



WESTERN GRANDSTAND ALPHA



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PRESORT STANDARD
U.S. POSTAGE
PAID
FRESNO, CA 93706
PERMIT #1938

GRANDSTAND combines exceptional forage yield potential, fast recovery after cutting and excellent winterhardiness. This FD4 variety is significantly more winterhardy than other commercial varieties of this dormancy. Multiple pest resistance is excellent. High ML expression, dark green color and very fast recovery after cutting combine together to give **GRANDSTAND** excellent visual impact. **GRANDSTAND** has performed well over a wide range of environments and should be well adapted to all the areas FD3-4 varieties are typically planted.



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www.westernfarmservice.com

GRANDSTAND



FORAGE YIELD POTENTIAL

The table below shows the performance of GRANDSTAND relative to commercial checks in the first and second production years. Forage yield potential is presented as the percentage of the check mean. The Grand Mean figure is the average percent of checks over all locations.

| VARIETY | 011A6 | 011N6 | 011D1 | 02MN1 | 02ID1 | 02W/3 | GRAND MEAN |
|---------------|-------|-------|-------|-------|-------|-------|------------|
| GRANDSTAND | 110 | 108 | 116 | 112 | 109 | 113 | 111 |
| Ameristand403 | 97 | 96 | 105 | 103 | 102 | 94 | 97 |
| DKA42-15 | | | 102 | 95 | | | 103 |
| Masterpiece | | 103 | | | | | 98 |
| Legendary YPQ | 98 | 101 | 99 | 97 | 97 | | 103 |
| Magnum V | | | | | | | 99 |
| Mariner | 101 | 99 | 98 | 93 | 93 | 100 | 93 |
| Pioneer 54V54 | 102 | | | | | | 98 |
| Rocket | | | | | | | 102 |
| WL327 | | | 103 | | 104 | 103 | 103 |
| WL325 HQ | | | | 99 | | 101 | 100 |

Trial Locations::

- 01' Boone, IA (011A6)
- 01' Buck Creek, IN (011N6)
- 01' Nampa, ID (011D1)
- 02' Faribault, MN (02MN1)
- 02' West Salem (02W/3)
- 02' Aberdeen, ID (02ID1)
- 02' Seward, NE (02Ne1)

PEST RESISTANCE

| BW | FW | VW | AN | HR | PRR | SN | PA | SAA | PLH |
|----|----|----|----|----|-----|----|----|-----|-----|
| HR | HR | HR | HR | HR | HR | R | R | R | S |

Multiple pest resistance is an important feature of modern alfalfa varieties. This variety has been characterized for resistance to several important alfalfa pests. Pests can cause reduced forage yield, persistence and/or forage quality. Bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, and Phytophthora root rot are the five diseases most commonly associated with alfalfa stand loss in the U.S. Pea aphids are occasional pests in most parts of North America and the potato leafhopper can be a very serious pest in the eastern half of the U.S. The stem nematode and spotted alfalfa aphid can limit yield and persistence in parts of the Western U.S. The University of Wisconsin has developed a disease resistance index (DRI) to measure combined resistance to the six major diseases. The highest possible score in this system is 30; this variety has a DRI of 30.

FORAGE QUALITY

The table below summarizes data and compares relative forage quality of GRANDSTAND with several commercial checks.

| VARIETY | NDF | NDFD | RFQ |
|-----------------|------|------|-----|
| GRANDSTAND | 38.0 | 51.6 | 174 |
| WL327 | 38.3 | 50.4 | 171 |
| 54V54 | 39.1 | 49.3 | 164 |
| Ameristand 403T | 40.4 | 48.4 | 156 |
| Magnum V | 40.9 | 47.8 | 153 |

Forage Genetics is using NIR predictions of Neutral Detergent Fiber (NDF) and Neutral Detergent Fiber Digestibility (NDFD) to estimate forage intake potential and digestibility. Forage Genetics is a member of the University of Minnesota, University of Wisconsin NIRS Consortium, and uses the prediction equations developed exclusively for Consortium members. Relative Forage Quality (RFQ) is an index used to compare forage quality of different feedstuffs and is based on forage energy content and digestible fiber. NDF and NDFD are used in calculating the TDN (Total Digestible Nutrients) component to estimate RFQ. Forage quality was measured in yield trial plots at three locations in 2003 to generate forage quality comparisons between varieties. Forage quality samples were taken and analyzed in the first production year from the first, second and third cuttings.

