CHLOROSIS
Continued from preceding page
the year they will respond is not known.
Lime-induced chlorosis can be avoided
in many situations by not overirrigat-
ing. 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 other-
wise. Also, chelating agents permit
the use of irrigation water which previ-
ously 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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The above progress report is based on Re-
search Project No. 851.

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 chrysanthem-
umms 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 per-
mitted 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 de-
velop in the nurse bed—was noted on
plants in the treated soil.

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QUOTAS
Continued from page 2
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 cot-
ton 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 occu-
pied 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 adjust-
ment 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 geo-
graphic differences in alternative crops, effect
of size and changes in net income.

Estimated Utilization of Diverted Cotton Acreage, 1953 to 1954, Basis July 1

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<th>County</th>
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<th>Small grains</th>
<th>Alfalfa</th>
<th>Grain sorghum</th>
<th>Sugar beets</th>
<th>Corn</th>
<th>Oil crops</th>
<th>Potato</th>
<th>Irrig. pasture</th>
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