

Progress Report

Tuolumne County

Name of Project: Weed Control (Medusa-head and Barbed Goatgrass)

Are project and progress reports to continue? Yes No

DATE: September 2, 1959

REPORT PREPARED BY: Harry S. Hinkley
 Farm Advisor

PROJECT NUMBER: State 3506 County 1

I. PROCEDURE USED:

- A. Established control demonstrations using burning, cultivation, seeding and fertilizing competing vegetation, spraying with dalapon, spraying with weed oils, and hand pulling.
- B. Organized county weed control committee and promoted eradication campaign.
- C. Observed results.

II. RESULTS:

Medusa-head

All control measures used, except seeding and fertilizing, did some good. In most instances two or more control measures were needed. On all treated infestations, the stand is noticeably less and approaches eradication. Where no treatment was used, the stand has thickened and spread.
 The weed control committee has served well and the eradication control campaign has been effective. They will be continued.

Barbed Goatgrass

Most goatgrass occurs on road rights of way. Burning had little effect on the stand. Roadside spraying was handled by the Agricultural Commissioner. Handicapped by inadequate equipment and help the spraying was not completed. Where Oil-Dintro was used, control was obtained. Goatgrass is spreading rapidly.

III. CONCLUSIONS:

Medusa-head

Recommended eradication program.

- 1. Burn in early summer.
- 2. Spray with dalapon following spring.
- 3. Spray in flower with weed oil if many plants head out or hand pull if only a few appear.

Barbed Goatgrass

No conclusions.

SIGNATURE:

Harry S. Hinkley
 Farm Advisor

To Street

Progress Report

Tuolumne County

Weed Control (Tarweed)

Name of Project

I. PROCEDURE USED:

Two sets of fenced plots established February, 1957, were treated and observed. Engler, elevation 2100 ft., and Rosasco, elevation 1350 feet. A third set, Kistler, elevation 1050 feet, was established March 3, 1959. Treatment consisted of clipping, 6/27/58, 12/19/58 and 4/2/59 and fertilizing October 28, 1958. Observations were made at other locations.

III. CONCLUSIONS:

It appears that time of utilization of the forage and the amount of residue affects the stand of tarweed. It appears that tarweed seed remains viable in the soil for several years. Fertilizers have had little influence on the abundance of tarweed.

II. RESULTS:

On the Engler plots, unclipped areas contained virtually no tarweed, but it was abundant on clipped areas. At the Rosasco plots there was no difference between clipped and unclipped areas. At Engler's, a plot clipped in December contained as much tarweed as that clipped the previous June. At Rosasco's, a plot clipped in April, after tarweed had started, had less tarweed than those clipped the previous June. No tarweed went to seed on the Engler ranch for the past two years, yet there was an abundance of tarweed this year. It is now in full bloom and will apparently produce an abundant supply of seed this year. On Cavagnaro's Twist Ranch, tarweed covered half of one field in 1956 and 1957. There was no tarweed in this field in 1958, yet in 1959 the entire field was covered. Fertilizers had little effect on the abundance of forage on the stand of tarweed.

To Street

SIGNATURE:

Farm Advisor

REPORT PREPARED BY Harry S. Hinkley
Farm Advisor

DATE September 2, 1959

Are project and progress reports to continue? Yes No

PROJECT NUMBER: State 3586 County 1

Progress Report

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County Inyo

Name of Project Weed Control (Tarweed)

PROJECT NUMBER: State 3586 County 2

REPORT PREPARED BY Thomas R. Redell Farm Advisor

DATE July 3, 1958

Are project and progress reports to continue? Yes No

I. PROCEDURE USED:

Fenced plots were established at two locations to observe the effects of mowing, fertilizing, and spraying on the abundance of Virgate Tarweed. In some plots individual plants were removed by hand. One-half of the plots were mowed in July 1957 and the latter removed. Fertilizer was applied to both mowed and unmowed plots. Other plots were sprayed in June 1957 and in June 1958.

III. CONCLUSIONS:

It is very difficult to arrive at any conclusions in 1958 upon which to base a recommendation. Because of the striking difference between mowed and unmowed plots in favor of the unmowed plot, possibly build-up of organic matter and shading by mulch effectively inhibits early tarweed growth. At least one more year's testing should be done before any recommendations can be attempted.

II. RESULTS:

There were striking differences between the mowed and unmowed plots. At both locations there were more tarweed in the mowed plot, and, at one location there were 1358 plants in a 100 sq. ft. mowed plot and no plants in another unmowed plot. Fertilizer plots had less tarweed than adjacent controls, however, there was more tarweed in fertilized mowed than fertilized unmowed plots. Pulling individual plants had no effect on abundance of tarweed. Spraying with 2,4-D low-volatility ester on June 10, 1957 effectively killed tarweed at rates as low as $\frac{1}{2}$ lb/A in 20 gal. of water. In plots sprayed on June 9, 1958 at another location no control was realized with rates of 1, $\frac{2}{3}$, and $\frac{1}{2}$ lbs. of 2,4-D per acre in 60 gal. of water. It appeared that the spraying was done too late. Tarweed was as abundant in grazed fertilized plots as unfertilized. In one location grasshoppers effectively killed all tarweed during the latter part of June.

SIGNATURE: Thomas R. Redell
 Farm Advisor