FALL DORMANCY AND WINTERHARDINESS

The table below summarizes ratings for fall dormancy, winterhardiness and recovery after cutting of GRANDSTAND compared with standard and commercial checks. Fall dormancy, winterhardiness and persistence ratings are the mean of two trials (West Salem and Boone, IA).

| VARIETY | FD | WH | PI | Rgw |
|--------------|-----|-----|-----|-----|
| GRANDSTAND | 3.9 | 1.8 | 8.3 | 8.8 |
| Dart | 3.3 | 3.1 | 6.0 | |
| 53060 | 3.2 | 3.1 | 8.1 | 8.2 |
| G2852 | 3.9 | 4.1 | 4.0 | |
| Avalanche +Z | 2.3 | 2.4 | 5.6 | 6.9 |
| Archer | 4.8 | 4.7 | 5.1 | 7.4 |
| Vernal | 1.9 | 2.1 | 5.8 | |

Fall dormancy and winterhardiness ratings help determine where a variety is best adapted. Later fall dormant types are, in general, better suited to take advantage of the longer growing season typical of some production areas. Winterhardy types are recommended in areas where winter injury is common. In older varieties winterhardiness was closely related to early fall dormancy and slower recovery after cutting. These relationships make it difficult to combine high yield potential and good winterhardiness. This variety is the product of a selection program designed to change the fall dormancy/winterhardiness relationship. The result is a new generation of products that combines later fall dormancy, excellent winterhardiness, fast recovery after cutting and excellent forage yield potential.

Standard tests are used to measure fall dormancy and winterhardiness in a WH nursery in the first and second years, respectively. A persistence index is measured in the third year. Recovery after cutting was rated visually ten days after a July cutting in West Salem, WI variety trials.

Fall dormancy is rated (1-9) with 1=earliest dormant and 9=non-dormant. Winterhardiness is rated (1-6) with 1=most hardy and 6=non-hardy. The persistence index is rated (1-9) with 9=most persistent. Recovery after cutting is rated (1-9) with 9=fastest regrowth.

MILK PRODUCTION

The Agronomy and Dairy Science Departments at the University of Wisconsin have developed a series of equations to predict milk production per acre from forage. The table below compares total milk production per acre for GRANDSTAND with several competitive check varieties in trials averaged over two locations (Wisconsin and Iowa).

| VARIETY | 2003 Yield T/A | Mean RFQ | 2003 Lbs Milk/Acre |
|-----------------|----------------|----------|--------------------|
| GRANDSTAND | 8.12 | 174 | 25,359 |
| WL327 | 7.64 | 171 | 23,475 |
| 54V54 | 7.76 | 164 | 23,342 |
| Ameristand 403T | 7.30 | 156 | 21,412 |
| Magnum V | 7.33 | 153 | 21,233 |

MULTIFOLIATE EXPRESSION

| VARIETY | %ML |
|-----------------------------|-----|
| GRANDSTAND | 78 |
| Proof (high check) | 80 |
| Multiking (mod check) | 41 |
| Vernal (trifoliolate check) | 0 |

GRANDSTAND has high expression of multifoliolate (ML) trait. ML expression is a component in improved forage quality. ML expression has been successfully used to help market improved forage quality. The striking visual image of the ML trait and the straightforward tie-in between improved leafiness and improved forage quality has led to the successful use of the ML trait to help market improved forage quality.

