

## Why and How Forage Blends are produced?

### Reasons for Blending Two or More Varieties

- **Broaden the range of adaptability from year to year**

Crop varieties differ in their adaptability to different growing conditions, tolerance to diseases, and other factors that can differ significantly from year to year. Temperature, precipitation, and incidence of pests all may vary substantially and result in significant differences in varietal performance. One variety might perform best in one year, while another might do best in another. Blends of varieties can respond better to the variability in growing conditions, and can provide high forage yields and quality under a wider range of conditions.

- **Utilize production inputs more fully**

Varieties differ in the structure and functioning of their roots and leaves. A combination of different plant types may use soil moisture, nutrients, and light more fully and productively than any one type of plant.

- **Attain a more desirable balance of forage production for grazing different times of the year**

Varieties differ in their seasonal growth patterns and response to temperature and daylength. One variety may be more productive than others in the fall, another may be the earliest and most productive coming out of winter dormancy, while a third may produce forage for a longer time and in greater quantity in the late spring. For grazing, blends of multiple varieties can provide a more desirable balance of forage growth throughout the grazing season.

Variability in forage production among different parts of a growing season and among years is evident in results from two years of forage testing by New Mexico State University researchers at the Clovis Agricultural Science Center (see below). Forage yields were measured by clipping fall, winter, and spring during each of two years for two TRICAL® varieties that are in several forage blends available in the Southern Plains. As evident in these results, one variety was the top producer in one year, while the other variety was superior in the other. One variety was superior in the fall and on average in the spring, while the other was superior in the winter.

### How Forage Blends are produced?

A blend of two or more varieties typically does not reproduce itself because the varieties differ significantly in terms of growth habit and seed yields. To achieve the desired blend, seed of the varieties must be grown separately and then blended in the desired proportion.

## New Mexico State University: 2 years of forage testing by researchers at the Clovis Agricultural Science Center

### Clovis 1993-94

	Dec	March	May	Total		Dec	March	May	Total
TRICAL® 102	0.92	1.17	3.8	5.89		107%	94%	94%	96%
TRICAL® 762	0.86	1.24	4.04	6.14		100%	100%	100%	100%

See Clovis Test # 1 chart below

### Clovis 1997-98

	Dec	March	May	Total		Dec	March	May	Total
Beardless	0.65	0.47	2.29	3.4		138%	68%	148%	125%
Bearded	0.47	0.69	1.55	2.72		100%	100%	100%	100%

("Beardless" component of blend - "Bearded" component of blend)

See Clovis Test # 2 chart below

### Hays 1995-96

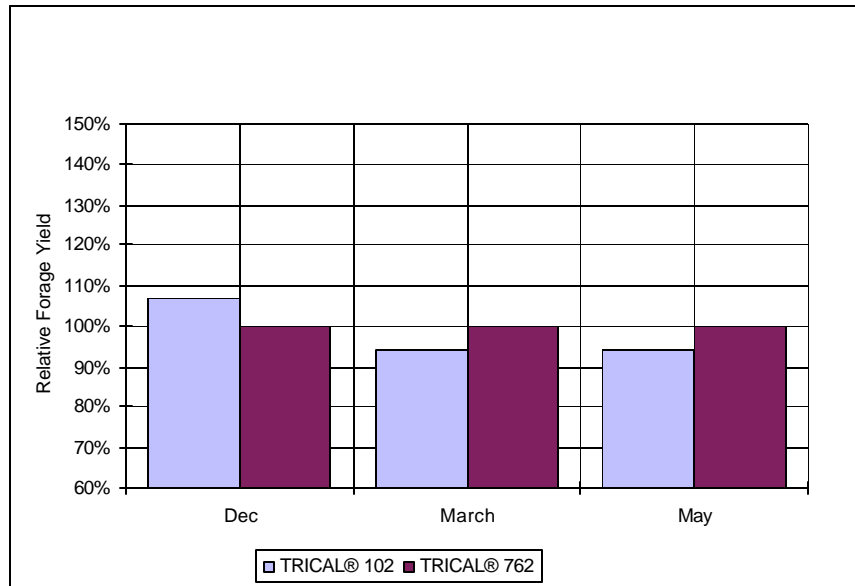
	May Boot		Freeze Rating (0=Best)		Freeze %	
	Lowland	Upland	Lowland	Upland	Lowland	Upland
Hays 1995-96						
Beardless	6539	1338	2	2	131%	141%
Bearded	4991	948	3	4	100%	100%

("Beardless" component of blend - "Bearded" component of blend)

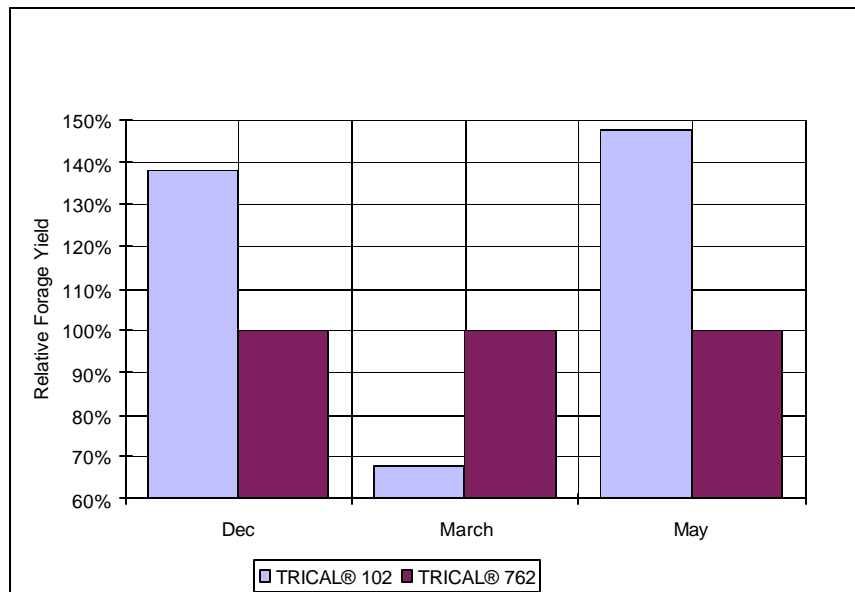
### Hays 1996-97

		Forage Rating (10= best)		Forage %
		December	April	
Hays 1996-97	May boot			
Beardless	5512	7.2	6.5	168%
Bearded	3284	5.5	5.2	100%

## Clovis Test Charts



**Clovis Test #1 - TRICAL® Varieties Used in Forage Blends (New Mexico State Univ)**



**Clovis Test #2 - TRICAL® Varieties Used in Forage Blends (New Mexico State Univ)**