

CHLOROSIS

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the year they will respond is not known.

Lime-induced chlorosis can be avoided in many situations by not overirrigating. Careful irrigation will often prevent or minimize the need for chelates.

The use of chelating agents may make it possible to grow certain plants in soil in which they could not survive otherwise. Also, chelating agents may permit the use of irrigation water which previously was too alkaline. However it is more logical to grow in lime soil only those species resistant to lime-induced chlorosis. Certain plants, including grapes and possibly avocados, can be grafted to resistant rootstocks.

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Rooting Bed Test

soil conditioner in nursing bed eased chrysanthemum transplanting

Edward J. Bowles

A synthetic soil conditioner, CRD-186—Krilium—was tested in rooting beds of commercially grown chrysanthemums for its influence on total root growth and the transplant operation.

Customarily, cuttings are taken in the spring and rooted in beds of sand, after which they are moved to open ground beds for additional growth before being finally transplanted into the cloth house flowering beds.

One such rooting, or nurse, bed was treated with CRD-186 when the soil—a Yolo clay loam—was in ideal condition, and rototilled. At the treatment rate of 10 pounds per 500 square feet there was a remarkable improvement in the aggregation of the soil.

The improved soil aggregation permitted good plant growth, and there was

much less damage to roots when the plants were dug for transplanting to the flowering beds. The digging operation was easier and faster. When the soil was loosened with a fork the plants could be pulled from the bed in groups of five or six. A few shakes removed the soil from the roots with little or no loss of feeder roots.

In untreated soil the plants had to be dug out, and the soil removed by hand from each plant, with a rather heavy loss of roots.

A better root development—by those varieties usually slow to root and develop in the nurse bed—was noted on plants in the treated soil.

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QUOTAS

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that grain, alfalfa and idle or fallow land will absorb 523,000 acres, or 76% of the land diverted from cotton.

Specialty crops, oil seeds and sugar beets are expected to account for another 82,000 acres—12%. The remainder will be divided among miscellaneous uses.

If these preliminary estimates are borne out by farmer action, California feed grain and hay acreage in 1954 will be at record levels. Alfalfa would occupy about 1,100,000 acres as compared with 1,058,000 in 1950—the last previous cotton allotment year. Barley, too, at 2,200,000 acres would exceed its previous high of 2,162,000 acres, also in 1950. Grain sorghum acreage, about 170,000, would be the highest since 1941 when it occupied 204,000 acres.

Among specialty crops, sugar beets—at about 220,000 acres—may exceed their previous high of 219,000 acres in 1950. Oil seeds would be well down from earlier highs because it is not expected that flaxseed will regain its wartime prominence in southern California.

Such acreage shifts as these—with normal yields—must be accompanied by price reactions as well as farm adjustment problems. Least price impact will be felt by producers of specialty crops that can be contracted.

Alfalfa and grain producers may sell at lower prices than for recent years. Alfalfa is more vulnerable to price drops due to oversupply than is grain because there is a close production-consumption balance in California.

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The third article in this four-part report, to be published next month, will consider the geographic differences in alternative crops, effect of size and changes in net income.

Estimated Utilization of Diverted Cotton Acreage, 1953 to 1954, Basis July 1
Estimates (Thousands of Acres)

County	Acres to be diverted	Small grains	Alfalfa	Grain sorghum	Sugar beets	Corn	Oil crops	Potatoes	Irrig. pasture	Idle	Misc. crops
Merced	24	9	8	2	1	2	..	..	2	..	..
Madera	19	6	6	3	2	..	..	..	2	..	..
Fresno	188	100	18	7	6	3	14	..	4	31	5
Kings	74	37	9	3	1	..	4	..	1	15	4
Tulare	103	30	25	8	5	5	8	2	2	5	13
Kern	149	65	16	6	12	3	5	4	3	27	8
Total											
San Joaquin Valley	557	247	82	29	27	13	31	6	14	78	30
Imperial	91	20	17	12	5	..	17	..	1	8	11
Riverside	37	15	10	1	..	..	2	..	1	2	6
Total											
Southern California	128	35	27	13	5	..	19	..	2	10	17
Total 8 Counties	685	282	109	42	32	13	50	6	16	88	47
Others	2	1	1	..	..	..	..	..	..	..	..
Total California	687	283	110	42	32	13	50	6	16	88	47