



## CLIMATE READY ALFALFA

NuMex 501 makes the Mountain View Seeds' A-TEAM! NuMex 501 is a high forage yielding and high forage quality alfalfa variety selected for a new genetic trait called Drought-Resilience. This trait allows NuMex 501 to recover from prolonged periods of drought stress while maintaining high yields when adequate irrigation is available. NuMex 501 was bred by New Mexico State University using advanced conventional (Non-GMO) plant breeding technology, that identified alfalfa genes influencing Drought Tolerance and Drought-Resilience. This technology combined with selection of vigorous plants from multiple deficit-irrigated fields over seven years, was used in the plant breeding process to develop a new class of alfalfa varieties with Drought-Resilience.



### DROUGHT RESILIENT ALFALFA

#### NEW TRAITS COMBAT WATER STRESS CONDITIONS DUE TO CLIMATE CHANGE

*Ability to Recover from Drought Stress  
Selected for 7-Years for Drought-Resilience  
Salinity Tolerance\**

#### EXCELLENT FORAGE QUALITY

**VERY GOOD FORAGE YIELD**  
*Under Normal Irrigation with 7-Years of Selection for Drought-Resilience*

### AGRONOMIC CHARACTERISTICS

Fusarium Wilt	R	Recovery After Cutting	Good
Anthrachnose	HR	Forage Yield Potential	Very Good
Aphanomyces Root Rot	MR	Forage Quality	Excellent
Phytophthora Root Rot	HR	Drought-Resilience	7-Yrs of Selection
Pea Aphid	R	Root Type	Tap
Spotted Alfalfa Aphid	MR	Leaf Type	Trifoliolate
Stem Nematode	MR	Salt Tolerance (germ.)	Tolerant*
Fall Dormancy	5		

\*Projected level of resistance or tolerance  
High Resistance (HR), Resistant (R), Moderate Resistance (MR)

#### BREEDING FOR DROUGHT-RESILIENCE



# DROUGHT RESILIENT ALFALFA



## DRY MATTER YIELDS (Tons/Acre)

Variety	2021 Total	2022 Total	2023 Harvests				2023 Total	3-Year Average
			13-Jun	18-Jul	21-Aug	12-Oct		
<b>NuMEX 501</b>	<b>7.39</b>	<b>12.50</b>	<b>2.88</b>	<b>2.13</b>	<b>1.68</b>	<b>1.28</b>	<b>7.95</b>	<b>9.28</b>
Magnum 8	6.78	12.78	2.70	2.28	1.88	1.23	8.08	9.21
SW4412Y	6.85	12.28	2.78	2.35	1.90	1.18	8.20	9.11
AFX 469	6.06	12.65	2.88	2.45	1.93	1.25	8.50	9.07
Bar MSI	6.92	11.83	3.05	2.18	1.90	1.20	8.33	9.02
NM Common	6.29	11.78	3.18	2.38	1.83	1.48	8.85	8.97
African Common	6.68	11.13	2.88	1.85	1.48	1.03	7.23	8.34
Dona Ana	6.12	10.30	3.08	1.80	1.48	1.15	7.50	7.97
Zia	5.62	9.28	2.95	1.35	1.25	0.83	6.38	7.09
Trial Average	6.49	12.01	2.90	2.17	1.74	1.20	8.00	8.83

Sprinkler-irrigated alfalfa trial planted 08/20/2020 at NMSU's Agricultural Science Center at Farmington. 2021 Harvest dates: 19-Jun, 10-Aug, 22-Sep. 2022 Harvest dates: 9-Jun, 21-Jul, 30-Aug, 12-Oct.  
Standard Irrigation Management.

## SEEDING

Alfalfa is a very "foundational" crop; start with adequate fertility levels; pH 6.5-7.5; P ≥ 50 lbs/ac; K ≥ 220-250 lbs/ac. Plant into well-drained soil type, firm seedbed, seeding depth ¼" to ½". Planting rate, regardless of nurse or companion crop is 17-22 lbs/ac; if broadcast or no-till seeded, consider increasing seeding rate 10-20%. Keep nurse crop < 1 bu.; companion crop < 2 lbs. Imperative to plant into moist soils where irrigation not available, not in dry soil soils anticipating rainfall. GOAL: optimal stand density 5 weeks after planting, 25-35 plants per sq. ft.