

# Swine Production

## development of bacon-type hog considered by California growers

E. H. Hughes

Before World War II there was an inclination on the part of all producers of swine in California—purebred breeders, the commercial hogmen and the garbage feeders—to settle on a uniform type.

During the war, when fats were needed and pork tonnage was desired, there was a tendency among pork producers to market their hogs at heavier weights and, in some instances at least, to select for the wider, thicker kind of hogs.

Toward the end of the war and shortly after V-E day those people who were looking toward the future called attention to the fact that lard had many competitors and that there would soon be surpluses of this produce. In other words, they were saying that we should market our hogs at lighter weights and that we should be careful not to select brood sows that are too short and thick and heavy in the jowl. Some producers heeded the warning while others did not.

In California most producers have what might be called the middle-of-the-road type which is a brood sow with some length and width, strong legs and depth of side and with indications of superior udder development.

The progressive hogmen, including the purebred breeders and commercial producers alike have been selecting boars that show masculinity, ruggedness, without too much coarseness, yet having considerable depth and fulness of ham, medium width of back and loin, with deep sides and without too much jowl.

The offspring of such animals, if properly nourished, should grow rapidly and be ready for market at ages that will vary from six to nine months of age, weighing from 190 to 230 pounds. These fat hogs should yield from 75% to 79% if killed "shipper style."

Such market hogs, if they are of the proper type, should provide hams of the

proper weight, bellies that are thick enough and have considerable lean with the fat. The pork loin should be excellent and the shoulders, when properly processed, should meet the demands of the consumer. The carcasses from such pigs should have a back fat of about 1 $\frac{5}{8}$  inches in thickness.

There is some discussion among producers and others on the Pacific Coast about attempting to produce a bacon-type hog.

Generally speaking, bacon hogs are more expensive to produce than the so-called meat-type hog. More protein is required in the diet to produce bacon hogs.

### Possible Development

There has been some discussion as to whether new breeds should be brought in or whether the breeds now here might, by selection, be developed into a type of hog suitable both for the producer and consumer.

Excessively fat hogs are not needed, nor are hogs with heavy jowls. What is needed, are hogs that will provide carcasses with a relatively high percentage of muscle to fat and yet of a kind which will yield a high percentage of fat when slaughtered.

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Wood pocket lesion on semidense Lisbon branch.



### LEMON

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healthy lemon scions indicates either the presence of a virus or a toxin in the diseased tree affecting the growth of the scion. Further evidence is needed to determine the exact nature of this disease.

All known cases of wood pocket can be traced back to a semidense strain of Lisbon lemon in one orchard near Corona. Considerable numbers of this strain were distributed before it was known to carry wood pocket.

It is highly important that any further propagation of trees from this semidense strain of Lisbon lemon be avoided. It is also important that, unless and until this disease is proven not to be due to a virus, none of these trees be topworked with any citrus that would be used for seed purposes, and that no growth from the rootstock of any diseased tree be used for seed purposes. So far as we know, this disease spreads only through buds, scions or seeds and does not spread from tree to tree in the orchard, but the possibility of its spread by some other means must not be overlooked.

Because it is impossible to locate and eradicate all lemons affected by wood pocket, it is advised that growers control the disease by avoiding further propaga-

tion of this semidense strain of Lisbon and by removing diseased trees as soon as they become unprofitable.

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### ABSCISSION

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is essential since the chemical affects only the leaves on which it is applied and not the plant as a whole.

Abscission-hastening compounds also are effective in blossom thinning of fruit trees. While this work still is largely experimental, research has shown that results are best when the center blossom is open and pollenized, and then sprayed before the remainder of the cluster is pollenized.

Blossom-thinned trees appear to bear a higher proportion of marketable size fruit than do nonthinned trees. Blossom thinning in apples promotes annual bearing in biennial varieties. Occasionally severe foliage injury has occurred but no serious after effects have been noted.

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## 2,4-D

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oil deposited was not influenced by the presence of 2,4-D.

### Time of Application

Application of 2,4-D should be avoided from one month before bloom to one month after bloom and, of course, oil sprays usually are not applied during this period. When spraying lemons this caution may not be so important. In any case the established practices under local conditions with respect to timing, grade of oil, dosage, temperature, etc., should be followed, unless applications coincide with the bloom period.

