The Agricultural College Is a Valuable Friend to the Farmer

Page of News Notes and Interesting Articles Written by College Experts.

VIEW OF OREGON AGRICULTURAL COLLEGE AT CORVALLIS, OR. IT'S SOLE AIM IS TO AID AGRICULTURISTS.

New Horticultural and Crop Pest Report Now Announced

OREGON fruit and vegetable growers can find no more valuable aid in solving the problems of production and protection of horticultural products than the information contained in the second biennial crop pest and horticultural report of the Oregon experiment station. The facts and principles put forward in this newly published volume were determined by careful experimentation with Oregon material under Oregon conditions.

Some of the most important problems that confront the grower were taken up, several of which have been solved while still others are in course of solution. Carefully worded and accurate reports of these experiments have been made and results together with the principles of production induced therefrom are clearly stated.

The horticultural report deals with fertilizers for onion land, greenhouse tomato investigation, fruit-pit studies in the Willamette, effects of different degrees of moisture on pears, and strawberry varieties of Oregon. Each subject was written by a specialist and while conservative and reliable is also vigorously and vitally handled for the benefit of the general grower.

The report on insect crop pests was taken from records of original investigations and contains notes on a number of species not named in the first report. Several investigations that were under way when the first report was issued have been concluded, while others are still in progress. There are eight of the unfinished problems now under investigation to be reported at a later date.

Not all the investigational work was carried on at the college by any means, many of the control problems having been studied in the various parts of the state in which serious outbreaks occurred. Field tests with insecticides have also been performed in many instances and the efficiency of the sprays has been determined.

The report on botany and plant pathology includes seven discussions, as follows. A Pacific Coast rust attacking pear, quince, etc., a new filbert disease in Oregon, bacterial gummosis or bacterial canker of cherries, notes on miscellaneous potato diseases, experimental spraying of prunes for brown rot, potato spraying experiments, and notes, observations and minor investigations of plant diseases.

A number of investigations are under way including Winter injury to fruit trees, together with associated canker diseases, apple fruit spots and rots, mushroom root rot of fruit trees, and many other problems of primary interest to growers, but they have not progressed far enough to warrant publication in the present report. The investigations of certain diseases are now centered largely at the Hood River experiment station.

There are 280 pages in the report, which is indexed and profusely illustrated. As a reliable and ready-reference on the production of horticultural products the report will prove of incalculable value to horticulturists and general farmers. Copies may be had free of cost by writing to the Oregon Agricultural College for them.

Senior Wins Fellowship.

L. G. Gentner, of Portland, who will graduate in June at the Oregon Agricultural College, has been appointed to a fellowship in the department of entomology. This fellowship covers a period of two years. Five months each year will be spent at Corvallis and seven months as assistant to Dr. M. C. Henderson, plant pathologist and assistant county agriculturist for Jackson County, located at Medford.

A page of interesting items from the Oregon Agricultural College at Corvallis will alternate in the farm weekly with a page of news notes from the Washington State College at Pullman. This will afford an interchange of views from the two big agricultural colleges of the Northwest that should prove of benefit to the reader, for the institutions deal with similar problems.

Potato Seed Treatment Is Cheap Insurance for Crop

"IN taking up the matter of seed treatment for disease control, several questions present themselves for consideration," according to F. D. Bailey, research assistant in plant pathology, Oregon Agricultural College. "This being the time when many growers are especially interested the following recommendations are submitted in answer to queries that are constantly recurring:

"Diseases that can be controlled entirely or largely by proper treating and inspection of seed at cutting are, common scab, rhizoctonia, blackleg and the two fungus wilts. This, of course, with the understanding that the soil to be used has not produced crops with any of these diseases in recent years and has had no other chance to become disease.

"Tubers that are bruised, cracked or discolored, or show a brown ring when the stem is cut across should be sorted out and discarded from the seed. In case scab is the principal trouble for which seed is to be treated, it will be quite satisfactory to use the formaldehyde treatment:

"One pint formalin in 30 gallons water, soaking seed with sacks or crates for two hours, and then drying seed thoroughly. This should preferably be done immediately before planting; however, if it is desirable to start sprouts before planting it will be necessary to give the treatment somewhat earlier. Care should be taken not to reinfect the tubers by placing them back in the same storage place unless it, too, is disinfected. In any case, at the present state of experimental evidences it is advisable to treat before cutting.

"A substance that is more satisfactory than formalin in that it is effective against rhizoctonia as well as scab is mercuric chloride (corrosive sublimate). This poisonous substance may be secured in the form of white crystals from the large drug companies, the smaller stores generally carrying it only in tablet form. This should be used in 1 to 1000 dilution or about four ounces in 30 gallons of water where the crystals are used. If the tablets are used the directions should be followed.

"In making this up for use the amount to be used should be carefully weighed out and dissolved in a small quantity of hot water. This must be done in a clean wooden or porcelain container and after diluting it must be handled in the same way, since it reacts with metals. The treatment from this point is the same as with formaldehyde, except that tubers should be soaked one and one-half hours. It should also be borne in mind that this substance is poisonous so should be kept away from small children or stock.

"Either solution may be used several times (not to exceed four). The formaldehyde loses strength on standing and the mercuric chloride gradually deteriorates when it becomes dirty. A gas treatment with formalin may be used where large quantities of potatoes are to be treated but requires special precautions, details of which will be furnished parties interested on application to the department of plant pathology at Oregon Agricultural College."

One Oregon Gardener.

