

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.

FARMERS and other poultry raisers of Oregon who have suffered loss in young chicks are asked to cooperate with the department of bacteriology, Oregon Agricultural College, in ascertaining the cause and methods of control of the disease. They can assist themselves as well as confer a favor on the department by taking the chick as soon as possible after death, enclosing it in a water-tight can, packing it in ice and sawdust in a small box, and sending it parcels post to the department of bacteriology, O. A. C., Corvallis, Oregon. Oregon is the second state in the Union to carry on this work and G. D. Horton, who is conducting the experiments, has had the benefit of three years' experimental work in the first state to undertake it, Connecticut, at Storrs Station. In inviting co-operation Mr. Horton says:

"The question of the loss of young chicks at this season of the year is one of vital importance to poultrymen. It has been estimated that at least 10 per cent of all the chicks that are lost die as a result of white diarrhoea, a condition brought about by a specific germ or organism called 'B-pullorum.' The action of this organism is as follows. The mature hen having acquired the germs transmits them through her eggs to the young chicks. That is, the germs after gaining entrance into the hen's body lodge themselves within some of the ova or undeveloped eggs and later, when these germ laden eggs are hatched the young chicks emerging from them are infected before leaving the shell. These chicks may live for a period of weeks during which time they are a source of danger to the healthier chicks because their droppings contain the deadly germs which the healthier chicks may pick up. Complete isolation of the infected chicks and the free use of sour milk will lessen, in a large measure, the mortality.

"In order to determine accurately whether or not the loss of the chicks is due to the presence of the white diarrhoea germs and thereby gain some idea as to the condition of the health of the parent stock, the bacteriological department will make an examination, free, of the dead chicks provided the chicks are sent direct to the department of bacteriology just as soon as they die. Our aim is to control and eventually wipe out this unnecessary evil in this state. Co-operation upon the part of the poultry raisers is not only desired but necessary for the success of this undertaking. Further information may be obtained by addressing the department of bacteriology, Oregon Agricultural College, Corvallis, Oregon."

STUDENT Y. M. C. A. HAS RECORD OF ACHIEVEMENT.

THE Agricultural College Y. M. C. A. now numbers 345 students and is rapidly becoming one of the principal features of student life at the College. "The old spirit of antagonism has been largely eliminated," says the president, J. W. Seudder, "and friendship has been established between the student body and the association.

"Everything possible has been done to aid the students, especially new students coming as strangers to the College. Tents were erected at the railway stations and the students were met on their arrival by representatives of the association who furnished them information as to homes, prices, and other points of interest. An earnest effort was made to make the stranger feel at home and induce a feeling of good fellowship.

"There are 110 different men serving as members of committees on vari-

ous phases of association work. This plan places the association in direct contact with the entire student body.

"Of the members 225 are members of evangelical churches. Twenty-six religious meetings were held during the year with an average attendance of 75 students.

"An employment bureau of the association secured employment for 240 students during the year, and the amount of money earned in this employment is estimated at \$2500. Several men listed are making as much as \$6 per week at odd jobs only."

CHEMICAL INVESTIGATION OF LIME-SULPHUR SPRAY.

THE exact chemical composition of lime-sulphur spray as prepared by laboratory and by commercial methods is the subject of a report by Professor H. V. Tartar, agricultural chemist at the Oregon Station, in research Bulletin No. 3, just issued. The edition is limited to 3000 copies, because its technical purpose and nature render it of special value only to research workers, agricultural scientists and science writers.

The purpose of the bulletin is to set forth fully the work of the Station on the chemistry of the lime-sulphur solution. Most of the available literature on the composition, properties and effects of this spray is founded on field experiments and general use, and comparatively little information of the exact nature of the chemicals resulting from the mixture has been published. In this bulletin experiments have been made with varying ratios of ingredients, different methods of combining them in solution, and the effect of adding substances other than lime, sulphur and water. The solutions were then tested for their chemical components. The actual composition of several commercial preparations of lime-sulphur are given in tabular form, together with calculated ratios of lime to sulphur in preparation.

The advantages of securing the information developed by the experiments and tests are evident. In field work lime, sulphur and water, and occasionally other ingredients, were poured together and sprayed over vegetation, often in the belief that merely lime, sulphur water and the other substances, were the only things applied to it. Some persons knew that there were new compounds formed, but few, if any, knew precisely what they were. Effects were studied, but when unsatisfactory the reasons were not clear. At least some of the unknown facts have been brought out in this report, and they will be of great value to those trained to understand them, especially to those engaged in the commercial manufacture of lime-sulphur sprays.

Because of the technical nature of the bulletin its circulation will be confined to those specially interested, to the public press and to libraries. Those entitled to one or more copies may secure them by writing to the Experiment Station, Corvallis, Oregon.

OREGON DAIRY RECORDS PROPORTIONALLY HIGH.

THE supremacy of Oregon as a dairy state has frequently been asserted by the dairy department of the Agricultural College and is rapidly being verified by tests and records made in certain parts of the state. The number of cows of any breed in Oregon is relatively small in comparison with the number in the United States, yet the number of cows in the Jersey breed that have made noteworthy records is a very large percentage of the number in the whole country.

