



## Birdsfoot Trefoil

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Varietal Trials Results, January 2006



Birdsfoot trefoil is an excellent nonbloating pasture legume that can also be harvested for hay and silage. It grows under a wide range of soil conditions, and persists longer and performs better than other legumes under poor soil conditions, such as low fertility, acidity and poor drainage. It is also persistent when grown with Kentucky bluegrass, reed canarygrass and timothy.

Performance trials of birdsfoot trefoil were established at Rosemount in 1997, 1998, 2001 and 2003, and at Grand Rapids in 1998 and 2001. Trials are generally harvested twice

at Grand Rapids and two or three times at Rosemount.

New releases, Steadfast, a rhizomatous birdsfoot trefoil from Missouri, and Pardee, from Cornell, were significantly lower yielding than other varieties in the trial and may not be winterhardy enough to be grown in Minnesota. Winterhardy varieties, such as Norcen, generally produce the highest consistent overall yields. Norcen, released in 1983 by the agricultural experiment stations of Minnesota and six other states, has performed exceptionally well in grazing trials.

***Dry matter yield, in tons dry matter per acre of birdsfoot trefoil varieties seeded at two locations.***

| Variety   | Winter Injury*<br>05/24/04 | Rosemount |           |      |           | Grand Rapids |           |
|-----------|----------------------------|-----------|-----------|------|-----------|--------------|-----------|
|           |                            | 1998      | 1999-2001 | 2002 | 2004-2005 | 1999-2001    | 2002-2004 |
| Bright    | —                          | 3.6       | 3.1       | —    | —         | —            | —         |
| Dawn      | 1.0                        | 4.0       | 3.8       | 4.0  | 4.5       | 4.8          | 2.1       |
| Empire    | —                          | 4.0       | —         | —    | —         | 4.4          | —         |
| Fergus    | —                          | 3.9       | —         | —    | —         | —            | —         |
| Georgia 1 | —                          | —         | 3.6       | —    | —         | 4.6          | 1.8       |
| Leo       | —                          | 3.9       | 3.1       | —    | —         | —            | —         |
| Norcen    | 1.0                        | 4.3       | 3.5       | 3.9  | 4.2       | 4.8          | 2.1       |
| Nueltin   | 1.0                        | 3.7       | 3.1       | 4.0  | 3.6       | 4.2          | 2.2       |
| Pardee    | 8.3                        | —         | —         | 3.5  | 0.2       | —            | 1.9       |
| Roseau    | 2.5                        | 4.1       | 3.4       | 4.1  | 3.5       | 4.6          | 2.1       |
| Steadfast | —                          | 3.1       | 2.7       | —    | —         | 3.5          | —         |
| Trevig    | —                          | 4.1       | —         | 4.2  | —         | —            | —         |
| Viking    | 1.8                        | 3.8       | 3.6       | 4.0  | 4.0       | 4.4          | 2.1       |
| Witt      | —                          | 4.0       | 3.2       | 4.1  | —         | —            | 2.0       |
| LSD 5%    | 0.9                        | 0.5       | 0.3       | 0.4  | 0.3       | 0.5          | 0.2       |

\* Winter injury; 1 = no injury; 9 = dead.

***Birdsfoot Trefoil Planting Rate and Date***

|                            |         |                             |                        |
|----------------------------|---------|-----------------------------|------------------------|
| Bushel Weight, Pounds      | 65      | Planting Rate, Seeds/Sq.Ft. |                        |
| Seeds/Pound                | 372,000 | Alone                       | 70                     |
| Planting Rate, Pounds/Acre |         | In Mixtures                 | 50                     |
| Alone                      | 8       | Planting Date               | Early Spring or Summer |
| In Mixtures                | 6       |                             |                        |