



# Forage Crops Production Technology

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DIVISION OF AGRICULTURAL SCIENCES

&  
NATURAL RESOURCES  
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## ALFALFA VARIETIES FOR OKLAHOMA, 2002

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There are important differences among alfalfa varieties. The choice of which variety to plant is an important question alfalfa producers must resolve before establishing new stands. Thousands of varieties have been developed, and about 40 varieties were released this year, which is fewer than usual. It is no wonder producers are sometime uncertain about variety choices.

To assist producers with decisions related to variety choices, personnel in the Plant and Soil Sciences Department through the Oklahoma Agricultural Experiment Station, Cooperative Extension Service, and OSU conduct alfalfa variety

evaluations in Oklahoma. Normally 10-20 new alfalfas are submitted annually for testing in Oklahoma.

The table below summarizes data collected for many years (through plantings in 2000). For those who want detailed information about alfalfa variety performance in Oklahoma, results are always on the Internet at <http://alfalfa.okstate.edu/var-test/alf-var.html> Currently, detailed results for the years 1998-2001 may be seen and printed from that site. If you would like to study older data, contact - [jlc@mail.pss.okstate.edu](mailto:jlc@mail.pss.okstate.edu)

**Table 1. Performance summary of the proven varieties**

Variety	Relative Yield (%)	Number of Test-Years	Total Number of Tests	Higher than Average (no. of tests)	Higher than Average (% of tests)	Highest in Test (no. of times)
Good as Gold II	105.8	21	7	7	100	6
Magnum V	103.8	17	7	7	100	1
Reward	103.5	30	11	11	100	2
Enhancer	102.9	22	8	8	100	0
Garst 6420	102.2	14	8	6	75	1
OK 49	102.3	100+	39	28	72	7
Innovator+Z	102.2	21	7	3	43	1
Key	101.4	14	5	3	60	1
Magnum IV	101.3	23	10	7	70	0
Garst 630	101.1	100+	35	23	66	2
Garst 631	100.8	30	13	8	62	1
Cimarron 3i	100.1	31	9	5	56	0

The varieties in Table 1 are well-tested. That is, they have been in several tests, representing most of the diverse alfalfa production areas in the state. The more a variety is tested, the more confidence we have in its performance. When varieties are tested as much as OK 49 and Garst 630 (included as checks in many tests), there will be some failures.

There may be other good varieties marketed in Oklahoma, but they have not been tested (for whatever reason) or have been in only one or two tests. This is not good enough for us to "recommend" a variety.

**Table 2. Varieties that show promise.**

Variety	Relative Yield (%)	Number of Test-Years	Total Number of Tests	Higher than Average (no. of tests)	Higher than Average (% of tests)	Highest in Test (no. of times)
Affinity+Z	101.4	10	4	3	75	0
55H55	100.9	12	6	3	50	1
Depend+EV	100.7	15	5	2	40	1
HayGrazer	100.4	21	7	3	43	1
Cimarron SR	100.4	11	5	3	60	0
Dagger+EV	100.1	13	7	3	43	0

Most of the varieties in Table 2 have not been adequately tested to be considered for the “recommended” list. A Relative Yield score of 100%

means that a variety’s yield performance is average among those tested. Generally, very few “bad” varieties are entered into our tests.

**Table 3. Performance Summary of Buffalo and Oklahoma Common**

Variety	Relative Yield (%)	Number of Test-Years	Total Number of Tests	Higher than Average (no. of tests)	Higher than Average (% of tests)	Highest in Test (no. of times)
Buffalo	98.0	100+	32	10	31	1
OK08	92.1	100+	68	5	7	1

Table 3 includes yield performance of the old varieties, Buffalo and OK08. Many variety performance tests include an “Oklahoma Common” (usually represented by OK080 and/or Buffalo). These are frequently the lowest yielding varieties and rarely higher than average. Note: When these are included in variety tests, we clean the seed so its seed quality is comparable to other entries. Normally this means

removing a high percentage of small shriveled seed, sometimes a high percent foreign material, and weed seeds.

The “oklahoma common” seed that is available from many seed stores may be almost anything. Usually it is not as good as a recommended variety.

### Seed of Good Varieties is Expensive

**To reduce establishment costs**, try: 1) making a good seedbed; 2) buying clean seed that has good germination; and 3) reducing planting rate to 10 to 12 pounds/acre. Buying “cheap” seed usually costs more from the standpoint of reduced yields, shorter stand life, increased insecticide. Establishing alfalfa is an investment. Go with the best!!

**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 vary 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 [alfalfa.okstate.edu/var-test/alf-var.html](http://alfalfa.okstate.edu/var-test/alf-var.html) for interested readers.

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