# Farm Science Genetics

## Red Clover

### Uses
Red clover is primarily used for hay, silage, and soil improvement. It is a quick growing crop, easily established, and produces high quality forage. Tolerance of shade allows Red clover to be used effectively as a cover crop under silage corn. Newer varieties of medium red clover can be productive for 3 years or more under proper management.

### Description
Trifolium pratense L., red clover, is a short-lived perennial that grows as one of two types: medium (double-cut) or mammoth (single-cut). Red clover plants grow from crowns. Plants have hollow, hairy stems and branches. Stem lengths of medium and mammoth types average 18 inches and 24 to 30 inches, respectively. Medium types have about 4 branches per stem; mammoth have 6. Each leaf consists of a slender stalk bearing 3 leaflets. The taproot of red clover is extensively branched. Flowers are borne in compact clusters or heads and are usually rose-pink in color. Seed pods are small, short, and contain kidney-shaped seeds that vary in color from yellow to deep violet. There are approximately 272,000 seeds per pound. Mammoth red clover matures later than medium types; only one crop of Mammoth red clover is harvested each season since recovery is slow.

### Adaptation and Distribution
Red clover grows best on well-drained loamy soils, but it will also grow on soil that is not as well-drained. Medium and fine textured soils are preferred by the plant over sandy or gravelly soils. It is best adapted to a pH of 6.0 or higher. Red clover is distributed throughout the United States and Canada.

### Establishment
Red clover may be seeded in pure stands, but it is often mixed with grain or grass. Spring or late summer seedings are satisfactory. It may be overseeded in the spring or fall. Red clover seed should be inoculated. Phosphorus and potash are the fertilizer elements needed mostly by red clover. Apply as recommended by soil tests. Seeding may be done with a drill or broadcast. A firm, weed-free seedbed is essential. Plant seeds ¼ to ½ inch deep. Seeding rates are 12 to 15 lbs. per acre broadcast and 6 to 8 lbs. per acre when drilled. For renovating pastures, the recommended seeding rate is 8 lbs. per acre.

### Management
Graze or cut for hay when the red clover is ¼ to ½ in bloom. A second cutting or successive grazing should occur when red clover is ¼ in bloom. Leave at least 2 to 3 inches of growth after each harvest. Care should be taken to eliminate or appreciably reduce bloating of livestock when grazing. Keep lime and fertilizers (phosphorus and potash) at the proper level.