

TIMOTHY

Timothy is adapted throughout Minnesota for use in hay and pasture mixes. When timothy is the major component in hay its stage of maturity affects both yield and quality. Harvesting timothy at early heading is the preferred time. Timothy produces the majority of its forage at the first harvest.

Varieties of timothy differ in maturity, so care should be taken in choosing those that fit the management requirements of the crop and mixture. Early varieties are best adapted to a three-cut system with alfalfa.

Varieties that are intermediate to late maturing should not be harvested more than twice during the growing season. Therefore, appropriately selected timothy varieties are compatible with red clover and birdsfoot trefoil in mixtures for hay production.

Varieties in the experiment station timothy trials were established in pure stands in 1992 at Rosemount and Morris and again at Grand Rapids in 1993. Trials were also established at Rosemount and Grand Rapids in 1999. Trials were harvested two or three times per year.

Nitrogen was applied at all locations in the early spring and after each harvest at a rate of 40 to 50 pounds per acre.

Early maturing varieties of timothy had greater forage production than the late maturing varieties at all locations over all harvest years. Quality forage may be maintained later in the season with the later varieties, however. Timothy is normally less persistent than other cool-season grasses such as reed canarygrass.

Timothy Planting Rate and Date

| | |
|-----------------------------|---------------------|
| Bushel Weight, Pounds | 45 |
| Seeds/Pound..... | 1,234,000 |
| Planting Rate, Pounds/Acre | |
| In Mixtures..... | 3 |
| Planting Rate, Seeds Sq.Ft. | |
| In Mixtures..... | 85 |
| Planting Date | |
| In Mixtures..... | Use Date for Legume |

Dry matter yields, in tons dry matter per acre, of timothy seeded at three locations.

| Variety | Grand Rapids | | Rosemount | | Morris |
|---------------------------------------|--------------|------|-----------|-----------|-----------|
| | 1994-1996 | 2000 | 1993-1995 | 2000-2001 | 1993-1996 |
| Early to intermediate maturity | | | | | |
| Aurora | – | 4.3 | – | 3.5 | – |
| Climax | 3.6 | 4.2 | 3.8 | 3.7 | 4.0 |
| Colt | – | 4.2 | – | 4.0 | – |
| Comtal | 3.4 | 3.7 | 3.7 | 3.2 | – |
| Goliath | 3.4 | – | 3.4 | – | – |
| Motim | – | 4.1 | – | 3.7 | – |
| Promesse | – | 4.0 | – | 3.3 | – |
| Timfor | 3.5 | – | 3.8 | – | – |
| Toro | 3.7 | – | 3.9 | – | – |
| Late maturity | | | | | |
| Heidemij | 3.5 | – | 3.0 | – | 3.5 |
| Hokusen | 3.3 | – | 3.4 | – | 3.6 |
| LSD 5% | 0.4 | NS | 0.4 | 0.5 | NS |