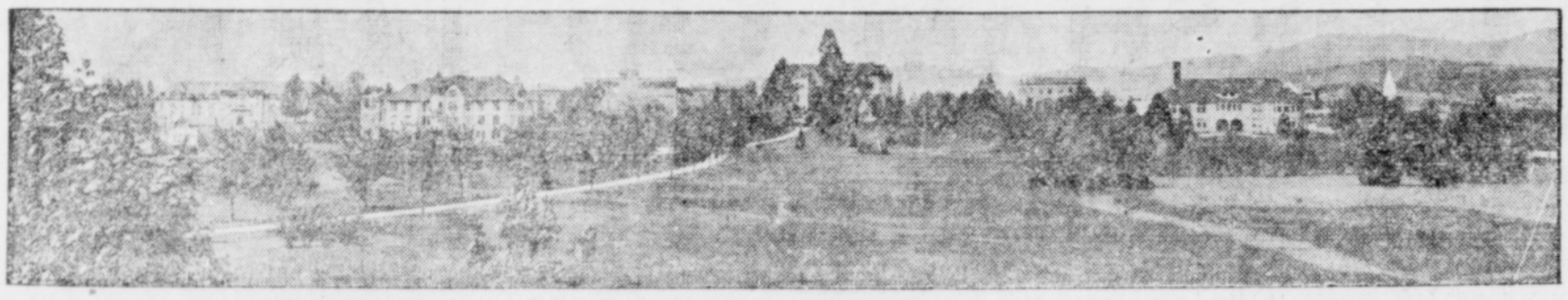
Oregon Agricultural College is the Friend of the Farmer

Page of News Notes and Interesting Articles Specially Written by College Experts For This Newspaper.



View of Oregon Agricultural College, Corvallis, Oregon, the Sole Aim of Which Is to Aid Agriculturists.

LIMING CERTAIN SOILS INCREASES THE BACTERIA.

THAT liming acid soils will greatly increase the number of soil bacteria that they coatain has been definitely shown in a series of experiments reported in Experiment Station bulletin No. 118, just issued by the Agricultural College. The experiments were conducted by T. D. Beckwith, bacteriologist, and show the effect of lime on six widely different types of Oregon soils.

In general it was found that in acid soils with a high content of humus and other organic matter the number of bacteria was greatly increased by liming at the rate of two tons of lime per acre-foot. In soils carrying an excess of lime and deficiency of organic matter the number of bacteria was decreased by liming. Soils that were neutral were not affected by liming.

It was also found that the amount of plant food prepared by the action of the bacteria increased with the increase in the number of the bacteria. This, of course, is the important point, since the amount of available nitrogenous plant food in the soils is the main factor in the soil fertility problem.

Liming the acid soils has been shown by the Department of Chemistry to sweeten them and release unavailable plant food. It has been shown by the Agronomy Department that liming the compacted soils flocculates the finer portions, makes the soil granular and porous, and renders cultivation easier. And now comes the Department of Bacteriology showing that liming these acid soils increases the number of bacteria, thus releasing the nitrogen content of the soils and making the supply immediately available for plant food.

In the meantime, the Extension workers have secured a bountiful supply of lime, which will be delivered at any station in the Willamette Valley at $3 per ton.

SMALL LAWNS FOR FARMS AND FEW ANNUAL PLANTS.

SMALL lawns with but few annuals is the recommendation for farms made by Professor W. S. Brown, extension horticulturist at the Oregon Agricultural College, in addressing the Monmouth grange recently. His subject was farm buildings and grounds, and the recommendation is a part of the general plan of simplicity and taste advocated.

"One reason for few annuals is the fact that farmers often have no time to bother with them in the spring, when they must have attention if they are made attractive," said he. "But they do not fit in so well with the general plan as do the perennials and shrubbery, which soon come to have a definite and characteristic effect in giving each farm home its distinctive features.

"Clipped lawns should be small since small lawns require less time for their care and are almost sure to be better cared for than the large ones. Also, they release more land for other purposes, and if it is thought best to have a larger tract of meadow land it should be located outside of the yard fences where it may be mowed by horse power as often as necessary."

