

Forage Research Updates

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SOUTH DAKOTA - Summer Annual Species as Emergency Forages

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Forage yield of annual warm-season species grown alone or in mixtures is being evaluated in central South Dakota. Two harvest dates were imposed: boot to early heading (August) vs. soft to hard dough (October). Plots received 100 lb/ac of 18-46-0 at planting. Pigeonpea was seeded at 36 lb/ac alone and 18 lb/ac in mixtures, cowpea at 48 lb/ac alone and 24 lb/ac in mixtures, pearl millet and foxtail millet at 20 lb/ac alone and 10 lb/ac in mixtures.

Yield data for 2004 are depicted in Table 1. The grasses out-yielded legumes on both harvest dates. Yields often increased by delaying harvest until October, but not for golden foxtail millet. However, delaying harvest to more mature stages would likely sacrifice forage quality (quality data is currently being analyzed).

Table 1. 2004 forage yield of annual warm-season forages alone or in mixtures at Highmore, SD.

Forage	Aug. 25	Oct. 6
	----- ton/ac -----	
Cowpea	1.0	1.2
Pigeonpea	0.8	1.9
Golden foxtail millet	2.5	2.4
Pearl millet	2.5	3.0
Golden foxtail millet + Cowpea	2.8	2.9
Golden foxtail millet + Pigeonpea	2.7	2.1
Pearl millet + Cowpea	1.3	2.9
Pearl millet + Pigeonpea	2.1	3.2
LSD 5%	1.0	1.2
CV, %	34	33