



**Cooperative
Extension
Service**

**2005 FIELD CROP
VARIETY AND FERTILIZER
RECOMMENDATIONS**

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FIELD CROPS
VARIETY AND FERTILIZER
RECOMMENDATIONS

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These recommendations were made by the Extension Service from the results of experiments at the New Mexico State University Agriculture Science Center at Farmington.

Additional information on crop production is available from the Extension Service, Agriculture Science Center, and USDA publications.

Variety recommendations are not necessarily listed in the order of their importance or yield potential.

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FIELD CROP VARIETY AND FERTILIZER RECOMMENDATIONS FOR SAN JUAN COUNTY

Crop & Varieties Fertilizer Recommendations/acre	Seeding Rate Remarks per acre	Planting Date	
ALFALFA:			
Affinity	12-20 lbs.	April 15 - May 15	90
- 120 lbs. P ₂ O ₅	Not all fields respond.		
Millennia			
Geneva		Aug. 10 - Sept. 15	
Archer II		(Fall planting preferred)	
Pinnacle			
Select			
Focus			
Champ			
Magnum V			

ALFALFA HERBICIDE RECOMMENDATIONS

***NOTE: READ AND FOLLOW DIRECTIONS ON**

(Use on 1-year or older plantings only)

HERBICIDE LABELS

HERBICIDE: Remarks	Rate/acre	Time	
SENCOR (LEXONE) days grazing restriction. Will burn back emerging cheat	1/2 - 3/4 pint	Nov. 1 - Feb. 15	28
SENCOR DF (LEXONE) not apply to seedling alfalfa.	3/8 lbs - 1/2 lbs.	Nov. 1 - Feb. 15	Do
KARMEX + 1 quart of Nov. 1 - Feb. 15 No grazing restriction. Alfalfa must be dormant when applied. surfactant/100 gal. water		1 1/2 - 2 lbs.	
VELPAR not apply to seedling alfalfa.	1 pt. - 2 pt.	Nov. 1 - Feb. 15	Do
PURSUIT Follow label carefully. Refer to label on crop rotation 30 day waiting period prior to harvest. Cannot replant alfalfa until months following PURSUIT application.	0.063 lb. ae/A 4 oz. 2AS/A	Post-emergence (apply only post- emergence when alfalfa has at least 2 trifoliolate leaves)	4
RAPTOR adjuvant (either a surfactant or a crop oil concentrate) and a optimum weed control activity	4-6 oz./A	Post-emergence (apply only post- least 2 trifoliolate leaves)	An

SELECT (grasses) Apply to actively growing grasses. days after application.	8-16 oz./A Do not graze treated field for	Post-emergence (apply only post- emergence when alfalfa has at least 2 trifoliolate leaves)	15
POAST (grasses) Established or seedling alfalfa.	0.5 to 2.5 pt. 1.5 E.C./A	Post-emergence	

Insert tables here when copying. There are two pages, copy back to back.

Crop and Varieties	Seeding rate	Planting Date	Fertilizer	Remarks
	Per Acre	Recommendations/acre		
CORN: Full season				
Mycogen	2725	*24,000 - 33,000	**April 25 - May 10 200 - 300 lbs. N	Late maturing
Agri Pro	AP 9616	plants/acre	planting date.	high-yield varieties
Agri Pro	AP 9707			Use a grain dryer.
DeKalb	DK 595	(Check seed company	Reduced fertilizer	
DeKalb	DK 626	for rate.)	recommended following	
Pioneer	34K77		alfalfa. Apply 1/2 N	
Pioneer	3489		at planting; 1/2 N at	
Round Up Ready Dekalb	512RR		layby.	
Grand Valley	SX 1300			

* Check seed company for recommended plant populations

** Varies with year and location in county. Minimum soil temperature for germination is 54°F.

CORN: Early season				
DeKalb	DK 477			
DeKalb	DK 493	SAME AS FULL SEASON		
DeKalb	DK 512			
Pioneer	3568			
Mycogen	2500			
Grand Valley	GVX 4616			

NOTES: Fertilizer rates are expressed in terms of actual nitrogen and P₂ O₅. Example: 200 lb. of Nitrogen would require application of 600 lbs of ammonium nitrate or 960 lbs. of ammonium sulfate. 45 lbs. of P₂ O₅ would require application of 100 lbs. of 45% phosphate.

* Check seed company for recommended plant populations

** Varies with year and location in county. Minimum soil temperature for germination is 54° F.

NOTE: Soil testing is recommended and will tell you what nutrients are actually available or needed in your soil and will assist in making recommendations for your crop. Contact the County Extension Office for procedures for soil testing.

