‘AU Sunrise’

*Crimson Clover*

*Trifolium incarnatum* L.

‘AU Sunrise’ Crimson Clover (*Trifolium incarnatum* L.) is an early maturing cultivar jointly developed and released by Auburn University, the Alabama Agricultural Experiment Station, and USDA NRCS Jimmy Carter Plant Materials Center in 1997.

**Description**

‘AU Sunrise’ Crimson Clover is a naturalized cool season annual legume. It has an upright habit with stems covered by fine hairs. The leaves are tri-foliate in shape. Vegetation averages 20 inches tall at flowering. This cultivar is an early blooming variety of crimson clover with bloom beginning in early March at the Americus, Georgia location. ‘AU Sunrise’ blooms up to 2 weeks earlier than ‘AU Robin’ crimson clover and up to 3 weeks earlier than ‘Dixie’ crimson clover at lower latitudes. The degree of earliness is reduced moving north. Forage or biomass yields produced were similar to ‘AU Robin’. It produces cylindrical bloom heads with deep, crimson red color. Several hundred pounds of yellow seed are produced per acre in May-June and can be harvested with a grain combine.

**Source**

‘AU Sunrise’ was developed by selecting from 11 crimson clover accessions collected in Alabama, Florida, Georgia, and South Carolina through multiple selection cycles. The primary selection criteria was earliness of bloom.

**Conservation Uses**

Uses for ‘AU Sunrise’ crimson clover include green manure crop, habitat for pollinators, cover crop, providing nitrogen in organic farming, and high-quality forage for grazing.

**Area of Adaptation and Use**

‘AU Sunrise’ is well adapted to upland soils in USDA Plant Hardiness Zones 6b to 9. It is adapted to the same sites as ‘AU Robin’ and ‘Dixie’. Crimson clover is adapted to moderately well to well-drained soils with pH of 5.5 to 7. Crimson clover does not grow well in poorly drained soils. Susceptibility to disease and insects is similar to ‘Dixie’.

**Establishment and Management for Conservation Plantings**

Before establishment, a soil test should be taken to determine soil pH and fertility. Apply lime at rates recommended to raise pH to at least 6.0 and nutrients according to soil test recommendations. Recommended seeding dates are from October 1 to November 15 at Americus, Georgia or 4-6 weeks before frost. ‘AU Sunrise’ should be seeded at a rate of 15 – 20 pounds per acre PLS ¼ - 1/2-inch-deep into moist soil; either by drilling or by broadcasting followed by light incorporation to improve seed to soil contact. Seed can be planted into a well-prepared seedbed or can be planted no-till. Seed should be inoculated prior to planting with Rhizobium strain suited for true clovers.

If seed heads reach maturity, ‘AU Sunrise’ acts as a reseeding annual. For grazing, allow plants to reach 4-6 inches tall before first grazing and do not graze plant height below 3-inches. For use as cover or green manure crop, termination can be accomplished mechanically by diskning or mowing, or chemically with herbicides. For maximum nitrogen accumulation, plants should be allowed to grow until mid-bloom.
Ecological Considerations
No severe or unusual insect or disease problems have been observed on AU Sunrise crimson clover. Susceptibility to disease and insect damage is comparable to crimson clover cultivars such as ‘Dixie’ and ‘AU Robin’. Crimson clover may serve as a secondary host plant to insect pests such as corn earworm and cotton bollworm.

Seed and Plant Production
Seed production fields should be evaluated for presence of noxious weeds and existing seedbank that could contaminate stands. Site preparation and management will be the same as for conservation plantings allowing seed heads to mature.

Availability
For conservation use: Availability may be limited locally. Special order may be needed.

For seed or plant increase: Breeder seed is being maintained by Auburn University Auburn, Alabama through the Alabama Crop Improvement Association.

For more information, contact:
Jimmy Carter Plant Materials Center
295 Morris Drive, Americus, Georgia 31719
Phone: 229-514-3245
http://www.plant-materials.nrcs.usda.gov/gapmc

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