

UNIVERSITY OF CALIFORNIA  
AGRICULTURAL EXTENSION SERVICE

JUN 1 1971

Date: May 26, 1971  
To: Walter R. Spivey, Farm Advisor  
Shasta-Lassen AES

DAVIS, CALIFORNIA

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

Dear Walt:

Enclosed are the yield results of the Meyer plot which we harvested on April 30. You will notice that both grass and clover were increased by phosphorus applications and that there was no measurable effect of sulfur or appreciable difference between sulfur fortified treble and normal superphosphate when applied at equivalent rates of nutrients.

*WEM*

WEM/bp

Enclosure

cc: L. J. Berry ✓  
R. H. Grippe

FORAGE YIELD - FRESH WEIGHT/250'<sup>2</sup>

Shasta County - Meyer

Harvest May 1968

| <u>Treatment</u> | <u>P<sub>2</sub>O<sub>5</sub>/Ac</u> | I            | II           | III          | IV           | Σ             | <u>Av Fresh Wt<br/>lbs/Acre</u> |
|------------------|--------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------------------------|
| Check            | 0                                    | 24.5         | 22.7         | 19.0         | 20.7         | 86.9          | 3780                            |
| 220 CSPA         | 88                                   | 44.7         | 38.2         | 55.3         | 37.0         | 175.2         | 7632                            |
| 433 Super        | 87                                   | 40.8         | 51.0         | 47.2         | 35.7         | 174.7         | 7610                            |
| 440 CSPA         | 176                                  | 50.1         | 50.2         | 60.9         | 39.7         | 200.9         | 8751                            |
| 880 Super        | 173                                  | 46.1         | 44.5         | 58.0         | 40.8         | 189.4         | 8250                            |
| 430 Treble       | 224                                  | 50.9         | 51.4         | 33.7         | 37.1         | 173.1         | 7540                            |
| 880 CSPA         | 352                                  | 57.6         | 53.6         | 58.8         | 51.8         | 221.8         | 9662                            |
| 1732 Super       | 346                                  | 54.7         | 43.0         | 53.7         | 50.7         | 202.1         | 8803                            |
|                  |                                      | <u>369.4</u> | <u>354.6</u> | <u>386.6</u> | <u>313.5</u> | <u>1424.1</u> | <u>*1490</u>                    |
|                  |                                      |              |              |              |              | *342          | LSD                             |

|               |           |         |    |  |        |  |         |
|---------------|-----------|---------|----|--|--------|--|---------|
| <u>Total</u>  | 6,737,801 |         |    |  |        |  |         |
| <u>Corr</u>   | 6,337,690 | 400,111 | 31 |  | 41,055 |  | F 11.32 |
| <u>Reps</u>   | 6,374,241 | 36,551  | 3  |  | 3,627  |  |         |
| <u>Treats</u> | 6,625,079 | 287,389 | 7  |  |        |  |         |
|               |           | 76,171  | 21 |  |        |  |         |

Effect of P+S Rate + Source on Forage  
 Meyer Plot Shasta Co 4th Season Results

| Treatments in 1987             |                               |     | 1991 Yields (Apr 30 1991) |                    |            |      |
|--------------------------------|-------------------------------|-----|---------------------------|--------------------|------------|------|
| Material / Ac                  | Nutrients / Ha                |     | Fresh wt<br>lbs / Ac      | Dry wt<br>lbs / Ac | Dry Yields |      |
|                                | P <sub>2</sub> O <sub>5</sub> | S   |                           |                    | Green      | CP   |
| ck                             | —                             | —   | 11773                     | 1738               | 438        | 1797 |
| 430 Treble                     | 224                           | —   | 22332                     | 3334               | 802        | 2531 |
| 220 (0.40-0.20S) CSPS          | 88                            | 44  | 15278                     | 2188               | 641        | 1511 |
| 433 (0.20-0-12) Super          | 87                            | 52  | 15281                     | 2185               | 600        | 1555 |
| 440 CSPS                       | 176                           | 88  | 21048                     | 2935               | 917        | 2018 |
| 866 Super                      | 173                           | 104 | 20560                     | 2812               | 835        | 1977 |
| 880 CSPS                       | 352                           | 176 | 25102                     | 3267               | 1043       | 2774 |
| 1732 Super                     | 346                           | 208 | 24102                     | 3242               | 945        | 2796 |
| P value - Linear response to P |                               |     | 0.968                     | .917               | .926       | .860 |
| C.V.                           |                               |     |                           | 25.5               | 30.4       | 26.9 |