AVERAGES

Corn (Full Season)

Corn (Early Season)

Two and three year average yields: N.M.S.U. Agriculture Science Center at Farmington, NM 1997-1999

Company or Brand Name & Hybrid	98 - 99			Company or Brand Name & Hybrid	98-99			97-99	
	1998	1999	2-year average		1997	1998	1999	2 year average	3 year average
	----- bu/acre -----				----- bu/acre -----				
Grand Valley SX 1300	222.6	200.5	211.6	DeKalb DK 493	234.8	201.1	183.5	192.3	209.7
Pioneer 34K77	210.4	201.7	206.1	DeKalb DK 477	206.0	212.9	158.1	185.5	192.3
Pioneer (white) 34P93	228.1	170.0	199.5	Grand Valley GVX 4616		223.2	199.4	211.3	
Germain's HT 4138	192.2	172.3	182.3	Germain's BH 4602		207.8	196.1	202.0	

Pioneer 37M81

184.1 139.3 166.7

CORN HERBICIDE RECOMMENDATIONS

***NOTE: READ & FOLLOW DIRECTIONS ON HERBICIDE LABELS**

HERBICIDE		Rate/acre	Application Time	Remarks
<u>For grass in corn:</u>				
ERADICANE	5 pints/A	Preplant	Incorporate within 15 minutes of application	
DUAL II Mag	2 pints/A	Preplant	Incorporate within 5 days of application	
FRONTIER	1 - 2 pt. 6.0/A	Preplant Pre-emergence		
BICEP II		1.5 to 3 qts/A	Early Preplant	Restricted use pesticide.
Read label carefully in order to prevent		Pre-emergence	crop injury and contamination to ground and surface water.	
HARNESS	1.25 - 3.4 pints/A	Preplant incorporated, Pre-emergence surface	Check label for crop rotation	
GUARDSMAN	2.5 - 5 pints/A	Preplant, Pre-emergence and early Post-emergence	Post-emergence application must be made prior to weeds reaching 1.5 inches tall. Rates vary by soil texture and organic matter content.	
HARNESS XTRA (Premix)	1.8 - 2.7 qts/A	Same as HARNESS	Same as HARNESS	
LASSO	2 - 3 qts/A	Preplant	Incorporate within 5 days of application	
SURPASS	1.5 - 3.75 pt. EC/A	Preplant Pre-emergence	Incorporate up to 30 days before planting	
LARIAT OR BULLET	2.5 - 4 qts/A	Preplant Pre-emergence	21 day grazing restriction	
<u>For broadleaves in corn:</u>				
ATRAZINE 4L	2 quarts	Preplant Pre-emergence, or	24 month residual	
ATRAZINE 80W		2 1/2 - lbs.	Post emergence	
BANVEL	1/2 pint	Post emergence	Apply before corn reaches 5 inches in height.	
BEACON	0.76 oz./A	Post emergence	Apply over the top, directed or semi-directed when corn is between 4"-20" tall.	
ACCENT		0.66 oz. /A	Post emergence	Broadcast - corn 24" or less
in height. Directed -				

25"-36" tall. Do not apply to seed corn taller than 20".
 Do not apply after 10 collar stage of corn, or to corn
 taller than 36", whichever occurs first.
 (Continued)

CORN HERBICIDE RECOMMENDATIONS

HERBICIDE	Rate/acre	Application Time	Remarks
For broadleaf's in corn:			
MARKSMAN	2 - 3.5 pints/A	Preplant Pre-emergence Early post-emergence (prior to 8 inches tall)	
EXCEED Apply to corn between		1 oz WDG/A	Post emergence (Over the top or directed) 4"-48" in height and before tassel emergence. Do not apply after corn exceeds 48" tall.
BASIS GOLD	14 oz. WDG/A	Post emergence	Apply to corn up to 12" tall.
FULTIME	2.5 - 5 qt./A	Preplant, pre-emergence Post emergence	Apply within 14 days before planting. No till: apply from up to 40 days before planting or after planting.
GUARDSMAN	1.6 - 3.2 lb. ai/A 2.25 - 5 pt./A	Preplant incorporated, preplant surface, pre-emergence or early post emergence	
2-4-D	1/2 - 3/4 pint/A	Post emergence	Apply before corn reaches 5 inches in height.
BICEP LITE II Mag	2.4 to 3.5 qt/A or 1.8 - 3 qt/A Post emergence 2-5 leaf stage	Preplant incorporated, preplant surface, Pre-emergence or early post emergence	
NORTH STAR	5 oz WDG/A	Post-emergence	Apply single application over the top between 4"-20" tall. Do not apply to corn less than 4" tall
DISTINCT	6 oz WDG/A 4 oz WDG/A	Early post-emergence, 4-6" tall Post-emergence, 10-24" tall	
CELEBRITY	6.67 oz./A	Early post-emergence	Apply to weeds less than 3" tall
STINGER	.25 - .66 pints/A	Apply to actively growing weeds Anytime after corn emerges through 24" tall	Canada Thistle - apply when majority of plants have emerged and thistles are 6.8" in diameter