Of 16 Jersey cows in the United

States that have produced above 900 pounds of butter in one year, four of them, or 25 per cent are in Oregon. Of 30 that have produced to exceed 800 pounds, six cows, 20 per cent, are Oregon cows. Of 105 that produced to exceed 700 pounds of butter within a year, 14, almost 14 per cent, are Oregon cows. While the five cows that have produced 1000 pounds or more of butter during a year's test are outside of Oregon, this state has one cow that fell but 7.1 ounces short of that number.

Although there are more than 60 breeders of pure bred Jerseys in the state not many of them have ever carried on testing. There are but 14 now doing advanced registry work, two having dropped out temporarily. This is a very poor showing, and yet it has proved that Oregon dairy conditions are unequalled elsewhere.

APPLE TREES.

DURING the decade 1900-1910 the number of bearing apple trees in the United States decreased by a total of 50,471,000 or 33.4 per cent. At the former date there were reported in the United States census 201,794,000 as against 151,323,000 in 1910. In 1910 there were fewer than one-half the farms in the United States that reported the growing of apple trees. Notwithstanding this showing there has been considerable advancement in the business of commercial apple growing. According to Professor C. I. Lewis, head of the Oregon Agricultural College division of horticulture, a prime factor in developing the commercial phases of the apple industry has been the growth of American cities and the tendency to change from apples in the form of cider, apple butter, etc., to a larger use of the fresh fruit, eating it in the form of pies, sauces, etc. Better transportation facilities and refrigerator cars have had an important influence not only on the apple but on all our fruits.

There have been waves or epochs in the apple industry such as the introduction of tillage as an orchard practice, spraying for the control of insects and disease pests, the use of cover crops, orchard heating to protect the fruit from late frosts and improved methods of selling and distributing. In view of all these advancements the apple industry is becoming greater and the United States and Canada are the principal commercial apple districts.

The great needs of the industry are the standardization of crates and packages, better organization and the establishment of a bureau of statistics by means of which we can keep informed of the approximate size and quality of the crop. It is only by producing high class fruit for fresh use and by developing factories to convert the inferior grades into valuable by-products that the industry can be placed upon a permanently safe and prosperous foundation.

O. A. C. TO GIVE AID TO OREGON TEACHERS.

TO AID Oregon teachers in equipping themselves to respond adequately to the demand for more efficient teaching in industrial subjects will be the principal feature of the summer session of the Oregon Agricultural College. State-wide interest in garden and household contests of public school pupils as shown by the fact that more than 10,000 are registered in the industrial courses shows the absolute necessity for teachers to equip themselves with additional information in this work. The summer school Bulletin No. 146, makes the following announcement covering the character of the work.

"The summer courses will not only

provide specific and detailed instruction for conducting these contests, but will show the teacher how to use the state adopted text in elementary agriculture and supplement it with simple and interesting experiments both indoors and outdoors. In the same way, the direct and practical instruction in cooking and sewing will furnish the essentials for assisting the girl pupils. Any teacher who has the advantage of six weeks' contact with expert instructors and practical demonstrations in the work in which he is to direct his pupils, will vastly multiply his efficiency and usefulness in his community.

"The courses are organized to meet the needs of both general and special students. Young men and women who have had no systematic instruction in the branches taught at this institution will find elementary courses adapted to their needs. Students and graduates of high schools where no industrial training is given, and others who have completed their schooling, may spend a delightful six weeks in Corvallis at moderate expense, obtaining useful, practical information and at the same time perhaps discover unexpected capacities, heretofore dormant. Others, who have a trade or profession, want a side line in fruit raising, vegetable gardening, poultry and the like. Still others are interested in beautifying their lawns with flowers and shrubbery and planting and arranging them in the most artistic way. Many public school and college teachers are providing old age pensions by acquiring land."

NEW COLLEGE BUILDINGS.

THE Home Economics building and the Men's Gymnasium at the Oregon Agricultural College are now entirely enclosed and well along in the interior work. The former is the most complete and commodious structure of the kind on the Coast, and will make a splendid home for teaching the young women of Oregon how to make and keep their own homes. The gymnasium is likewise an imposing structure, well designed to afford the best modern facilities for the physical instruction of men. The fine appearance of both buildings excites the admiration of visitors to the campus.

AD CLUB MAKES PRESENT.

IN TOKEN of their appreciation of their entertainment by the domestic science girls of the Oregon Agricultural College, members of the Portland Ad Club gave them a present of cash to be used in the purchase of a suitable testimonial. The associated women students met and decided to buy a handsome coffee urn and a copper tea pot. The articles will be engraved and placed in the model dining room of the new Home Economics building, where they will be put into general use.

Only One He Knew.

Can you give me an example of a toothless animal of the mammalian group? asked a teacher of a small boy in the class of zoology.
"Yes, sir," said the boy, promptly.
"My grandma!"

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