



University of Kentucky
UKnowledge

Agronomy Notes

Plant and Soil Sciences

4-1966

Summer Annual Grasses - Kentucky

W. H. Stroube
University of Kentucky

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Follow this and additional works at: https://uknowledge.uky.edu/pss_notes

 Part of the [Agronomy and Crop Sciences Commons](#)

Repository Citation

Stroube, W. H., "Summer Annual Grasses - Kentucky" (1966). *Agronomy Notes*. 207.
https://uknowledge.uky.edu/pss_notes/207

This Report is brought to you for free and open access by the Plant and Soil Sciences at UKnowledge. It has been accepted for inclusion in Agronomy Notes by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

AGRONOMY NOTES

SOILS • CROPS

Department of Agricultural Economics

Prepared by Department of Agronomy, University of Kentucky Cooperative Extension Service

No. 41

April 1966

SUMMER ANNUAL GRASSES - KENTUCKY

During the summer of 1965, several varieties of summer annual grasses were seeded at the rate of 10-12 pounds per acre, in rows 3 feet apart, at the Woodford County Farm and at the Western Kentucky Substation. These varieties were replicated four times and harvested three times at each location. Harvest data are reported in the attached table. It should be noted that data from Woodford county are reported in dry matter per acre and that from Princeton in air-dry forage. Previous studies have indicated that yield data from 3-foot rows of this type of material should be multiplied by a conversion factor of 2 to 2.5 to make the data comparable with data from broadcast plantings under the simulated grazing conditions used.

An attempt was made to harvest the crop when the height of the varieties averaged about 30 inches. All varieties were clipped to leave a stubble about 8 inches in height. All varieties recovered satisfactorily under these conditions. It was noted, however, that where borders were clipped to a height of about 3 inches, few of the hybrid materials or millet recovered as well as did the sudans, and some failed to recover at all.

The yield data in 1965 are the first recorded at the Kentucky Station in which some of the sorghum-sudan hybrids were consistently better yielding than was Piper sudan. This difference in results can probably be attributed largely to changes in cultural practices (i. e. 8-inch stubble and 36-inch row spacing). Additional studies involving plant morphology, cultural practices and nutrition are needed with these hybrids.

Note the matter of production distribution during the growing season. To many farmers, distribution may be as important as getting an additional one-fourth ton of yield per acre.

Fertility Requirements (Note)

To get top yields from these crops, it is necessary that fertility be removed as a limiting factor. The ideal pH level is from 6.0 to 7.0. Phosphate and potash application should reach ideal conditions for 100 bushels of corn per acre. Nitrogen is very often the real limiting factor. Generally, the recommendation would call for 200 pounds of nitrogen per acre. Of this amount 100 pounds (300 pounds ammonium nitrate equiv.) can go on prior to seeding and be worked in. Two additional applications of 50 pounds of N each should follow the first and the second removals.

W. H. Stroube

(To simplify information in this publication, trade names of some products are used. No endorsement is intended, nor is criticism implied of similar products not named.)

Cooperative Extension Work in Agriculture and Home Economics: College of Agriculture and Home Economics, University of Kentucky, Lexington, and the United States Department of Agriculture, cooperating. William A. Seay, Director. Issued in furtherance of the Acts of May 8 and June 30, 1914.

KENTUCKY - 1965 - SUMMER ANNUAL GRASSES

Seeded in 20-foot rows, 3 feet apart.
 Randomized block design. Four replications.

Variety	Woodford Co. TDM/ A ¹ /				% of Piper	Princeton - T. Air dry/ A ¹ /				% of Piper
	7/13	8/9	9/16	Total		7/20	8/19	9/14	Total	
SuChow	0.73	0.51	1.15	2.39	123	1.53	1.55	.98	4.06	116
SX - 12	.60	.60	1.19	2.39	123	1.18	1.53	.86	3.58	102
Sweet Souix	.76	.58	1.15	2.50	129	1.38	1.75	1.02	4.15	119
Trudan II /2	.51	.55	.87	1.92	99	1.19	1.73	.94	3.86	110
Sordan	.72	.57	1.08	2.36	122	1.55	1.46	.99	4.00	114
Green Graze	.67	.53	.99	2.18	112	1.26	1.53	.88	3.67	105
H 35 X	.74	.52	1.04	2.31	119	1.16	1.54	.72	3.43	98
985	.72	.62	1.25	2.60	134	1.33	1.75	1.09	4.17	119
77F	.72	.54	1.08	2.34	121	1.16	1.72	1.06	3.96	113
1038G	.62	.56	.97	2.14	110	1.30	1.69	.90	3.89	111
Greenleaf /2	.47	.44	.70	1.62	84	.70	1.45	.70	2.85	81
Tenn. Syn. #1 /2	.42	.59	.85	1.91	98	1.03	1.88	.93	3.84	109
Piper /2	.49	.60	.90	1.94	100	.96	1.81	.74	3.50	100
Ga Hi 1 /3	.59	.77	.94	2.30	119	1.07	1.42	.95	3.44	98
R P Mor Su	.70	.60	1.14	2.43	125	1.29	1.54	.96	3.79	108
Greenlan	.76	.58	1.12	2.46	127	1.52	1.74	1.03	4.28	122
Chow Maker 21	.76	.57	.98	2.31	119	1.41	1.80	1.09	4.30	123
Haygrazer	.76	.51	1.03	2.30	119	1.38	1.64	1.05	4.07	116
Grazer A	.72	.61	1.22	2.55	131	1.11	1.51	1.11	3.77	108
Orbit	.59	.70	1.13	2.42	125	1.10	1.88	1.02	4.00	114
Hybrid Gold 10	.71	.62	1.04	2.36	122	1.22	1.57	1.13	3.92	112
Hybrid Gold 15	.67	.70	.86	2.23	115	.96	1.29	.84	3.09	88
Wondergreen	.65	.56	.99	2.20	113	1.07	1.56	1.05	3.68	105
LSD 0.05	0.10	0.11	0.20	0.33	17	0.19	0.16	0.13	0.30	8.5
LSD 0.01	.12	N.S.	.25	.41	21	.23	.20	.16	.37	10.5
CV %	12.9	16.4	17.2	12.3	12.3	12.9	8.5	11.1	6.7	6.7

1/ Tons of dry matter per acre at Woodford Co. and tons of air dry forage per acre (approximately 12% moisture) at Princeton.

2/ Sudans

3/ Pearl millet