Mendocino County
Hargus Ranch
Harvested: May 10, 1972

		I	II	III	IV	T	$\bar{M}$
960	CSPS	1,152	1,192	1,444	1,486	5,274	1,318
480	CSPS	1,135	1,403	1,400	1,610	5,548	1,387
240	CSPS	996	846	857	1,304	4,003	1,001
2124	Super	689	774	757	1,033	3,253	813
1062	Super	530	515	717	806	2,568	642
531	Super	325	411	422	777	1,935	484
456	Treble	277	353	265	532	1,427	357
Check		193	415	396	724	1,728	432

Source	df	ss	MS	OF	RF 5%	RF 1%
Total	31	5,219,650				
Blocks	3	662,202	220,734	29.9**	3.07	4.87
Treatment	7	4,442,462	634,637	85.99**	2.49	3.65
Error	21	154,986	7,380			
Treatment	7	4,442,462	634,637	85.99**	2.49	3.64
P Response	1	703	703	.10		
S Response	1	72,051	72,051	9.76**	4.32	8.02
S Source	1	130,095	130,095	17.62**	4.32	8.02
P S Rate	2	418,933	209,466	28.32**	3.47	5.78
P S Rate & Source	2	138	69			

$LSD_{.05} = 126.4$

JUL 7 1971

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE

DAVIS, CALIFORNIA

Date: July 6, 1971
To: William H. Brooks, III
County Director & Farm Advisor
Mendocino County AES

From: William E. Martin
Title: Extension Soils Specialist
Re: Hargus plot

Dear Bill:

I am enclosing herewith two copies of the data from the Hargus plot which we harvested on May 6. I think you will find these results extremely interesting. Certainly the majority of our observed responses here was to sulfur in the CSPS which on subclover and nonlegume was greatly superior to equivalent P and S from normal superphosphate. Both of these materials you may recall were applied in 1968 and this is the first season we measured yields. It is particularly interesting that the lupine fraction was increased by P and S but there was no difference between the two fertilizer materials, both being significantly higher in yield than the treble super.

Sincerely,

WEM/bp

Enclosures

cc: L. Berry
D. Brittsan
L. Harwood

	Lupine	Subclover	Total
CSPS+Super	103	228	331
	30.1%		
CSPS-Super	248	122	370
	55.4%		
CSPS+Super	350	43	393
	75.2%		
CSPS-Super	213	27	240
	25.2%		

3RD SEASON RESULTS OF P & S TREATMENTS - MAY 6, 1971

Hargus Ranch - Mendocino County

Treatment 10/17/68			Yields as lbs. dry material/acre			
Material	Nutrients/acre		Grass*	Lupine	Subclover	Total
	P_2O_5	S				
None	---	---	228	122	43	392
456 Treble	237	---	227	151	27	405
240 CSPS	91	48	768	310	440	1518
531 Super	106	64	319	210	59	587
466 CSPS	182	96	930	424	595	1949
1062 Super	212	128	454	511	129	1076
960 CSPS	364	192	952	329	744	2025
2124 Super	424	256	666	387	584	1638
LSD			303	248	350	213
CV			36.4%	55.4%	75.2%	25.2%
Super vs CSPS			CSPS>Super	CSPS=Super	CSPS>Super	CSPS>Super

*grass includes all non-legume weeds as well as grass.

AGRICULTURAL EXTENSION LABORATORY

REPORT OF SOIL ANALYSIS
FERTILITY ASSAY

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE

APR 30 1971

County: Mendocino
Submitted by: Wm. Brooks
Identification: Hargus - 8 mi. N. of Laytonville

Number: S-5199-D
Date sampled: 3/24/71
Date submitted: 3/23/71
Date reported: 4/9/71

Crop: Range Soil Type: -

Sample No.	Description	SP	pH_s	EC_e	P	K	Zn	SO_4-S	LiR			
	Range	%		milli-mhos/cm	ppm soil	ppm soil	ppm soil	ppm	lb/A/ 6"			
1	a. Poor growth in untreated plot		5.5		8.1	72	0.52	3.96	3000			
2	b. " " 1000 CSPS "		5.1		50.7	103	1.05	8.82	3500			

MF-33

J. J. Berry

AGRICULTURAL EXTENSION LABORATORY

REPORT OF SOIL ANALYSIS
FERTILITY ASSAY

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE

AUG 14 REC'D

County: Mendocino
Submitted by: W. Brooks & Martin

No. S-4253-D
Date submitted: 7/23/69
Date reported: 8/8/69

Identification: Laytonville

Crop: Range Soil Type: --

Sample No.	Description	SP	pH_s	EC_e	P	K	Zn	SO_4-S				
		%		millimhos/cm.	ppm soil	ppm soil	ppm soil	ppm				
1			5.1		13.5	120		5.5				

