

BIRDSFOOT TREFOIL

Birdsfoot trefoil is a deep-rooted, winter-hardy legume that is useful in permanent pastures. It is best used on soils that are marginal for alfalfa production and where drought is not too severe. Seedling establishment is slower than alfalfa and red clover. Birdsfoot trefoil is best grown in mixtures with Kentucky bluegrass or timothy. For more details on growing this legume, see Extension publication *Birdsfoot Trefoil for Grazing and Harvested Forage* (NCR474).

Varieties

AU-Dewey. This semierect, early maturing variety of medium height was developed by Auburn University, Alabama. It yields less than Norcen under Wisconsin conditions, but survives well in northern Wisconsin with ample snow cover.

Bonnie. This semierect, winter-hardy, medium maturity variety was developed in France. It has leafy, multi-branched stems and yields similar to Norcen with excellent recovery after cutting.

Bright. This semierect, winter-hardy, late-maturing variety with leafy, multi-branched stems was developed by the University of Guelph, Ontario, Canada. Bright has greater seedling vigor and yield than Leo.

Bull. This is a semierect, winter-hardy, high yielding variety with good regrowth after cutting. It is leafy and multibranched with good seedling vigor and will persist well under either hay or grazing management.

Carroll. This semierect, winter-hardy, medium maturing variety with leafy, multi-branched stems, was developed at the Iowa State University Agricultural Experiment Station. It is long-lived and productive in pastures. It has excellent seedling vigor and forage yield in the year of establishment. Carroll recovers well after cutting, so it should persist under controlled continuous grazing.

Dawn. This semierect, winter-hardy, late-maturing variety with leafy, multi-branched stems was developed by the U.S. Department of Agriculture and the University of Missouri. It has excellent yield, recovery after cutting, and spring growth.

Empire. This semierect, winter-hardy, late-maturing variety with leafy, multi-branched stems was developed at the New York (Cornell) Agricultural Experiment Station. It is exceptionally long-lived and productive in pastures and persists under controlled continuous grazing.

Georgia I. A semierect, early maturing variety of medium height developed by the University of Georgia. It yields less than Norcen and is less winterhardy, but survives well in northern Wisconsin with ample snow cover.

Leo. A semierect, winter-hardy, late-maturing variety with leafy, multi-branched stems, Leo was developed at MacDonald College, Quebec, Canada. It has excellent seedling vigor. It ranks between Empire and Viking in plant stature, and is long-lived and productive in pastures. It persists under controlled (leave 3–4 inches of stem) continuous grazing.

Norcen. This is a semierect, winter-hardy variety with an intermediate growth habit. It is similar to Leo and Carroll in growth habit and fall dormancy but slightly less winter hardy. Norcen has better seedling vigor than Empire. It ranks high in crude protein and similar to other varieties in digestible dry matter. It is a good seed producer.

Steadfast. This variety was bred for rhizome development by the U.S. Department of Agriculture and the University of Missouri. Northern U.S. field trials have revealed a minimal rhizomatous characteristic. Seedling year production appears to be adequate, but this variety is not as winterhardy as cultivars such as Norcen, Dawn, or Carroll.

Trevig. This is an experimental variety developed by the U.S. Department of Agriculture and the University of Wisconsin Agricultural Experiment Station. It has good seedling vigor and persistence.

Upstart. This variety was registered in 1986 and developed by Maple Leaf Mills, Ltd. It is more erect than Empire, flowers similar to Leo, and has very good seedling vigor.

Viking. This is a productive, rapid-growing, erect, early maturing variety with good seedling vigor developed at the New York (Cornell) Agricultural Experiment Station. It

is best suited for hay or silage and can be used for pasture, but it is not well adapted to continuous grazing. As it lacks winterhardiness, it is only adapted to northern Wisconsin where there is heavy snow cover.

WITT. This semierect, winter-hardy medium maturity experimental strain with leafy multi-branched stems was developed by the U.S. Department of Agriculture and the University of Wisconsin. It has large seeds and excellent seedling vigor. It yields similar to Norcen and recovers quickly after cutting.

Table 9. Birdsfoot trefoil yields, expressed as a percent of Norcen

Variety	Ashland '97/'99 ^a		Marshfield '97/'98	Arlington '96/'97-'98	Ashland '95/'96	Ashland '94/'95-'96	Seed source ^b
	% of check variety						
Bonnie	.	.	.	.	.	85	Deer Creek Seed
Bright	104*	113*	.	.	.	.	Pickseed Canada
Bull	104*	94	.	.	.	.	Pickseed Canada
Dawn	92	79	85	90	99*	Deer Creek Seed	
Empire	.	.	.	83	.	.	New York (Public)
Georgia I	.	.	.	.	69	Deer Creek Seed	
Leo	91	96	99*	.	95	Farm Pure Global	
Norcen	100*	100*	100*	100*	100*	100*	North Central States (Public)
Steadfast (ARS 2620)	80	57	75	.	.	.	USDA-ARS, Univ MO
Trevig	109*	100*	92*	.	.	.	USDA-WI (Public-Exp)
Upstart	96*	89	.	.	.	.	Pickseed Canada
Viking	108*	73	78	100*	93	New York (Public)	
WITT	100*	90	93*	104*	94	USDA-WI (Public-Exp)	
Norcen ^c	2.71	2.76	8.79	2.22	5.65		

* Varieties not significantly different from highest yield in column.

^a Seeding year/harvest year(s).

^b Source of seed for testing purposes. Check with seed source supplier or local Extension agent for marketer of seed.

^c Norcen birdsfoot trefoil cumulative yield in tons dry matter per acre.