TEN O. A. C. PULLETS SENT TO STATE HOSPITAL.

A FLOCK of 100 pullets of the most famous laying strain in the world has been sent by the Agricultural College Poultry Department to the State Insane Asylum, to be used partly for demonstration purposes. These pullets have been bred from many generations of extra good layers and have a better pedigree than any other known flock of pullets. Their sires were half brothers to the world champion hen that laid 303 eggs in one year. Their mothers are half sisters to the earlier champion that laid 291 eggs in a year.

Another ancestor of these pullets made a record of 257, another of 218 and another of 204 eggs per year. Their grandmothers and great-grandmothers each laid more than 200 eggs per year. Their fathers, grandfathers and great-grandfathers were from hens that were more than 200-egg layers. If blood tells, these young hens ought to fill the egg basket.

"They should average 400 eggs each in the next two years," said Professor Dryden, whose breeding methods produced the world's best layers. "They were hatched a little early for securing high egg records, about the middle of March, but with good care on a two-year basis they will no doubt average 400 eggs each."

The flock will be kept in a separate yard and their individual records will be secured by trap-nesting. They will be managed by C. M. Wilcox, an O. A. C. graduate of this year's class, who is manager of the poultry work at the asylum.

POISONED BRAN MASH STOPS GRASSHOPPERS.

POISONED bran mash is the most satisfactory remedy under Central Oregon conditions, for grasshoppers, according to Professor H. F. Wilson, who has just returned from a successful campaign against grasshoppers in Klamath county. Its materials are cheap, easily put together, easily applied and the poison is quite effective. The only exceptions to the success of the treatment is with the hoppers that are in the moulting stage and refuse to eat much of anything.

As most successfully used in the recent raid, the mash was prepared as follows: Bran, 50 pounds; paris green or white arsenic, 2 pounds; salt, 1 pound; syrup, 1 quart; lemon extract, 1 ounce; water to make a thoroughly soaked mixture.

The mixture is best applied by broadcasting, walking in the center of a 20 or 30-foot strip and sowing both to the right and to the left. This should be done early in the morning, since the bran retains the moisture longer then and the young hoppers on beginning to feed eat the poisoned bait greedily. After the bran loses its moisture and after the young insects have eaten well of the plant food, the bran has less attraction for the insects. It takes several hours for the poison to complete its work, but within a day or two after it has been eaten the grasshoppers are dead. Only a flake or so is required to kill the young hopper when hungry.

NEW PLANT PATHOLOGIST FOR MEDFORD DISTRICT.

A SPECIALIST in plant pathology, Dr. M. P. Henderson, University of Wisconsin, has been appointed by the Oregon Agricultural College as pathologist and assistant county adviser of Jackson county, with headquarters at Medford. Under the provisions of the county farm adviser law Jackson county maintains a county adviser cooperatively with the Extension division of the college. This office is filled by Professor F. C. Reimer, superintendent of the Southern Oregon Experiment Station at Talent.

The new arrangement was secured through co-operation between the Experiment Station, the branch Station and the Extension division on the one hand and the county court of Jackson county on the other. It goes far to assure close co-operation in carrying on the work.

The newly appointed pathologist is a graduate of the Utah University and took his doctor's degree in plant pathology at the University of Wisconsin last June. He is a native of Idaho and has had extended experience in orchard work under western conditions.

TEACHERS CONDUCT SURVEY.

RURAL teachers can best shape their work after making a preliminary survey of the school and school conditions," said L. P. Harrington, state organizer of girls' and boys' industrial clubs in Oregon, addressing the summer school students at the Agricultural College. Buildings, repairs and equipments are inventoried in these surveys, and further needs noted. But more important than all these, the product of the school—the number and character of its pupils and kind of work accomplished by them—should be noted and listed for future reference. With a distinctive knowledge of what the school has done and what it has failed to do, and of what it can and should be made to do, the competent teacher is able to shape his work to the needs of the district. The teacher should then adopt a definite and continuous policy whose aim should be the best school possible and the best education possible for its girls and boys. Indications of the success with which this is done are the asking of questions and advice by the pupils, their hearty co-operation in school work and other related work, and the interest of parents and school boards.

