

The Agricultural College Is a Friend to the Farmer

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



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

Lactic Acid Organism Check to Putrefaction

(Special.)
THE lactic acid producing organisms, (Bulgarian bacteria), found in Yohourth and Kefer, fermented milk drinks, are able to establish themselves in the intestinal tract and produce enough acid to hold in check the putrefactive processes which otherwise exist there, says Professor Beckwith, of the Oregon Agricultural College.

Yohourth has been used by the Bulgarian tribes for a long time. It is made by the Bulgarians in skin bags. At least two species of bacilli are present and one yeast capable of producing lactic acid in very large amounts. This Bulgarian lactic organism is very hard to obtain in pure cultures because it grows with difficulty on ordinary laboratory media. These organisms produce a much higher percentage of acid than the common lactic acid bacteria and grows also at a much higher temperature.

It is possible to secure this acid in practically pure culture by growing it in milk at a high temperature. When the Bulgarian bacteria are grown in pure culture they will produce from 1 to 3 per cent of acidity. It grows well at temperatures between 37 degrees and 40 degrees. Very recently a number of fermented milks have been put upon the market which evidently have been derived from Yohourth. The flora of these preparations appear to be the same as that of the original Yohourth. All of these milks are recommended by physicians because of their effect upon the digestive system.

Quite recently there has been developed a very important industry in the manufacture of artificial buttermilk. This is made usually by adding a culture of Bulgarian lactic acid bacteria to skim milk. Yeasts are commonly added in the manufacture of artificial buttermilk. The skim milk is often pasteurized in order to get rid of the miscellaneous flora which it contains. This product contains nearly pure culture of the lactic organisms.—Earl Fraley.

Union County Doings.

(Special.)
That the people of Union County are very much alive on subjects related to better farming is very evident from recent reports. Very well attended meetings are held at two or three points each week by County Agriculturist Claude C. Cate.

Many invitations are given him to return and talk on other subjects. The people in the Mt. Glen district especially are very anxious to cooperate in several lines of work. The students in the high school show much interest and asked for practical talks on potato diseases. Mr. Cate is making arrangements for a colt show at Imbler and dairy demonstrations or judging demonstrations at Cove.

The professor of science at the La Grande High School has promised to make a mechanical analysis of the various types of soils of the county, which will be of value both to the farmers and to the students who help do the work. The Science Department will also co-operate in making a collection of local economic needs and in determining the best methods for their eradication.

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.

Farm Institutes Prove Stimuli to Field Work

(Special.)
R. B. COGLON, County Agriculturist for Lane County, states that as the result of the Farmers' Institutes or short courses in agriculture held in that county January 1 to 9, he has received many calls from farmers seeking information, especially in regard to good cows, pure bred sires, and drainage problems. The attendance in most cases, while not exceedingly large, was for the most part composed of farmers and their wives who attended regularly all sessions of the institutes. Meetings were held at Junction City, Creswell, Cottage Grove, Willakenzie Grange Hall and at Eugene. The total attendance was over 1400. In addition to the lectures and demonstrations for farmers, other sessions were given by the domestic science department of the College. Several farmers have asked information as to where they could procure pure bred Jersey cattle, pure bred hogs, and good seed corn.

The question of soil acidity in Lane County has caused considerable activity in the application of various forms of lime. The majority of the farmers evidently are of the impression that in order to raise normal crops on acid soils it is necessary only to apply lime. During the Farmers' Institutes special attention was given to this matter and an attempt was made to impress upon the farmers the necessity of good drainage in order to secure the maximum benefit from applications of lime. The discussions of this matter had the immediate effect of a number of requests for personal visits and making of drainage plans for the installation of systems at an early date.

Coos County Dairymen Banquet.

(Special.)
J. L. Smith, County Agriculturist of Coos County, writes of a successful meeting of the dairymen representing two of the cow testing associations in the county. Namely, the Coquille Valley Cow Testing Association, which in this instance was banqueted by the Bandon and Lower Coquille Cow Testing Association.

The meeting was held at Coquille, at which time both associations were re-organized for 1915 and new officers elected. Several new herds of cows were entered in the two associations and the work is going forward with much interest. He writes further that "Everyone present entirely enjoyed the big feast, the music, and the speeches, and the dairymen responded with hearty spirit throughout the programme that was good to see and hear."

Largely due to Mr. Smith's efforts Coos County now ranks second in the United States in number of cows in cow testing associations. Total number of cows in that county undergoing test now exceeds 3000.

Short Course Succeeds.

(Special.)
The Agricultural Short Course given in Marion County during the week December 28-January 2, by the Extension staff of the Oregon Agricultural College and the County Agriculturist, L. J. Chapin, was very successful. Meetings were held at Aurora, Silverton, Woodburn, Cloverdale and Salem, lasting from one to three days at each place. A total of 1864 persons attended the meetings. Eight persons from the Oregon Agricultural College took part in the work in addition to Mr. Chapin.

The largest attendance was at Woodburn where as many as 185 persons attended a single session. Mr. Chapin states he received enough invitations to make personal visits to farms to keep him busy all Summer. Most of the requests were for help along the lines of efficient farm management, cropping systems, and better livestock.

