

Forage Crops Production Technology

DEPARTMENT OF PLANT & SOIL SCIENCES
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ALFALFA VARIETIES FOR OKLAHOMA - 2005

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The alfalfa variety evaluation program within the Plant & Soil Sciences Dept. at OSU tests the performance of alfalfa varieties that may be marketed in the state. Our purpose is to help alfalfa producers decide which varieties to consider and to assist marketers to choose varieties for this area. Normally 10 to 20 new alfalfas are submitted annually for testing in Oklahoma. We also include in these tests some varieties that are well tested to give a sound basis of comparison among varieties.

The table below summarizes facts about the best varieties in current tests. Those wanting detailed information about alfalfa variety performance should visit http://alfalfa.okstate.edu/var-test/alf-var.html on the Internet. Currently, detailed results for the 1999-2004 harvest years in Oklahoma are available and can be printed from that site. If anyone desires older data, email the authors at john.caddel@okstate.edu

Varieties listed in Table 1 are well-tested and have had consistently good yields. That is, they have been in several tests, representing diverse alfalfa production areas in the state.

Test-years is the sum of the number of years a variety has been in tests. In general 10 test-years is a minimum to have confidence of a variety's yield potential. **Relative Yield** is a relative ranking of a variety's yield, compared to others in a test. A **Relative Yield** score of 100% indicates a variety's yield performance is average among those in a test. Table 1 also gives the year a variety was released and who markets the variety in Oklahoma. Alfalfa varieties are marketed in Oklahoma that are not submitted for testing. They may be good or poor. Without testing we do not know.

Summary of Good Varieties

Magnum V, released in 1995, has been one of the highest yielding and well-tested varieties for this area. It has consistently produced high yields in diverse locations.

Good As Gold II was released in 1999 as a replacement for Good As Gold. It has performed well in our tests and is distributed by Johnston Seeds.

Garst 6420 was released in 1998, and is distributed in Oklahoma by Garst Seed dealers. It is another in a long line of good varieties marketed by this company.

OK 49 is a relatively old (1990) variety developed by the Oklahoma Ag. Experiment Station for Oklahoma that has maintained its high yield and persistence. It is marketed by Ross Seeds.

Magnum IV, released in 1994 by Dairyland Seeds, is still a good variety but has been replaced to a large extent by Magnum V.

HybriForce-400 was released in 2001 by Dairyland as a hybrid and has performed very well in our tests.

HayGrazer was released in the mid 1990's by Great Plains Research and is market by Ross Seeds. Its performance has been good as a grazing or hay type alfalfa.

Garst 631, released in 1993, is still a reliable variety in most situations.

Table 1. Performance summary of the proven varieties

Entry	Test-Years	Relative	Released	Marketer in
-		Yield	Date	Oklahoma
Magnum V	20	104	1997	Dairyland
Good As Gold II	17	102	1999	Johnston Seeds
Garst 6420	21	102	1999	Garst Seeds
OK 49	100+	101	1990	Ross Seeds
Magnum IV	28	101	1994	Dairyland
HybriForce-400	13	101	2001	Dairyland
HayGrazer	24	100	1995	Great Plains
-				Research
Garst 631	55	100	1993	Garst Seeds

Relative Yield is the relative ranking of a variety's yield, compared to others in a particular test. A **Relative Yield** score of 100% indicates a variety's yield performance is average among those in a test.

Table 2. Varieties with apparent high potential but inadequately tested.

Entry	Test-Years	Relative	Released	Marketer in
-		Yield	Date	Oklahoma
55H05	6	100	2002	Pioneer
WPAR02	6	102		Great Plains Res.
Magna 601	5	102	1999	Dairyland
HybridForce-420Wet	3	101	2003	Dairyland
DS 218Hyb	2	105		Dairyland

Roundup Ready Alfalfa Approved For U.S. Market

Roundup Ready alfalfa was approved for sale in the U.S. in June 2005, according to Jennifer Garrett, Monsanto Public Affairs. "The agreements for licensees and dealers will be completed over the next month," says Garrett. "The USDA, FDA and EPA approvals for the use of Roundup over the top of Roundup Ready alfalfa apply to alfalfa produced only in the U.S. In turn, dealers will sign agreements to ensure that the Roundup Ready alfalfa forage will be used on farms the USA only, and not grown for export. The actual sales process will start in time for fall planting."

The amount of seed available this fall will be very limited, but Garrett expects the seed to be fully available next year. "Forage Genetics International is our partner and has done a great job of working with us to ensure we have the Roundup Ready trait in the best varieties for this limited supply of seed this year, and to make sure there will be a good supply of seed the following year," says Garrett. "Forage Genetics is working to broadly license this trait to a large number of companies." Although the initial seed supply is limited, Garrett says Monsanto and Forage Genetics want growers to get experience with Roundup Ready alfalfa as soon as possible. The pricing has not yet been announced.

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Additional Information: Alfalfa forage yield for a particular variety varies from year to year and from one site to another; however, a variety's Relative Yield Scores varies much less. For this reason (and to conserve space), Relative Yield Scores are presented. This is the total yield for a variety in a test divided by the average of all varieties in the test and multiplied by 100. Detailed yield data for each harvest in every trial are on the Internet at http://alfalfa.okstate.edu/var-test/alf-var.html.

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