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THE COMPARATIVE VALUES OF
COTTONSEED CAKE AND GROUND
YELLOW CORN
FOR THE SUPPLEMENTAL FEEDING OF
COWS AND WEANED CALVES
ON THE RANGE

By J. L. LANTOW

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AGRICULTURAL EXPERIMENT STATION
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1. In cooperation with the Bureau of Agricultural Engineering, Division of Irrigation, United States Department of Agriculture.

2. Post office address. Clayton, N. M.

3. Superintendent of the Tucumcari, N. M., Field Station, operated by the United States Department of Agriculture, in cooperation with the New Mexico Agricultural Experiment Station.

4. Superintendent of the Acclimatization Field Station, operated by the United States Department of Agriculture, in cooperation with the New Mexico Agricultural Experiment Station.

5. Bureau of Plant Industry, United States Department of Agriculture.
 Station.

TABLE III.—ANALYSES OF RANGE GRASSES AND PALMILLA COLLECTED DURING THE EXPERIMENT.

Sample letter	Species	Date collected	Moisture	Ash	Protein	Ether extract	Crude fiber	Nitrogen-free extract	Calcium	Phosphorus	Ash	Protein	Ether extract	Crude fiber	Nitrogen-free extract	Calcium	Phosphorus		
			Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
			As eaten by the cattle on the range										On a moisture-free basis						
A	Palmilla (<i>Yucca elata</i>), dry leaves	Jan. 1, 1930	12.28	5.45	3.778	3.586	37.451	37.455			6.21	4.307	4.088	42.694	42.701				
B	Black grama grass (<i>Bouteloua eriopoda</i>)	"	29.68	5.41	3.353	1.018	24.966	35.573	.203	.0469	7.69	4.768	1.448	35.591	50.591	.289	.0667		
C	Dropseed grass (<i>Sporobolus flexuosus</i>)	"	16.68	3.86	3.182	.583	34.812	40.883			4.63	3.819	.700	41.781	49.070				
D	Needle grass (<i>Aristida</i> sp.)	"	16.34	5.82	3.670	.857	32.478	40.835	.229	.0845	6.96	4.387	1.024	38.821	48.808	.274	.1010		
E	Tobosa grass (<i>Hilaria mutica</i>)	"	16.41	7.72	3.804	.623	34.367	37.076			9.24	4.551	.745	41.114	44.350				
F	Dropseed grass (<i>Sporobolus flexuosus</i>)	Feb. 11, 1930	8.50	3.17	1.902	.584	44.185	41.659			3.46	2.079	.638	48.290	45.533				
G	Tobosa grass (<i>Hilaria mutica</i>)	"	10.98	7.18	3.374	.566	36.157	41.743			8.07	3.790	.636	40.617	46.887				
H	Needle grass (<i>Aristida</i> sp.)	"	14.89	6.97	3.319	1.045	30.938	42.838			8.19	3.900	1.228	36.351	50.331				
I	Palmilla (<i>Yucca elata</i>), dry leaves	"	19.89	4.29	6.899	3.849	24.600	40.472			5.36	8.61	4.805	30.708	50.515				
J	Black grama grass (<i>Bouteloua eriopoda</i>)	"	24.13	5.80	3.007	.820	27.375	38.868	.167	.0841	7.64	3.963	1.081	36.081	51.235	.220	.1108		
K	Dropseed grass (<i>Sporobolus flexuosus</i>)	Mar. 6, 1930	12.96	4.41	3.300	.548	37.562	41.220	.158	.0707	5.07	3.791	.630	43.155	47.354	.182	.0812		
L	Needle grass (<i>Aristida</i> sp.)	"	31.01	5.23	2.567	.767	24.297	36.129			7.58	3.721	1.112	35.218	52.369				
M	Palmilla (<i>Yucca elata</i>), dry leaves	"	7.40	4.23	4.207	2.636	37.511	44.016			4.57	4.543	2.847	40.509	47.531				
N	Palmilla (<i>Yucca elata</i>), green leaves	"	40.99	2.44	5.309	2.021	20.270	28.970	.434	.1911	4.13	8.997	3.425	35.350	49.098	.7355	.3238		
O	Tobosa grass (<i>Hilaria mutica</i>)	"	11.96	12.09	2.976	.700	34.626	38.548			13.73	2.558	.795	39.330	43.787				
P	Black grama grass (<i>Bouteloua eriopoda</i>)	Mar. 31, 1930	27.87	4.10	3.598	.881	26.492	37.059	.153	.0747	5.68	4.988	1.221	36.728	51.383	.212	.1036		
Q	Tobosa grass (<i>Hilaria mutica</i>)	"	18.76	8.61	2.965	.835	30.716	38.114			10.60	3.650	1.038	36.809	46.913				
R	Palmilla (<i>Yucca elata</i>), green leaves	"	55.82	1.92	4.905	2.181	14.748	20.426			4.35	11.102	4.937	33.382	46.229				
S	Needle grass (<i>Aristida</i> sp.)	"	6.42	5.92	4.515	1.074	35.859	46.212			6.33	4.825	1.148	38.319	49.378				
T	Dropseed grass (<i>Sporobolus flexuosus</i>)	"	6.88	3.68	3.194	.691	39.150	46.405			3.95	3.430	.742	42.043	49.835				
	Tobosa grass, special sample of old dead grass	Aug. 8, 1928	4.12	8.81	2.330	.860	39.400	44.580			9.19	2.430	.897	41.093	46.390				

SUMMARY.

1. Cottonseed cake showed an advantage over ground yellow corn in each trial, the advantage, as expressed by the difference in weight, being as great or greater with cows as with weaned calves.
2. Cottonseed cake was more palatable for supplemental feeding than was ground corn.
3. When the cattle are fed in groups, cottonseed cake lends itself better than ground corn to fairly uniform individual consumption.