PANAMA POULTRY SHOW BY O. A. C. DEPARTMENT.

THE educational poultry exhibit of the United States Government at the Panama-Pacific Exposition will be furnished by the Poultry Department of the Oregon Agricultural College. "The striking results obtained at your station indicates your ability to put on an excellent exhibit," writes Dr. A. C. True, who is directing the Government's agricultural display at the Exposition. The invitation to provide and arrange the material for this exhibit has been accepted by Professor Dryden, but definite plans for the display have not yet been decided upon.

In outlining the general character of the exhibit Director True suggested that it should include research, teaching and extension features of poultry husbandry. This plan will be followed by the local poultry department in selecting and arranging the display, although the limited space available makes necessary a close concentration of exhibit material.

DRAINAGE OF CAMPUS.

DRAINAGE results have proved to be very satisfactory on the Oregon Agricultural College campus. Not only were the drained areas entirely free from surface water during the wet season, but they are less affected by the severe drought of the present summer. By lowering the water table in the wet season drainage permitted better aeration and less compaction, so that capilarity is much more perfectly performed during the summer. A wide use of tiling draining systems is thus indicated for farm lawns and stock grounds.

HOWARD WILL INSPECT NORTHWESTERN ORCHARDS.

OREGON methods of orchard practice have attracted the attention of mid-west fruit growers, and the University of Wisconsin will have a horticultural expert in the Hood River district during the summer to inspect the orchards and observe methods of handling fruit. The purpose of the visit is announced by the University of Wisconsin Press Bulletin as follows:

"To learn what orchard methods are followed by western orchardists which might be adapted by Wisconsin fruit men, R. F. Howard, agricultural experiment station, University of Wisconsin, will this summer visit many of the fruit farms in the Hood River Valley (Oregon). Many of the young men attending the college of agriculture are interested in orcharding and desire information on the western plan of handling and marketing of fruit."

FEEDING FOR EGGS.

THE FOURTH edition of Professor James Dryden's bulletin, Feeding for Eggs, has just been issued by the Extension division and may be had upon request. Each of the three former editions was exhausted, showing the sustained demand for reliable data on the subject of feeding poultry to secure a good egg supply. The material of this bulletin was secured by the author in experiments covering many years and has been revised to date. From the table on composition of foods the poultryman can readily determine which food stuffs can be bought most profitably in the different sections of the state. Feeding is regarded by Professor Dryden as one of the four principal factors in filling the egg basket.

TOM LAWSON, FARMER.

SCIENTIFIC farming methods appeal to Hon. Tom Lawson, the noted Economist and journalist. Mr. Lawson, who made the Wall street magnates hunt tall timber, is visiting at the farm of his son-in-law, Henry McCall, of Crook county, Oregon. On this farm a specialty is made of high class pure-bred cattle and swine. Holsteins and Jerseys and many breeds of swine, are carried as part of the farm stock. The owner is co-operating with the Agricultural College in many lines, and finds that the scientific methods pay best. Bacterial cultures for the legumes has been found to be especially profitable.

HUNTING LIME SUPPLY.

LIME, so much needed in many sections of the Willamette Valley to sweeten sour soils, is the object of special search by two county agriculturists, Floyd W. Rader, of Lane county, and Luther J. Chapin, of Marion. A suitable source of lime is believed to be found in quarries near Medford of good quality and large extent. Grinding is necessary to make it fit to apply to the field, and the two specialists hope to learn the exact details of operation and cost of product, and to arrange for the installation of necessary machinery. Its great value to the farm has been worked out by Professor H. D. Scudder, agronomist at the Agricultural College.

GRASSHOPPER SPRAYS.

Arsenical sprays are beneficial in the control of grasshoppers on trees, fruit bushes and shrubby plants, according to A. L. Lovett, assistant entomologist at the Oregon Agricultural College. A spray made of one and one-half to five pounds of lead arsenate in fifty gallons of water may be used, depending upon the nature of the foliage to be sprayed. The solution should be as strong as can be used without injury to the plant, since it acts rather slowly at times. The hopper dozer and the poison bran mash are standard treatments when suited to conditions. The ideal time for fighting this pest is early spring and in the fall.