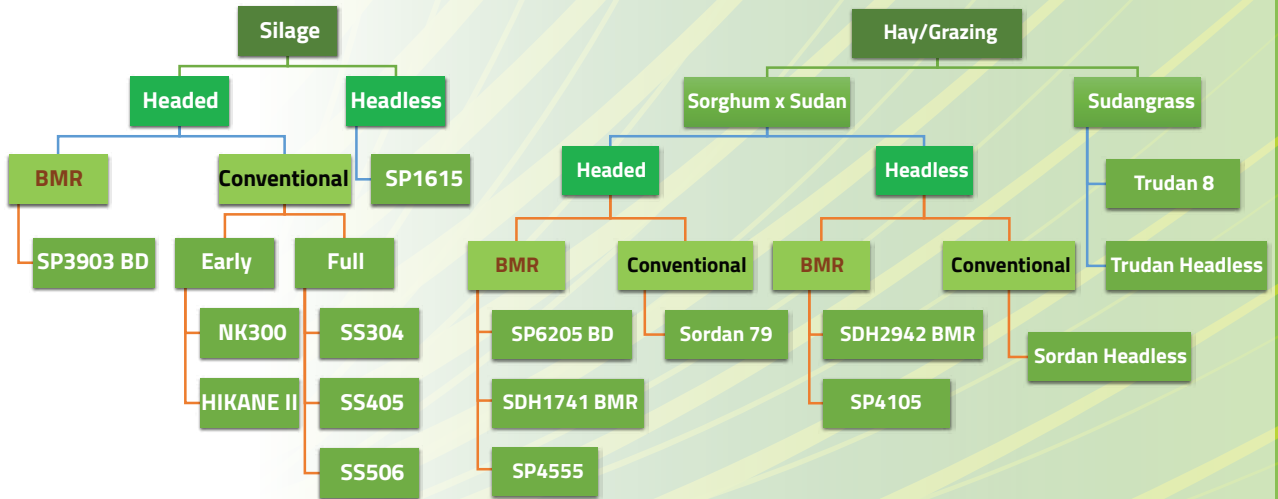


# SORGHUM NUTRITION GUIDE



**SORGHUM PARTNERS®**  
BRAND

# FORAGE SORGHUM DECISION TREE



# FORAGE SORGHUM COMPOSITION

Hybrid	CP	ADF	NDF	LIGNIN	STARCH	FAT	TDN	NEL	NEG	NEM
<b>NK300</b>	9.1	33.9	52.0	5.3	17.1	2.1	58.9	60.1	31.2	57.0
<b>Sordan 79</b>	11.8	40.3	61.7	4.7	0.9	1.3	51.9	52.3	22.9	48.0
<b>Sordan Headless</b>	15.3	38.3	60.2	3.9	0.3	1.4	53.0	53.5	26.0	51.3
<b>SDH2942 BMR</b>	9.6	40.8	62.2	4.5	0.8	1.5	53.6	54.2	24.3	49.5
<b>SD1741 BMR</b>	8.6	36.4	53.2	4.3	1.6	1.7	57.9	59.0	29.9	55.6
<b>SP3903 BD</b>	9.0	28.2	45.6	3.2	15.0	2.2	65.5	67.5	39.9	66.6
<b>SP1615</b>	7.8	44.1	66.2	5.6	0.3	1.6	52.7	53.3	22.4	47.4
<b>SP4105</b>	16.1	39.1	59.5	3.0	0.7	1.4	52.4	52.9	25.7	51.1
<b>SP4555</b>	12.2	38.9	60.8	3.8	0.5	1.1	54.3	55.0	26.4	51.8
<b>SP6205 BD</b>	8.3	35.8	52.0	4.5	3.5	1.3	58.8	60.0	30.9	56.7

# FORAGE QUALITY

**Forage composition of plant parts for three Sorghum Partners forage sorghum hybrids.**

	NK300			SS405			1990		
	Stalk	Leaves	Grain	Stalk	Leaves	Grain	Stalk	Leaves	Grain
C. Prot. <sup>†</sup>	6.3	10.63	13.06	4.9	9.64	14.83	8.14	10.25	N/A
NDF <sup>†</sup>	60.38	65.73	13.58	69.16	71.33	14.65	52.75	70.18	N/A
Starch <sup>†</sup>	3.85	1.37	65.75	3.6	0.87	59.56	7.93	1.55	N/A
C. Fat <sup>†</sup>	1.28	1.83	2.94	0.48	1.56	3.65	0.61	1.37	N/A
Ash <sup>†</sup>	12.45	14.42	1.75	8.43	12.75	3.36	8.4	10.88	N/A
NE <sub>l</sub> <sup>‡</sup>	61	54.5	83.88	48.5	52	85.74	65.5	52.5	N/A
† units = (%); ‡ units = Mcal/cwt									