no difference between CSPS + Super treatments

TIME & SOURCE OF P & S: FIRST SEASON RESULTS

County: Shasta

Date applied: E 11/9/66 L 2/11/67

Cooperator: Murfrey (Craig)

Date harvested: 5/26/67

| Material & Rate                                  | Material & Time Applied          | Yield Fresh Wt. Lbs./Ac. | Percent Dry Matter | Yield Dry Wt. Lbs./Ac. | Yield as Percent of Untreated |
|--|----------------------------------|--------------------------|--------------------|------------------------|-------------------------------|
| 1. None  | --                               | 11010                    | 28.76              | 3166                   | 100                           |
| 2. 187 lbs. TSP                                  | P <sub>E</sub>                   | 14563                    | 26.85              | 3910                   | 124                           |
| 3. TSP   | P <sub>L</sub>                   | 14145                    | 28.04              | 3966                   | 125                           |
| .....  |                                  |                          |                    |                        |                               |
| 4. 300 lbs. Gypsum                               | SO <sub>4E</sub>                 | 10870                    | 32.43              | 3525                   | 111                           |
| 5. 500 lbs. SSP<br>(0-21-0-12 SO <sub>4</sub> S) | P <sub>E</sub> SO <sub>4E</sub>  | 15155                    | 30.34              | 4698                   | 148                           |
| 6. Gypsum + TSP                                  | P <sub>L</sub> SO <sub>4E</sub>  | 14772                    | 31.00              | 4579                   | 145                           |
| .....  |                                  |                          |                    |                        |                               |
| 7. 50 lbs. Elemental S                           | S <sub>E</sub>                   | 11171                    | 31.59              | 3528                   | 111                           |
| 8. 250 lbs. TSPS<br>(0-40-0-20 S)                | P <sub>E</sub> S <sub>E</sub>    | 15155                    | 27.83              | 4218                   | 133                           |
| 9. E1. S + TSP                                   | P <sub>L</sub> S <sub>E</sub>    | 12368                    | 30.22              | 3738                   | 118                           |
| .....  |                                  |                          |                    |                        |                               |
| 10. Gypsum                                       | SO <sub>4L</sub>                 | 10730                    | 34.08              | 3656                   | 116                           |
| 11. TSP + Gypsum                                 | P <sub>E</sub> SO <sub>4L</sub>  | 13970                    | 32.22              | 4501                   | 142                           |
| 12. SSP  | P <sub>L</sub> SO <sub>4L</sub>  | 14460                    | 32.42              | 4688                   | 148                           |
| .....  |                                  |                          |                    |                        |                               |
| 13. E1. S  | S <sub>L</sub>                   | 9580                     | 37.33              | 3676                   | 116                           |
| 14. TSP + E1. S                                  | P <sub>E</sub> S <sub>L</sub>    | 14110                    | 29.91              | 4220                   | 133                           |
| 15. TSPS   | P <sub>L</sub> S <sub>L</sub>    | 14842                    | 30.06              | 4461                   | 141                           |
| .....  |                                  |                          |                    |                        |                               |
| 16. TSPS + Mo                                    | P <sub>E</sub> S <sub>E</sub> Mo | 14946                    | 29.08              | 4346                   | 137                           |
| L.S.D. (between individual treatments)           |                                  | ---                      | ---                | ---                    | ---                           |
| Coefficient of Variation                         |                                  | ---                      | ---                | ---                    | ---                           |
| Major Response                                   |                                  | P                        | P                  | P,PS                   |                               |