CLOVER, CRIMSON (*Trifolium incarnatum*)

Crimson clover is probably the most commonly used cool season legume cover crop. It does not produce as much biomass or nitrogen as hairy vetch but is less likely to volunteer. It is one of the largest seeded clovers and tends to be one of the earliest flowering of winter legumes. Choosing an early-maturing variety that blooms before termination maximizes the amount of N fixation. Conversely, allowing crimson clover to produce seed lowers nutrient quality and nitrogen availability for the subsequent cash crop. Termination should occur when approximately 50% of plants are blooming. It should not be used if there is high nematode pressure or if following cash crop is susceptible to *Sclerotinia*.

Recommended Varieties

Variety	Reasons Why	Source
AU Robin	More suitable for corn or early planted cash crops. Good biomass, early maturing- flowers about 2 weeks before Dixie. Seed is generally more expensive than Dixie. Moderate host to root-knot nematodes. In some years seed may be difficult to find.	
AU Sunrise	More suitable for corn or early planted cash crops. Good biomass, early maturing- flowers about 1 to 2 weeks before AU Robin and about 3 to 4 weeks earlier than Dixie. Seed is generally more expensive than Dixie. In some years seed may be difficult to find.	
AU Sunup	Earliest flowering crimson clover.	
Dixie	Good biomass. Seed is available and affordable. The standard crimson clover variety when variety is not specified. Good host to root-knot nematodes.	

Planting Information

Information		Comments	Source
Drilled Seed Depth (inches)	¼ - ½		Managing Cover Crops Profitably
Drilled Seeding Rate (lbs/acre)	8-15	Use *Rhizobium leguminosarum biovar trifolii* inoculant	Managing Cover Crops Profitably
Broadcast Seeding Rate (lbs/acre)	15- 20		Managing Cover Crops Profitably

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Termination Information

Information	Source
Most vegetable farmers use mowing and incorporation for termination. Flail mowers provide the finest residue and most even distribution, but rotary mowers can be used. Small scale farmers can use weed-eaters on smaller beds. Residue should be incorporated as soon after mowing as possible. Leave at least 2 weeks for residue to decompose before planting. Legumes decompose quickly and most of the nitrogen is released within 1 month after incorporation. Decomposition is greater in moist, warm conditions. If the soil is dry then irrigation may be necessary. Cool soils conditions will lengthen time needed before planting. If using herbicides for termination, consult your local Extension and state Pest Management Handbook for herbicide recommendations. Always follow the herbicide label.	Managing Cover Crops Profitably

Cultural Traits

Traits	Comments		Source
Typical Dry Matter Range (lbs/acre)	2,500 - 5,000		Managing Cover Crops Profitably, Unpublished Literature Review in Piedmont – Gaskin
Typical Total N Range (lbs/acre)	50 - 125		Managing Cover Crops Profitably, Unpublished Literature Review in Piedmont – Gaskin
Life Cycle	Cool season annual legume		Managing Cover Crops Profitably
Growth Habit	Semi-upright		Managing Cover Crops Profitably
Preferred Soil pH	6.0 – 7.0	Tolerant of a wide variety of soil types	Managing Cover Crops Profitably
Relative Seed Cost ($/acre)	$$		Based on survey of seed costs using maximum price and max seeding rate
Min. Germination Temp (F)	Not available		
Cautions	Use with caution if there is high nematode pressure in your field. ‘Dixie’ is a good host for root knot nematode. ‘AU Sunrise’ is a moderate host for root knot nematode. Risk of susceptibility to *Sclerotinia*. Not a good choice for fields with a history of problems with *Sclerotinia* or for use before a susceptible spring crop such as lettuce or crucifers.		Timper et al. 2006; Clemson University; University of Georgia

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Sources:

Managing Cover Crops Profitably: https://www.sare.org/Learning-Center/Books

Timper, P., R.F. Davis, and P.G. Tillman. 2006. Reproduction of *Meloidogyne incognita* on winter cover crops used in cotton production. J. Nematology 38(1):83-89.