Fertilizer Trial with Plums
results of tests with Santa Rosa variety in principal plum growing area of Kern County determined by leaf analyses

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Potassium, like nitrogen, was not absorbed as is shown by the graphs on page 14. Although the first three dates of sampling show higher potassium in both orchards for the plots receiving potas-

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Phosphorus content of Santa Rosa Plum leaves, Orchard B, 1956.

Phosphorus content of Santa Rosa Plum leaves, Orchard A, 1956.

Phosphorus content of Santa Rosa Plum leaves, Orchard B, 1956.
CREDIT
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offered any kind of credit, none, with one exception, offered full credit. The exception was in Fresno where 86% of the stores with 7–14 employees which offered credit had full credit.

To be continued

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PARITY
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be gained from such regulation. The parity standard is intended to define prices that are fair to producers and consumers.

However, the argument has been advanced that the present parity index is unrepresentative of production and cost conditions for specialty crops and a more representative index would give greater weight to wages of hired labor and perhaps certain other inputs which bulk relatively large in specialty crop-production cost. Since the wages subindex stands at a higher level than any other, any increase of its weight will raise the over-all parity index. The amount of the increase would depend upon how offsetting decreases of weight are distributed among the other subindexes.

While certain types of special-purpose revision of the parity index for specialty crops could result in parity-price increases of perhaps 10%–20%, the prospects of obtaining such revision are remote. The contention that revision should be made appears to rest on the premise that the parity index should accurately represent production expenses of individual commodities or groups of commodities. A cost-of-production parity index would logically have to take into account decreases in cost as a result of increasing efficiency which might offset gains from other modifications.

A market control program that is effective in smoothing out short-run price fluctuations about a basic price level or in preventing disastrously low prices in unusual seasons may benefit both producers and consumers. It can stand without recourse either to the parity goal or the parity limitation. Prudently administered, with proper attention to consumer interests on the one hand and long-run supply responses on the other, marketing orders might conceivably function better without objective standards of any kind. But it is hardly conceivable that consumer safeguards could or should be eliminated from the law. Despite the deficiencies of the parity standard, it is better than none. Any proposal to eliminate the parity limitation, therefore, might reasonably be accompanied by a proposal for a substitute standard.

A bill under Congressional examination would provide, in the interest of producers and consumers, an orderly flow or disposition thereof and among the available market outlets throughout the normal marketing season to avoid unreasonable fluctuations in supplies and prices.

Passage of this or a similar amendment which does not mention parity, would complete the process of sterilizing the parity limitation by providing an alternative and more flexible set of criteria. Nevertheless, administrative standards would still be required to replace the legislative parity standard.

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POTATOES
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amination of the tubers at harvest revealed that gibberellin applied to the foliage as late as one week before harvest markedly stimulated sprouting. In comparison, tubers from untreated plants showed little or no sprouting activity.

When the tubers harvested from sprayed plants were cut and planted as seedpieces, the rate of emergence of new plants was accelerated. Most rapid emergence resulted from the earliest application and the highest concentration. Similar results were obtained with a summer crop of White Rose potatoes at Davis. Although foliar sprays are reasonably effective in shortening the rest period, high concentrations of gibberellin are required and therefore the method probably has limited practical value.

Immersing resting potatoes for five minutes in a gibberellin solution—from 0.5 to 25.0 ppm—will consistently curtail the rest period and promote sprout growth. However, the commercial significance of these findings must be determined.

The influence of gibberellin on yield and on the processing quality of the resulting tubers is being investigated under a variety of environmental conditions and locations. The effect of the chemical on sprout emergence and plant growth from nonresting potatoes needs to be investigated.

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sium, the variability of the plots is such that it can not be considered significant.
The shape of the seasonal curves—an initial rise rather than a drop—is like that of the apricot rather than like the prune. The potassium values tend to be high.
This may be due to the fact that magnesium levels are low, as are sodium. There is a tendency for a reciprocal relationship between these two elements and potassium. At Davis, for example, the magnesium content has been found to be 2-3 times as high as in the Kern County experimental plots, and the potassium content is much lower.

The leaf analyses provided an obvious explanation of the failure of the trees to respond to nitrogen. The analyses also pointed out the difficulty of getting absorption of phosphorus and potassium—even with heavy applications on a light soil—and emphasized the importance of time of sampling in the interpretation of leaf analyses.

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ters and berries of vines sprayed with the gibberellin at 5 ppm were larger than those of unsprayed and ungirdled vines, but smaller than those of the unsprayed but girdled vines. Very large clusters and berries resulted from treatment with the compound at 10 ppm and 50 ppm. The percentage of total soluble solids was lowest and the percentage of acid highest in the fruit sprayed with the compound at 50 ppm.

Zinfandel

Grape varieties with compact clusters are undesirable because rot is likely to develop in them. If the cluster parts could be lengthened, such clusters would be loosened and the tendency to rot reduced. Shoots of Zinfandel, a variety with very compact clusters, were sprayed with gibberellin at 0, 1, 10, 100, or 1,000 ppm on April 7 when the shoots were 2"-3" long. Canes were removed and fruit harvested on September 23. The shoots and their internodes were elongated in proportion to the concentration of compound used. When measured on July 15, the shoots sprayed with the compound at 1,000 ppm were twice as long as the untreated shoots.

The length of cluster parts was increased in proportion to the concentration of the gibberellin used. The compound at 10 ppm resulted in the production of rather loose clusters as a result of the elongation of cluster parts. Very loose clusters resulted from application of the compound at 100 ppm, but there were many shot berries. At 1,000 ppm the clusters were virtually destroyed. In this treatment ovaries still adhered to the greatly elongated pedicels, but the cluster framework was cracked and quite brittle. Above 1 ppm the average weight per cluster and berry usually decreased with increasing concentrations of the compound, probably because the number of small shot berries increased.

There was no definite trend in the percentage of total soluble solids or acid. However, treatments at later dates hastened coloration and maturation.

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RED MITE

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Aphelinus semiclausus adults began to appear commonly in the San Joaquin and Salinas valleys in the fall of 1957. The shiny black aphid mummy is quite distinct, but it is not conspicuous because it is found usually on the under surface of the lower leaves. In addition to the three imported parasites, over 8,000 individuals of several aphid feeding predators imported from India have been released in northern California. Among these predators are three ladybeetles—Coccinella septempunctata Linn.; Adonia variegata Goeze; and Scymnus nubilus Mulsant. Also from India a green lacewing—Chrysopa carnea St.—has been released against the spotted alfalfa aphid. None of these parasites had been recovered by November 1957. One of the difficulties in establishing the predators is the effective competition of native natural enemies of the spotted alfalfa aphid in the spring and fall.

Because the three wasp parasites overwintered successfully in the San Joaquin Valley and Praon survived the winter as far north as Tehama County, it is expected that these parasites will be widely distributed throughout the state in 1958, and become abundant enough to significantly reduce the population of the spotted alfalfa aphid in northern California as they have done in southern California...

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