

State Cooperative Soil - Vegetation Survey

CALIFORNIA DIVISION OF FORESTRY
Department of Conservation, The Resources Agency

PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION
Forest Service, U. S. Department of Agriculture

DIVISION OF AGRICULTURAL SCIENCES
University of California

April

1965

SOIL FERTILITY STUDIES: NO. 15 - Redding series

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This leaflet, a product of the Soil-Vegetation Survey, is one of a series giving results of greenhouse pot tests and field fertilizer trials on soils primarily associated with range lands. The data indicate fertility status with regard to nitrogen, phosphorus, and sulfur. Field trials also give preliminary data on potential range forage production and species changes resulting from fertilizer treatments. Methods are detailed in: Powell, W. Robert. 1964. Procedures used in range land soil fertility studies. State Cooperative Soil-Vegetation Survey, Calif. Division of Forestry, Sacramento, 15 pp.

GREENHOUSE POT TESTS

Sample A (FA56-52-12)
Tehama County, Quad 32C-2
North $\frac{1}{4}$ corner Sec. 6, T27N, R5W,
MDMB
Nearly level; 900 feet
Open woodland-grass
Collected 20 September 1956
Tested 15 June - 12 August 1957

Treatment	Yield
None	22.2 a
P	28.2 a
N	37.5 a
NS	39.2 a
NP	64.0 b
NPS	60.0 b

Sample B (FA56-52-13)
Tehama County, Quad 32C-2
North $\frac{1}{4}$ corner Sec. 6, T27N, R5W,
MDMB
Nearly level; 900 feet
Open woodland-grass
Collected 20 September 1956
Tested 15 June - 12 August 1957

Treatment	Yield
None	10.2 a
P	19.8 b
N	8.8 a
NS	9.5 a
NP	58.5 c
NPS	56.2 c

(N = 200, P = 88, S = 100 lb/A)
(Yield, decigrams per pot, oven-dry)

COMMENTS:

These two samples were taken very close to each other in an area of hummocky microrelief, typical for the Redding soils.

Sample A: from the top of a mound; a strong interaction response to nitrogen and phosphorus.

Sample B: from the intermound area; a good primary response to phosphorus; a secondary response to nitrogen.