FRONTIER

1-2 pint/A

Preplant
Pre-emergence

Rate varies by soil type and organic matter

BULLET OR LARIAT
(LASSO & ATRIZINE)

2.5 - 4.5 quarts/A

Early post-emergence (up to 8")
Pre-emergence or post-emergence
Preplant incorporated

Check label for rotation

Crop and Varieties	Seeding Rate Per Acre	Planting Date	Fertilizer Recommendations/acre	Remarks
SORGHUM X SUDAN See seed company or feed store for availability	10-20 lbs.	May 15 - June 20	100 - 150 lbs. N 45 lbs. P ₂ O ₅	Apply 100 lbs. N and all P ₂ O ₅ at planting and 50 lbs. N after cutting (boot stage)
FORAGE SORGHUM See feed store or seed dealer for availability	10-16 lbs.	May 15 - June 30	160 lbs. N 45 lbs P ₂ O ₅	Apply N in split applications 80 lbs. at planting 80 lbs. at layby
BARLEY: Spring Stephoe Triumph	90 - 100 lbs Use higher rates at later dates.	Mar. 15 - April 15 Reduced yield if planted after April 1.	125 lbs. N	Apply at planting time
BARLEY: Winter Post Schuyler Kamiak Hudson	90 - 100 lbs.	Sept. 1 - 15	125 lbs. N 45 lbs. P ₂ O ₅	Apply at planting time.
WHEAT: Winter (Grain) TAM 105** TAM 107 TAM 109 TAM 200 TAM 202 Longhorn Tomahawk Ogallala Mesa Scout 66 Thunderbird Ike Hickok Karl 92	60 - 120 lbs. Use higher rates for grazing.	Sept. 1 -30	125 lbs. N 45 lbs. P ₂ O ₅	Apply 1/2 N at planting. Apply 1/2 N in early spring.

**Short statured varieties can be fertilized at higher rates without lodging.

Crop and Varieties	Seeding rate per acre	Planting Date	Fertilizer Recommendations/acre	Remarks
WHEAT: Winter (Forage) Quantum 555 Apply 1/2 N at planting Quantum 554 and 1/2 N in early spring Scout 66 - Grazing Triticale KGS Pounds Plus B		100-120 lbs.	Sept. 1-30	125 lbs. Nitrogen 45 lbs. P ₂ O ₅
OATS: Grain Russell Cayuse Markton Colorado 37 Corbit* Monida	90 lbs.	Mar. 15 - April 15	125 lbs. Nitrogen	Apply at planting
OATS: Hay Cayuse Colorado 37	90 lbs.	Mar. 15 - April 15	125 lbs. Nitrogen	Apply at planting
RYE: (For grazing) Elbon Bonel	60 lbs.	Sept. 1 - 30	125 lbs. Nitrogen.	Apply 1/2 N at planting and 1/2 N in early spring.
PINTO BEANS Olathe San Juan Red UI 114 Northwest 410 Flint	90 lbs in 20 inch rows	May 20 - June 30	20 lbs. Nitrogen 45 lbs. P ₂ O ₅	

AVERAGES

Winter Wheat varieties: three and four year average yields, N.M.S.U. Agricultural Science Center, Farmington, NM 1995-1999