July 2, 1973
William H. Brooks
County Director - Mendocino County

W. James Clawson
Extension Range Specialist
Phosphorus Rate and Source Trial

Dear Bill:

Congratulations! Yours was the only phosphorus and sulfur source trial that had any statistical difference. The way to evaluate this is to look at the means which I've circled and the least significant difference either for the 5 percent or the 1 percent level underlined at the bottom of the sheet. The legal comparison in this test is to compare the check with the treble super which was not significantly different then compare all the other six treatments together. Legally none of these were compared with the check in this particular statistical design. You'll note how the 1200 and 600 lb. CSPS applications are holding up very well. There would be no statistical difference between the 500 and 1000 single super application but there would be between the 500 and 2000 single super application. Again, there is no difference between the 1000 and 2000 single super application. I'll sit down with you and further explain this stuff later on this summer when we have more time.

Cordially.

WJC:rb
Encl.

UCD877 ANALYSIS OF VARIANCE
REVISED JAN. 1973

CLAWSON-BROOKS PHOS. SOURCE-RATE LAYTONVILLE

EXPERIMENT 1626 LOT 1 DATE RUN JUNE 26, 1973

VARIABLE	NAME
1	YIELD-DRY WT LBS/AC

FACTOR	NUMBER OF LEVELS	NAME
R	4	REP.
T	8	TREAT.

VARIABLE 1 YIELD-DRY WT LBS/AC
COUNT = 32 MEAN = 0.26676317E 04

DATA

Treatment				
1	2235.40	2692.72	2938.96	2715.10
2	3716.08	4157.40	5503.76	5542.13
3	2030.73	2318.55	2094.69	2561.60
4	5177.56	3565.77	3274.75	4355.68
5	1906.01	1608.59	1423.11	1589.41
6	2980.54	2446.47	2929.37	2229.01
check 7	1874.03	1119.30	2177.84	1090.52
8	2075.50	1266.41	2238.60	1528.64

COMBINATION	COUNT PER MEAN	SUBCLASS R	T					MEAN	TOTAL
REP.	8								
		1	0	0	0	0	0	2749.4805	21995.8440
		2	0	0	0	0	0	2396.9010	19175.2080
		3	0	0	0	0	0	2822.6348	22581.0780
		4	0	0	0	0	0	2701.5105	21612.0840
TREAT.	4								
2000 SSP		0	1	0	0	0	0	2645.5455	10582.1820
1200 CSPS		0	2	0	0	0	0	4729.8420	18919.3680
1000 SSP		0	3	0	0	0	0	2251.3920	9005.5680
600 CSPS		0	4	0	0	0	0	4093.4400	16373.7600
500 SSP		0	5	0	0	0	0	1631.7795	6527.1180
300 CSPS		0	6	0	0	0	0	2646.3450	10585.3800
CHECK		0	7	0	0	0	0	1565.4210	6261.6840
370 TSP		0	8	0	0	0	0	1777.2885	7109.1540

ANALYSIS OF VARIANCE OF VARIABLE 1 YIELD-DRY WT LBS/AC

SOURCE OF VARIATION	DF	SS	MS	F	CV %	SIG % LEVEL
REP.	3	0.8413445E 06	0.2804482E 06	0.91		
TREAT.	7	0.3816163E 08	0.5451661E 07	17.76		0.00
CK VS TSP	1	0.8977568E 05	0.8977568E 05	0.29		
SOURCE OF P	1	0.1627506E 08	0.1627506E 08	53.01		0.00
RATE LINEAR	1	0.9950904E 07	0.9950904E 07	32.41		0.00
RATE RESID	1	0.4474402E 01	0.4474402E 01	0.00		

S X R LIN	1	0.1241685E 07	0.1241685E 07	4.04	5.73
S X R RES	1	0.1680558E 05	0.1680558E 05	0.05	
RESIDUAL	1	0.1058739E 08	0.1058739E 08	34.48	0.00
ERROR	21	0.6447361E 07	0.3070172E 06	20.8	
ADJUSTED TOTAL	31	0.4545033E 08			
CORRECTION TERM	1	0.2277203E 09			
UNADJUSTED TOTAL	32	0.2731706E 09			

TREAT. LSD .05 = 814.947622 LSD .01 = 1109.190730

OUTPUT IS COMPLETE