**Yield and forage quality data for three Sorghum Partners forage sorghum hybrids grown over a four year period.**

Variable	NK300	SS405	1990
Harvest Moisture	62.1	65.2	70
Yield (T/a @ 65%)	22.3	26.2	25.9
Grain (lb/acre)	7021.8	2633.5	0
Crude Protein (%) <sup>†</sup>	9.76 ±0.54	8.01 ±0.31	9.54 ±1.36
ADF (%) <sup>†</sup>	24.96 ±0.06	34.63 ±1.52	33.16 ±3.61
NDF (%) <sup>†</sup>	39.50 ±1.13	54.43 ±2.5	54.54 ±0.62
TDN (%) <sup>†</sup>	65.24 ±2.78	65.75 ±0.35	61.26 ±4.45
Starch (%) <sup>†</sup>	33.64 ±5.15	19.79 ±9.73	5.93 ±1.92
Crude Fat (%) <sup>†</sup>	2.25 ±0.15	2.08 ±0.52	0.84 ±0.05
Ash (%) <sup>†</sup>	6.68 ±0.76	7.43 ±0.41	8.65 ±0.37
NE <sub>L</sub> () <sup>†</sup>	75.50 ±2.12	63.50 ±0.71	65.50 ±6.36

Source: Bushland Silage Trials (2002-2005)

<sup>†</sup> Chromatin internal data collected from different samples.

*I'VE GOT  
THE NEED...*

*...FOR  
HIGH QUALITY  
FEED.*



# BMR

OR

# NON-BMR...

**Forage sorghum characteristics by type (2000-2004)**

Characteristic		Non-BMR <sup>1</sup>	BMR	PS	SEM	P value
Yield, tons	Mean	8.5 <sup>a</sup>	7.5 <sup>b</sup>	10.7 <sup>c</sup>	0.45	<0.001
	s.d.	1.8	1.8	2.9		
CP, %DM	Mean	7.3 <sup>a</sup>	7.9 <sup>b</sup>	6.0 <sup>c</sup>	0.27	<0.001
	s.d.	1.2	1	0.9		
NDF, %DM	Mean	46.6 <sup>a</sup>	45.5 <sup>a</sup>	64.4 <sup>b</sup>	1.36	<0.001
	s.d.	6.1	4.9	4.8		
ADF, %DM	Mean	28.0 <sup>a</sup>	27.0 <sup>a</sup>	39.4 <sup>b</sup>	0.94	<0.001
	s.d.	4.1	3.3	4.8		
IVTD, %DM	Mean	76.2 <sup>a</sup>	80.7 <sup>b</sup>	68.5 <sup>c</sup>	0.9	<0.001
	s.d.	4.3	2.3	2.6		

Source: McCollum et al., 2005

<sup>1</sup>Non-BMR, n=154 entries; BMR, n=99 entries; PS, n=17 entries.

**Lignin (%), in vitro dry matter disappearance (% IVDMD), and in vitro cell wall disappearance (% IVCWD) of three sorghum *bmr* genotypes and their normal sisters (Porter et al., 1978)<sup>b</sup>**

	Lignin		IVDMD		IVCWD	
	Leaf	Stem	Leaf	Stem	Leaf	Stem
<i>bmr</i> -6	5.02 <sup>a</sup>	4.38 <sup>a</sup>	63.5 <sup>a</sup>	64.0 <sup>a</sup>	70.8	61.9
Normal	6.25	6.12	59.5	57.5	68.4	55.4
<i>bmr</i> -12	4.73	3.46 <sup>a</sup>	66.0 <sup>a</sup>	74.0 <sup>a</sup>	79.0 <sup>a</sup>	76.9 <sup>a</sup>
Normal	5.56	5.89	55.8	60.4	64.2	53.7
<i>bmr</i> -18	5.23 <sup>a</sup>	3.45 <sup>a</sup>	64.3 <sup>a</sup>	74.4 <sup>a</sup>	72.9 <sup>a</sup>	77.3 <sup>a</sup>
Normal	6.84	6.28	56.3	59.9	58.2	64.5

<sup>a</sup>Normal and *bmr* are different, P<0.05.

<sup>b</sup>Two years of data for lignin and IVDMD of stems; one year of data for all others.

Source: McCollum et al., 2005