

Barduro: A Mid-dormant Red Clover with Root-knot Nematode Resistance

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‘Cherokee’, red clover (*Trifolium pratense* L.), released in 1993, was the first moderately root-knot nematode (RKN) (*Meloidogyne* spp.) resistant red clover that was also non-dormant. ‘Southern Belle’, a highly RKN resistant, non-dormant cultivar was released in 2003. The objective of the program for development of Barduro was to select for a dormancy response intermediate between dormant cultivars developed in the transitional zone and the non-dormant response of Southern Belle, while maintaining a high level of RKN resistance. ‘Barduro’ is the first mid-dormant red clover cultivar with high levels of resistance to root-knot nematodes (*Meloidogyne* spp.). The original population used to initiate a recurrent selection program that resulted in this cultivar consisted of a mixture of 50% ‘Southern Belle’, 15% ‘Scarlet’, 15% ‘Cinnamon’, 15% ‘Kenstar’, and 5% creeping red clover plant introductions. Recurrent selection was practiced for four cycles for dormancy responses intermediate between Kenstar and Southern Belle, absence of fungal disease symptoms, and absence of root-knot nematode damage symptoms.

First harvest and total seasonal yields of Barduro have been similar to or less than the most non-dormant cultivars developed in Florida when cultivars are grown at locations in Florida and across the lower Coastal Plains. Conversely, Barduro dry matter yields were generally among the top yielding cultivars compared to other standard cultivars when grown in the upper Coastal Plains and lower transition zone states. At Athens, GA in 2008 Barduro was equal to or superior to all released cultivars, and at Knoxville and Springfield, TN in 2008 Barduro was not significantly different from the top yielding cultivar. Barduro was generally not different in RKN gall and egg mass scores from Southern Belle, and was superior in resistance to Kenstar. Spring dormancy response was intermediate between Southern Belle and Kenton. Production and marketing rights for Barduro have been granted to Barenbrug USA, Tangent, OR.

	Gainesville, FL 2010		Athens, GA 2009	
	1st harvest	Season total	1st harvest	Season total
Barduro	4280	5420	2170	9340
Southern Belle	4160	5370	-	-
Redland Max	2590	4830	1510	9160
Freedom	2890	4080	1180	7220
lsd.	540	740	610	1100