Variety	Source	1999	1998	1997	1996	1995	5 yr. Avg. 95-99	4 yr. Avg. 96-99	3 yr. Avg. 97-99	2 yr Avg. 98-99	% of TAM 200
-----Bushels per acre-----											
TAM 200	Variety	116.3	127.2	102.4	99.0	109.8	111.1	111.5	115.6	121.8	100.0
TAM 107	Variety	121.7	118.4	103.5	102.1	105.1	110.2	111.4	114.5	120.1	99.2
Longhorn	Agri Pro	94.4	122.1	107.5	95.1	110.6	105.9	104.8	108.0	108.3	95.3
Tomahawk	Agri Pro	107.7	114.9	108.7	99.8	96.8	105.6	107.8	110.4	111.3	95.0
Ogallala	Pioneer	114.6	114.5	90.8	105.8	93.7	103.9	106.5	106.6	114.6	93.5
Mesa	Variety	101.3	118.0	102.6	90.6	65.7	100.0	101.2	104.6	105.7	90.0
Scout 66 (check)	Variety	89.4	105.4	107.5	86.6	98.5	97.5	97.3	100.8	97.4	87.8
Thunderbird	Agri Pro	99.5	89.9	87.0	89.2	105.2	94.2	91.4	92.1	94.7	84.8
TAM 109	Variety	119.2	114.5	101.1	93.3			107.0	111.6	116.9	96.0
Hickok	Variety	111.5	110.2	89.2	93.7			101.2	103.6	110.9	90.8
Karl 92	Variety	107.5	109.3	87.9	93.8			99.6	101.6	108.4	89.3
TAM 202	Variety	104.0	96.2	103.4	88.5			98.0	101.2	100.1	87.9
Ike	Variety	90.9	105.2	108.9	79.2			96.1	101.7	98.1	86.2
TAM 105	Variety	103.1	95.6	108.6					102.4	99.4	88.6
7406	Hybritech	142.0	147.9							145.0	119.0
7501	Hybritech	133.0	123.8							128.4	105.4

SMALL GRAIN HERBICIDE RECOMMENDATIONS

HERBICIDE:	Rate/acre	Remarks
2-4 D + Dicamba (Banvel)	0.5 pt. 2-4D + 0.25 pt. Banvel	Apply in spring when grain is fully tillered but before jointing.
Curtail (especially effective on Canada Thistle)	2 pts./acre	Apply before weeds exceed 3" in height. One year crop rotation, except for corn, wheat, barley, oats, grass, 18 months for alfalfa.

Crop and Varieties	Seeding Rate per acre	Planting Date	Fertilizer recommendations/acre	Remarks
IRRIGATED PASTURE				
<u>Orchard Grass</u>				
Crown				
Hallmark	15-20 lbs.	August 15 - Sept. 15	175 lbs. N	Plant all grasses 1/4 to 1/2 inches deep.
Dayton				
Palastine		April 15 - May 15		Apply 75 lbs. N at planting.
<u>Tall Fescue</u>				
K-31	15-20 lbs.	Aug. 15 - Sept. 15 April 15 - May 15	175 lbs. N	FOR ESTABLISHED
STANDS				
<u>Bromegrass</u>				
Lincoln	15 - 20 lbs.	Aug. 15 - Sept. 15	175 lbs. N	Apply 100 lbs. N before first irrigation in spring
Regar		April 15 - May 15		
<u>Tall Wheatgrass</u>				
Jose (Good choice for Alkali Soils)	15 - 20 lbs.	Aug. 15 - Sept. 15 April 15 - May 15	175 lbs. N	Apply 75 lbs. N in early June.

Seasonal dry matter yield of eight pasture grasses at two levels of irrigation.
 NMSU Ag. Science Center at Farmington, 1996-1998

-----FULL IRRIGATION-----

Water Applied Inches*	Regor Meadow Brome	Crown Orchard	Fawn Tall Fescue	Luna Pubescent Wheat	Oahe Intermediate Wheat	Smooth Brome	Hycrest Crested Wheat	Linn Perennial Rye
-----LISTED HIGHEST TO LOWEST YIELD----- DRY POUNDS PER ACRE								
-----1996-----								
35.2	7565	7634	7975	7084	7359	6509	5184	4385
-----1997-----								
29.7	6002	5464	5973	5185	4412	3841	3421	3280
-----1998-----								
36.1	7448	6635	5381	4723	4794	4317	4120	2311
-----3 year average-----								
33.7	7005	6578	6443	5664	5522	4889	4242	3325

-----MID IRRIGATION-----

Water Applied Inches*	Oahe Intermediate Wheat	Regor Meadow Brome	Luna Pubescent Wheat	Fawn Tall Fescue	Hycrest Crested Wheat	Smooth Brome	Linn Perennial Rye
-----LISTED HIGHEST TO LOWEST YIELD----- DRY POUNDS PER ACRE							
-----1996-----							
26	4405	4791	3814	3627	4026	3150	1703
-----1997-----							
25.5	5505	4232	4870	3947	3958	2868	2838

	-----1998-----								
24.7	1714	2193	1319	2291	1141	1814	1356	1882	
	-----3 year average-----								
25.4	3875	3739	3334	3288	3042	2611	2461	1808	

*Water applied includes precipitation.

Fertilizer applied: 1996 - 165 lbs N/a; 1997 - 157 lbs N/a and 173 lbs S/a;
1998 - 139 lbs N/a and 177 lbs P₂O₅/a and 120 lbs S/a