

RON ECHARD - MEADOW FERTILIZATION-1963

Objective: To determine if nitrogen is deficient and to what extent.

Method: Five 1/2 acre plots were treated as follows:

- 1. Check
- 2. 200# Ammonium Sulfate
- 3. 400# Ammonium Sulfate
- 4. 500# 16-20-0
- 5. 800# Ammonium Sulfate

Applied March 26, 1963. Results received December 18, 1963

Results:

	<u>Treatment</u>	<u>Tons/Acre</u>
1.	Check	3.22
2.	200# Ammonium Sulfate	3.85
3.	400# Ammonium Sulfate	5.15
4.	500# 16-20-0	5.39
5.	800# Ammonium Sulfate	4.76

Conclusions: From this trial, it appears that nitrogen is effective in boosting yield. There may be some response from phosphorous as indicated by the results from treatment #4.

M 1700 (11)

UNIVERSITY OF CALIFORNIA
 AGRICULTURAL EXTENSION SERVICE

AGRICULTURAL EXTENSION LABORATORIES
 REPORT OF PLANT TISSUE ANALYSIS
 FEED QUALITY

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County: Merced
 Submitted by: Owner

No. 10100
 Date collected: 11/10/68
 Date reported: 11/20/68

Identification: W. Orchard - No. 174 Sec. 17, Twp. 13N, R. 10E, S. 12E

Sample No.	Plant Part	Moisture (%)	N (%)	P (%)	Ash (%)	Ca (%)	P2O5 (%)	Water Soluble (%)	Cellulose (%)	Starch (%)	Other (%)
1	Whole Plant	78.5	1.2	0.3	12.5	0.8	0.2	1.5	45.0	15.0	30.0
2	Stems	75.0	1.0	0.2	10.0	0.7	0.1	1.2	40.0	12.0	28.0
3	Leaves	80.0	1.5	0.4	15.0	0.9	0.3	2.0	50.0	18.0	32.0
4	Roots	72.0	0.8	0.1	8.0	0.5	0.1	0.8	35.0	10.0	25.0
5	Check	77.0	1.1	0.3	11.0	0.8	0.2	1.4	42.0	14.0	29.0

FOR FEEDING TRIALS

1. 2000 lbs. Supplement
 2. 1000 lbs. Supplement
 3. 500 lbs. Supplement
 4. 250 lbs. Supplement
 5. Check

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RESULTS

1963 MEADOW FERTILIZATION - FRED DERNER RANCH

Purpose: To determine if ammonium sulfate fertilizer would cause a change in mountain meadow hay production and to evaluate rates of application as to pounds per acre produced.

Results:

<u>Rate of Ammonium Sulfate</u>	<u>Reps.</u>	<u>Lbs./Acre</u>	<u>Tons/Acre</u>
Check	1	2164.4	1.08
	2	2357.6	1.17
100# s	1	3547.0	1.77
	2	3781.1	1.89
200#	1	4169.6	2.08
	2	4727.8	2.36
300#	1	4613.3	2.30
	2	9113.5	4.55
400#	1	4469.3	2.23
	2	2521.4	1.26

Conclusions: It certainly appears that ammonium sulfate does increase yields of meadow hay. Due to the great variability for the 300# rate, it would be difficult to choose between a 200# and 300# rate. More replicates are needed to have a more conclusive answer.