Management**

The growing point of crownvetch is at the top of the plant. It can be grazed when it is eight inches tall, but should not be grazed lower than four inches.

**Where To Get Help**

For more information about crownvetch, contact the local office of the Natural Resources Conservation Service. It is listed in the telephone directory under "U.S. Government."