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## **Cherokee Red Clover An Alternative**

### **Legume for Winter Grazing**

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White clover has been grown as a cool-season annual legume in peninsular Florida for decades. In recent years, white clover production on Florida flatwood soils has been either limited or nonexistent.

Since most flatwood soils consist of about 95 percent sand, it has been suggested that lack of rainfall is the reason for poor clover production. However, even under irrigation, white clover production failed in test plots. Researchers and commercial growers have suggested the application of additional phosphorus, potassium, or boron for improved clover production, yet all fertilizer treatments failed to provide good clover production.

Recently, research studies were conducted on clean tilled soil with methylbromide to determine if insects, diseases, or nematodes were limiting clover production. All clovers were seeded in late November and harvests were taken at 30 day intervals in April, May, and June. The fertilization program was 0-40-80 lb/A N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O at seeding. Results indicate soil treated with methylbromide increased total seasonal yield by 107 percent when averaged over four clover entries (Cherokee, FL MR-6, and Kenstar red clover, and Osceola white clover). Average total seasonal dry yield with no methylbromide was 1.3 tons per acre compared with 2.6 tons per acre with methylbromide. These studies indicate one of the biological problems which tend to limit clover production is root-knot nematodes. The use of methylbromide will control root-knot nematodes, resulting in increased clover production. Since methylbromide is too expensive to be used in any type of forage production practices, the question is, which of the above clover entries has the most nematode tolerance and can produce greatest dry matter yields without methylbromide. Three year average yields of 'Osceola' white clover were 0.9 tons/acre

and 1.7 tons/acre for 'Cherokee' red clover. Nearly twice as much ground was covered with Cherokee red clover than Osceola white clover in April, and nearly four times as much in May. By June of each year, Osceola white clover was dead, whereas Cherokee still supported 10 percent ground cover. Crude protein content for Cherokee and Osceola were similar, averaging 22 percent, whereas digestible forage was 71 and 81 percent for Cherokee and Osceola, respectively.

These data indicate Cherokee red clover may be a good alternative to white clover where production problems with white clover have occurred in past years. Cherokee red clover is a cool season annual, and must be seeded each fall on soils with good moisture holding capacity. It has excellent seedling vigor, good root-knot nematode tolerance, and has good tolerance to wet soils (not standing water).

Since many growers already seed annual ryegrass, the combination of 10 lb/A ryegrass plus 5 lb/A Cherokee, seeded together at a cost of \$13.50 per acre can extend the grazing season. Ryegrass can provide early winter forage (late January and February) with red clover extending the grazing season through May. The combination ryegrass-red clover will perform better on clean tilled soil than in sod. However, red clover can be successfully sod seeded, if moisture is adequate. A fertilization program of 50-30-60 lb/A N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O at seedling emergence should be adequate for the winter season. Cherokee red clover alone, or in combination with ryegrass, can make an excellent quality hay.