The vegetable display of F. M. Sherman, of Lebanon, Or., is attracting much favorable notice at the Panama-Pacific Exposition. His onions, cantaloupes, potatoes, pumpkins, squashes and other garden truck are described as top-notchers. Mr. Sherman has been a faithful attendant at Oregon Agricultural College short courses until he is familiar not only with the processes of scientific production but also with the principles of selection and arrangement of displays. He began gardening about nine years ago with a capital of $30, and within five years had paid for his 10 acres that had been brought into production. Although out of health when he began he is rugged now and has supported his family of four besides adding materially to his holdings. He has repeatedly won distinction at state and National fairs with his choice vegetables.

Roumania is a trifle larger than New York, and Bulgaria a little bigger than Virginia.

Advantages and Ills of Hogging Off Corn

BY G. R. SAMSON,
Swine Specialist, O. A. C.

IN considering the possibilities of hogging off corn, a sufficient amount of thought has not been given to the finishing process. Hogging off corn is a compromise between pasturing and lot feeding; hence the features which are incident to pasture are present to this sort of feeding, both the advantages and the disadvantages.

The advantages, of course, are the facts that the pigs harvest the feed themselves and that they secure a good deal of succulence at a comparatively cheap price; moreover, they secure a good deal of nutrient at a low cost. The disadvantages are that they consume a considerable amount of crude fiber or coarse material which takes up space in their stomachs and which cannot, therefore, be occupied by better feed. Consequently the high finish is not secured by subjecting the pigs which have hogged off a crop to a period of finishing during which time they can be fed but little pasture or roughage and should have a maximum of a balanced ration of pretty concentrated material.

The length of time which will be required for finishing will depend upon the size of the pigs and upon the weight they have reached before hogging off the crop. The eye of the feeder is the only guide in this case. The pigs must be smooth and plump when finished and a sufficient amount of time and a sufficient quantity of feed must be used to secure this result, be it two weeks or longer. Ordinarily the finishing process cannot be completed in much short of two weeks and it may take a considerably longer time.

Since the pigs have been practically on full feed during the hogging off of the crop they may be easily put onto a self-feeder for their finishing process. The ration at this time may well consist of a ration of grain balanced with tankage or skim milk, according to what is available. If tankage is used, 5 per cent will be a sufficient quantity, or if skim milk is used, two pounds of skim milk to each pound of grain consumed will just about produce the balance. As to the kind of grain which is best suited for the finishing process, this will depend upon what is cheapest in the locality, since the relative values of corn, wheat and barley for fattening pigs are not very different. Whichever feed will produce the greatest amount of grain for each dollar expended on each acre of land may be considered the best feed to raise for the feeding of the pigs.

Poison Bait for Slugs.

The garden slug, slimy, slow-moving and repulsive creature that attacks all manner of garden and ornamental plants, is readily controlled by the use of a poison bait, says A. L. Lovett, specialist in insect crop pests at the Oregon Agricultural College. To be most effective the material should be placed in small heaps about the infested area early in the evening. The treatment should be repeated about every five days to take care of the newly hatched slugs.

The most effective bait is finely chopped leaves of some green succulent feed, such as lettuce, kale, wild mustard or clover, with the addition of arsenic and some sweetening agent. The following formula is good for small amounts:

Green succulent leaves (chopped finely), one quart; Paris green or white arsenic, one tablespoonful; sugar one tablespoonful.

Bran may be used instead of the leaves, but water must be added sufficient to make the mixture moist, not sloppy.

Slugs may also be trapped under boards or pieces of burlap placed about the field. The traps should be visited in the early morning, when the slugs may be removed and destroyed.

He Took Dad.

"My boy," said the Arvada minister, patting the youngster on the head. "Have you been to the circus this Summer?"

"Yes, sir," replied Johnnie Tumblebug. "Pa wanted to go, so I had to go with him."

Early Spray Recommended for Currant and Gooseberry Worm

THERE are two insect pests which attack the currant and gooseberry. One occurs as a small white maggot inside the developing fruit, causing it to ripen prematurely and drop to the ground. The pest is known as the currant maggot or the gooseberry fruit fly. The other pest is a velvety green worm which feeds on the leaves stripping the foliage from the bushes about the time the fruit is maturing. This pest is known as the native currant worm.

Sprays are not generally effective in controlling the currant maggot. Stir the soil thoroughly to some depth about the bushes in the Fall and again in late March.

For the green currant worm spray the bushes with a lead arsenate solution using one ounce of lead arsenate to three gallons of water. This spray to do the most good must be applied just after the fruit is set on the bushes. If one does not apply this early spray, the worms may be killed when the fruit is large by a spray of white hellebore powder one ounce in three gallons of water. This material is non-poisonous and does not discolor the fruit. The early spray is to be recommended, however.

Here Are a Few Things to Be Done for the Lawn in April

LAWNS can be made all through April in Oregon and even well into May, says Professor A. L. Peck, landscape specialist of the Agricultural College. All rose pruning should have been completed before this time, and under no consideration should any of the early flowering woody shrubs be pruned before their flowering season has passed. Otherwise a large part of the flowers are cut away in the pruning.

As soon as the ground works well grass seed may be sown in the lawn. All newly planted trees should be shaped so as to develop into fine straight growth rather than into forms crooked and undesirable, due to prevailing winds and other causes.

Keep a close lookout for the weeds, and get them early. If slugs are present, sprinkle a little soot or wood ashes around the plants that are being attacked.

From the middle to the last of the month early flowering asters, balsam, calliopsis, candytuft, cornflower, sweet sultan, annual chrysanthemum, dahlia, cosmos, any of the poppies, annual gallardia, annual larkspur, mignonette, pansy, annual phlox, stocks and other early flowering plant seed may be sown.

Needs an Audience.

"So your wife is a suffragette?"

"Yes," answered Mr. Jenkins.

"Why does she want to vote?"

"I don't think Henrietta really desires to vote. She's merely tired of talking to me. She wants a large and more intelligent audience."