Emergency Forage Options for July Planting

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As wet soil conditions subside, many folks in the Midwest need to plant emergency forage. We recently completed preliminary forage quality analysis of crops evaluated for their emergency forage potential with a July 1, 2003 planting date at Arlington (south central), Marshfield (central), and Spooner (northwest), Wisconsin. The trial was also conducted at two Minnesota locations, but forage quality data are not yet available.

Note that these are preliminary forage quality values, and further analyses are being conducted to refine the data. Also, recall that summer 2003 was considerably drier and somewhat warmer than average, with Marshfield being particularly dry (9" below normal rainfall June through September). In the tables that follow, crops are listed, by location, in descending order of milk production potential per acre as estimated using Milk2000. If you have crop insurance, be sure to check with your agent before planting anything to see how it affects possible insurance payment for lost yield.

- Planting corn silage still appears to be the best bet for maximum yield and milk per acre, even though the crop may not mature to an optimum silage stage. As the first opportunity to plant moves into July, even short-season hybrids run out of time to mature, and a full-season hybrid may be the best choice to maximize tonnage.
- Brown midrib (BMR) forage sorghum was often as productive as corn silage (fertilized similarly at 150 lb N/ac), but had lower forage quality.
- Sudangrass, sorghum-sudan, hybrid pearl millet, and Japanese millet planted July 1 and fertilized twice with 50 lb N/ac produced two cuttings before a killing frost. Of emergency options tested, they were generally intermediate in DM and milk per acre and milk per ton, but had greater crude protein content than corn silage.
- Grain soybean harvested for forage at R6.5 was the highest quality option of those tested, approaching alfalfa quality.
- Foxtail millets, receiving 100 lb N/ac and harvested once at boot to early head, were the lowest in quality. Earlier harvest may have improved their quality, but yield would have been sacrificed.

Table 1. Performance of emergency forages planted July 1, 2003 at Arlington, WI.

Entry	DM Yld	Milk/Ac	Milk/Ton	CP
	ton/acre	*lb/acre*	*lb/ton*	*%DM*
Corn 103d	9.0	28930	3200	10.7
Corn 94d	8.7	26210	3020	10.5
Corn 81d	7.6	23230	3050	11.6
BMR Forage Sorghum	9.4	22360	2380	10.2
Soybean RM2.5	3.0	10380	3460	21.5
BMR Sorghum-Sudan	4.6	10290	2250	20.3
Hybrid Pearl Millet	4.4	9620	2210	18.2
Soybean RM0.7	2.3	8250	3550	23.0
Japanese Millet	3.6	7740	2180	19.2
Sudangrass	3.1	6660	2150	21.1
Siberian Foxtail Millet	2.9	4740	1630	17.9
German Foxtail Millet	2.6	4470	1690	17.6
Oat/Pea	2.3	4370	1940	18.9
Barley/Pea	2.0	3330	1660	20.1
Barley	1.2	2220	1910	25.1

Table 2. Performance of emergency forages planted July 1, 2003 at Marshfield, WI.

Entry	DM Yld	Milk/Ac	Milk/Ton	CP
	ton/acre	*lb/ac*	*lb/ton*	*%DM*
Corn 81d	2.7	7290	2740	11.2
Corn 103d	2.8	6630	2370	10.4
Corn 94d	2.5	5100	2060	10.2
Hybrid Pearl Millet	3.1	4700	1500	15.6
BMR Forage Sorghum	3.2	4430	1380	10.2
Soybean RM2.5	1.5	4300	2950	16.9
Soybean RM0.7	1.3	3860	2900	12.5
BMR Sorghum-Sudan	2.2	3640	1630	17.8
Sudangrass	2.2	3370	1530	17.6
Japanese Millet	2.0	3020	1530	18.7
German Foxtail Millet	2.9	2940	1010	12.8
Siberian Foxtail Millet	2.5	2620	1050	14.5
Barley/Pea	1.7	2360	1370	14.8
Oat/Pea	1.6	1810	1110	13.8
Barley	1.4	1510	1070	16.8

Table 3. Performance of emergency forages planted July 1, 2003 at Spooner, WI (irrigated).

Entry	DM Yld	Milk/Ac	Milk/Ton	CP
	ton/acre	*lb/acre*	*lb/ton*	*%DM*
Corn 94d	5.4	16210	3010	10.7
Corn 103d	4.7	14580	3070	10.6
Corn 81d	4.6	14020	3050	11.3
BMR Forage Sorghum	3.9	10210	2640	11.7
Japanese Millet	4.0	9410	2380	15.6
Hybrid Pearl Millet	3.3	7840	2410	15.4
BMR Sorghum-Sudan	2.9	6820	2350	16.2
Sudangrass	2.8	6740	2370	17.0
German Foxtail Millet	2.5	5250	2080	10.4
Soybean RM2.5*	1.5	4840	3320	18.4
Barley	2.0	4330	2140	18.6
Barley/Pea	1.4	3630	2520	15.4
Oat/Pea	1.4	3380	2420	13.7

** Yields reduced by deer damage*