Checking Epidemic of White Diarrhea

EXTENSIVE investigations recently conducted by the O. A. C. department of bacteriology have disclosed the fact that where 65 per cent of chicks suffered mortality from white diarrhea, approximately 65 per cent of the hens of the flock were infected with the disease germs. Of 150 hens killed and examined, 98 of them were found to be infected, having diseased ovaries. While it was impossible to examine all of the chicks that died, an examination of large numbers was made and from the dead chicks and causative agent of the disease, a germ known as *Bacillus Pullorum*, was isolated.

Many of the hens from which these chicks were bred had been examined previous to their slaughter by the brood test which gave evidence of their having ovarian infection with white diarrhea germs in the undeveloped ova or eggs. Not all the hens slaughtered had been given this blood test for the reason that it was thought best to clean up the old stock by killing most of the older birds. These birds were later used for market since the germs of the disease are not harmful to humans and do not injure the birds for edible purposes.

The flock upon which this investigation was conducted was that of the State Insane Asylum at Salem. This plant is under the supervision of C. N. Wilcox, a former O. A. C. graduate, who realized that in order to run the plant successfully and make it pay from a business standpoint it was necessary to save the chicks and also get at and remove the cause of the trouble. This view was endorsed by Dr. R. E. L. Steiner, head of the State Institution, under whose courtesy the investigation was made.

These findings seem to indicate that where white diarrhea becomes a serious epidemic in a flock the most sure and profitable way of eradicating is to kill off the breeding birds from which the germs are transmitted, and at the same time make an effective and thorough cleaning up of all grounds, buildings and equipment.

Klamath County Progress.

(Special.)
County Agriculturist H. R. Glaisyer reports the first issue of the Klamath County Monthly Farmers' Exchange List as having met with the general approval of the farmers and business men alike. Twelve hundred copies were printed and mailed to all farmers and business men of the county. In less than two weeks three-fourths of all the items listed were sold or exchanged.

Mr. Glaisyer also reports widespread interest in regard to co-operative field tests with different crops for 1915. Many farmers have called at his office in this connection without previous personal solicitation. Interest is being shown especially in regard to drying our alfalfa and field peas in rows under dry conditions, a good start along this line having been made last season under the direction of M. A. McCall, former County Agriculturist.

Pasture in Pork Production.

"To make pork production most profitable in all its phases Oregon growers should provide pasture for hogs wherever possible," says R. E. Reynolds, extension livestock man of the Agricultural College. "Fresh pasture has a beneficial effect on the health of the hog besides affording valuable nutrients for the ration. While grazing, the pigs obtain considerable exercise, which is essential to economical gains, especially in young pigs. It has been proved that cheaper gains can be made in a pasture than in a dry lot. Likewise soil fertility is maintained more steadily, since the manure, which is rich in fertilizing elements, is evenly distributed on the lands pastured."

Need of a Few Good Sheep on Every Farm

(Special.)
MR. FARMER, why not increase your profits by running a few sheep on your farm?

That sheep can be made the most profitable of all farm animals on the place, with proper management, is the conclusion of Professor O. M. Nelson, instructor in sheep husbandry at the Oregon Agricultural College.

When prices for wool are good a rightly managed breeding ewe will pay for her maintenance during the year with her fleece, and in addition will raise, one, two, or perhaps three lambs, which are net profit to the owner.

On an average, sheep produce a pound of gain with less feed than do other classes of livestock. This fact together with the increasing demand for good mutton and the prices that can be obtained for it make sheep husbandry pay well indeed.

The manure as a fertilizer is worth more than any other except that of poultry. In this connection it has been found that there is but very little impoverishment of land upon which sheep run. They return to it in the form of excrement almost all that is taken from it in feed.

The establishment of a small band does not require a large outlay of capital in comparison with that for other stock, since there is no need for expensive buildings to furnish proper sheltering and housing. And the business fits in well with other phases of farming.—W. A. Luxton.

Tillamook Has Best Car Stock.

(Special.)
Tillamook papers are authority for the statement that the carload of stock purchased by the Tillamookers at the Pacific International Livestock Show in Portland was the best carload ever brought into the county. All the bulls had an average record by nearest dams of over 30 pounds of butter-fat each. Out of 192 head on sale, Tillamook people purchased 25, consisting of five bulls and 20 heifers, all Holsteins. The total cost was \$6130.

Great credit is due the persons who made these purchases for their enterprise in bringing more good stock to the county, and to the County Agriculturist, Mr. Jones, in working up the proposition and assistance in selecting the animals.

Soils for Orchard Fruit.

"Pears succeed on soils heavier than that on which any other fruit grows with success," says Professor C. I. Lewis, horticulturist at O. A. C. "Apples do well on a wide range of soils, reaching from the clay loams on the one hand to silt loams and sandy soils on the other. Prunes seem to do well on any soil that is well drained, and red hill lands have in certain sections been well utilized in prune production. Peaches require either silt loam or very well drained clay loam, although they succeed well on well watered sandy loams. Cherries flourish on the lighter clay loams. Nuts may be profitably grown on any soil that is deep and well drained."

A pair of rare and beautiful German game birds known as "auerhahns," has been placed in the O. A. C. museum by Mrs. Sarah K. Newell, of Roseburg, daughter of Honorable D. S. K. Bulck, formerly Consul to Germany, who says the birds were killed by her father in the Sonneberg forest in 1893. They are a species of woodcock, and the aristocrats of game birds.

Absolutely Free

A beautiful 42-piece set of dishes given to our direct cream shippers this year. Write for particulars.

F. S. TOWNSEND CREAMERY CO.
P. O. Box 235, Portland, Or.
Creamery E. Seventh and Everett Sts.