Application of 2,4-D in oil even at the low concentration of four p.p.m. in the finished oil spray mixture may cause leaf curling when applied on young, actively growing shoots. Data thus far obtained indicate no decrease in fruit quality or production as a result of the curl. The leaf curl may be minimized by spraying with 2,4-D between leaf growth flushes.

The vigorous, rapidly growing whips or sucker-shoots of lemons are very sensitive to 2,4-D and may be killed at the tip by its application. Subsequent to the killing, however, these suckers have been observed to produce short lateral fruiting branches.

In orchard practice the tips of these suckers are often mechanically cut off to accomplish this same purpose.

There is no information available on the effect of two applications of 2,4-D per year. It is not anticipated difficulties would arise in this regard provided the bloom period were avoided.

Spray rigs previously used for 2,4-D weed spraying should be thoroughly cleaned before applying oil sprays on citrus. Flush the tank several times with a strong alkaline water solution—soda ash, etc.—and rinse with clean water. If the rig was previously used with weed-oil, and 2,4-D, rinse out the oil residue with kerosene or some similar petroleum solvent before using the alkali solution.

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## AVOCADO

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Virtually every horticultural practice has been tried to correct the alternate bearing behavior of the Fuerte avocado variety. Among these are orchard fertilization, fruit-thinning and pruning.

Of all the practices tried, only one worked, but unfortunately it is not applicable to commercial practices.

That was very early harvesting—as

soon as the fruit attains horticultural maturity—coupled with girdling. When these were done it was possible on individual limbs to produce two good crops in succession and to change the stride of alternation so that limbs on the same tree were in opposite stride.

Early harvesting without girdling did not accomplish the desired result.

The conclusion has been reached that there are really only two solutions to the problem of alternate bearing in the avocado.

One of them is finding strains or seedlings of Fuerte that are less subject to the factors that cause alternate bearing. Evidence exists that there are at least two strains and one that is somewhat better than the other has been isolated. The better strain seems to be less sensitive to unfavorable temperatures during the fruit-setting period, and its alternation is more regular and perhaps not quite so wide in amplitude as that of the other strain.

The other solution—upon which work was started several years ago—is the breeding of varieties that have the desirable market and other qualities of Fuerte but are less subject to the alternate bearing habit.

There is some hope in the picture because there are some varieties that don't alternate much. Perhaps by using them as parents in a breeding program their desirable characters in this respect can be converted to their progeny, and at the same time the desirable characters of Fuerte can be brought into the progeny. If so, the resulting product will be better than anything produced now.

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## RATS

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only by a trained official. All of the gases used are poisonous to man and domestic animals.

Calcium cyanide is the commonest material used in gassing. It is available both in granular form and as a dust. The dust is applied with a special pump and a hose for insertion inside the burrow. Granular cyanide is applied directly inside the burrow.

Other gases which are effective include carbon disulfide, sulfur dioxide, and methyl bromide.

A simply administered gas is carbon monoxide from an automobile exhaust which can be forced through a hose into rat burrows. This gas may be used for burrows under cement farm buildings where cyanide would be dangerous to livestock.

Poisonous dusts are effective in some cases. ANTU—up to 20%—when mixed in flour, pyrophyllite, or talc, may be dusted heavily on rat runs and entrances to burrows for control of Norway rats.

In areas where murine typhus is a hazard, DDT dust—5% to 10%—is placed on runways to catch on the feet and fur of passing rats and kill many of their fleas. Any of these dusts can be applied with a sifter can.

When rat burrows are numerous in fields, the burrows may be destroyed by plowing to a depth of 18 inches with a subsoiler or chisel.

Rats may sometimes be killed by flooding their burrows, especially on poultry farms.

Since fleas and mites will leave dead rats and may get onto people, the trapper should handle dead rats as little as possible and should wear gloves.

Dead rats and mice should be burned out-of-doors, or buried at a depth of not less than two feet.

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## SULFA

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moving the bacteria which were harbored in the organs of the birds.

Data concerning the effect of the sulfa drugs upon reactors and carriers indicate that the present drugs cannot be relied upon to remove carriers of organisms which cause fowl cholera, pullorum and typhoid disease of poultry. At best the drugs may be used in acute outbreaks in the hope of salvaging as many birds as possible. It is strongly recommended, however, that the salvaged birds not be used as breeders.

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