A new strawberry variety—the Solana is released by the University of California for unrestricted propagation. California nurserymen were supplied a few plants in 1957 to establish foundation stock. Plants should be generally available by December 1958. The University of California does not have plants for distribution.

**The new Solana** strawberry may prove to be a good supplemental variety to Lassen for commercial and home-garden culture because of superior fruit quality. However, Solana does not yield as well as Lassen, nor does it start production as early.

Solana originated in 1935 as a cross between selections Cal. 177-19 and Cal. 103-22 and has been tested as Cal. 35.93-11. The selection is named for the town of Solana Beach, near where much of the testing was done.

Although Solana is as old as the Shasta Variety and tested—in a limited way in northern California from 1939 to 1950, it was not tested in southern California until 1953. Since then, Solana has been compared with Lassen at Torrey Pines, Fallbrook, San Luis Rey, and Santa Ana. Trials have been completed on both winter—December—and spring —April—plantings. During 1957, Solana has been successfully established in summer plantings, growing more vigorously than Lassen.

Quantity fruit production on Solana begins 7-10 days later than Lassen at Torrey Pines and Santa Ana. First-year production from plants set in early to mid-December—winter—has been about one half that harvested from Lassen plants handled the same way. Solana has compared more favorably with Lassen during the full production season that follows. The plants have persisted as long as Lassen in test plantings.

The fruit of the Solana is large to

trained in animal feeding are factors to be studied before antibiotics are incorporated in a cattle ration.

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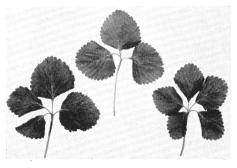
Reuben Albaugh is Extension Animal Husbandman, University of California, Davis.

Norman E. Nichols, Modoc County; Jesse W. Baquette, Shasta County; and Alva W. Mitchell. Butte County; Farm Advisors, University of California, cooperated in the feeding trials reported here.

The experiments with antibiotics in Iowa referred to in the above progress report were carried on by Dr. Wise Burroughs; those in Florida, by Dr. T. J. Cunha; and in Indiana, by Dr. T. W. Perry.

## Solana Strawberry

new variety yields fruit of high quality in southern California trial plantings



Characteristic 3, 4, and 5-foliate leaves of the new Solana strawberry. Note the long leaflet petioles—petiolules.

medium large in size and has a very symmetrical, conic to blunt conic shape. The color is bright red with a glossy finish and the yellow seeds are flush with the surface and medium in size and spacing. The slightly pubescent skin is relatively resistant to injury. The flesh is moderately firm and juicy and uniformly red and aromatic when ripe. The pleasing subacid flavor gives the fruit a good dessert quality. Also, the fruit holds well in storage and does not darken.

The plant of the Solana is vigorous and large with a medium open crown. It is a prolific runner maker. The leaves are large, borne on long petioles, and of a medium deep green. The leaflets are broad obovate, upcupped, and borne on exceptionally long petiolules. Often there are 4–5 leaflets instead of three. The flower stocks are long to medium long and high branching. The pedicel pubes-

## – R. S. Bringhurst and Victor Voth

cence is appressed—slanted upward. The flowers produce copious amounts of pollen.

Solana is highly susceptible to Verticillium wilt but is more resistant to mildew than Lassen and has resisted infestation with cyclamen mite better than Lassen on several occasions. It reacts to virus infection similarly to Lassen and appears to be moderately tolerant of salinity.

In southern California, the most firstyear production from winter plantings of Solana has been obtained from plants set by December 10–20. Those set later have gone to runners too early to produce well. Also, plants set too early lack vigor.

Relatively high yields have been realized from spring-planted test plots of Solana near Berkeley and at the Deciduous Fruit Field Station at San Jose. Low to near-acceptable yields were obtained from winter plantings made in early December 1956 in the central coast area at San Jose, Salinas, and Watsonville. All of the above plots were small, and further tests should be made.

Solana has yielded reasonably well in small plots at Davis and Wheatland and should be further evaluated in the central valleys.

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The above progress report is based on Research Project No. 1386.

## **ALFALFA APHID**

## Continued from page 5

the parathion treatment. By contrast, in the Systox plots where beneficial insects survived the treatment in goodly numbers, aphids were destroyed as they reinvaded the plots. Thus, seven days after application there was still less than one aphid per alfalfa stem where Systox was used. Ten days after application aphids averaged 14 per stem in the parathion plots, 8 per stem in the Phosdrin plots and only 1.5 per stem in the Systox plots.

The use of Systox should lower longterm costs of treatment because of fewer applications. Moreover, there probably will be a reduced tendency for the development of resistance by the aphid, and a reduced threat of secondary insect outbreaks which might develop following use of more widely toxic insecticides.

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Robert van den Bosch is Associate Entomologist in Biological Control, University of California, Riverside.

Dewey Born was Laboratory Technician in Biological Control, University of California, Riverside, at the time these studies were conducted.

The above progress report is based on Research Projects Nos. 1443 and 1650.