

CRIMSON CLOVER

Trifolium incarnatum L.

plant symbol = TRIN3

Contributed by: USDA NRCS Plant Materials Program



USDA NRCS National Plant Materials Center
Beltsville, MD

Animal management note: on pasture or hay high in clover content, take steps to introduce animals gradually to the forage or the risk of bloat can be high.

Uses

Crimson clover, as a winter annual, is usually planted in the late summer to early fall. It used in pasture, hay, and silage mixes, or used alone as a winter cover for soil protection or green manure crop for soil improvement.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Weediness

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, or state natural resource or agriculture department regarding its status and use. Weed information is also available from the PLANTS Web site at plants.usda.gov.

Description

The leaves and stems of crimson clover resemble those of red clover, but the leaves are round-tipped and there is more hair on the stems and leaves. Seedlings grow rapidly from the crown and form a rosette. This enlarges as weather becomes more favorable. In the spring, the flower stems develop rapidly and end their growth with long, pointed conical flower heads comprised of 75 to 125 florets. Florets are a bright crimson color and open in succession from the bottom to the top. Introduced winter annual, herbaceous legume.

Adaptation and Distribution

Crimson clover will grow on poorer soils than most other clovers, thriving on both well-drained sandy and clayey soils. It does not do well in extreme cold or heat. The preferable pH range is 6.0 to 7.0. After the seedlings become well established, it makes good growth at lower temperatures than most other clovers. Crimson clover has been used for a cover crop as far north as northern Maine; primary growing areas are the Southeast and southern Atlantic coastal states.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

Establishment

Crimson clover seed should be inoculated for planting on critical areas where bacteria may have been lost in erosion of the surface. On sites that have been in pasture or hay, this is probably no longer necessary.

Soils should be brought up to moderate to high levels of phosphorus and potash prior to planting clovers, but nitrogen should not be applied unless degraded sites are being planted. Plant in the spring or late summer. Clovers may be frost seeded in late winter. The best planting method is to drill the seed into a firm, weed free seedbed. No-till methods can be used successfully when effective weed control is employed. Seeding rates range from 10 to 15 lb/acre when seeded alone and 5 to 10 lb/acre when seeded in a mixture. Seed should be planted at about a ¼ inch depth.

Management

Pasture and hayland management varies depending upon the forages in use, but should be based upon the grasses involved since they are the "meat and potatoes" of the mix. Graze or cut for hay when the crimson clover is in the early bloom stage (¼ to ½ in bloom). If used as a winter pasture, grazing should not be too close as to affect stand and yields the

following spring. Grazing or hay cutting as this clover reaches maturity may be harmful. Hairs of stems and heads become hard and tough. If used as a green manure, manage the crop so it is plowed under about 2 to 3 weeks before the next crop is planted.

Clover especially needs a high level of phosphorous. High inputs of nitrogen fertilizer will damage clover and other legumes by reducing their vigor and boosting the grass.

Cultivars, Improved, and Selected Materials (and area of origin)

Most crimson clover types used in the past were common types. However, more recent introductions featured reseeding types such as 'Auburn', 'Autauga', 'Dixie', and 'Talledega'. 'AU Sunrise' (composite of 11 accession from FL, AL, GA, SC) is a reseeding cultivar from the Jimmy Carter Plant Materials Center in Georgia. The release is well-adapted to Alabama and Georgia, and can grow into Florida and Mississippi.

Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA, NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

Prepared By & Species Coordinator:
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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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