

COUNTY AGENTS STUDY EXPERIMENTS ON GRAIN AT EXPERIMENT STATION

Harry G. Avery, county agent for chaff club which is commonly known here as the Moro Experiment Station, has prepared the following statement regarding the results of the experiments on grain at the Moro and Hood River Experiment Stations taken last week by eastern Oregon county agents:

The following results and conclusions have been reached in grain investigations at the Moro Experiment Station which has been in operation since 1911. Their station is composed of about three hundred acres of land suitable for wheat farming located near the town of Moro in Sherman county. The rainfall in this section over the first four years reported was an average of 11.36 inches. Work at the station has been directed chiefly to testing of varieties, tillage experiments, crop rotations, investigations and fertilizer tests. Some work has also been done in smut control. The following results have been obtained through consistent records of performance during the period since 1911 and practically all of the tests have run from seven to nine years:

Time of Plowing
Over an eight-year test on the Moro Experiment Station, land plowed about April 1st produced an average of 29.1 bushels per acre, land plowed May 1st produced an average of 26.8 bushels per acre, and land plowed June 1st produced an average of 22.7 bushels per acre. Tests have been carried on over seven years on the yield secured from fall plowed land both with moldboard and disc plows and land plowed both wet and dry. All of the land at the station is summer fallowed. Mr. D. E. Stephens, superintendent, concludes that in sections where land must be summer fallowed it should be plowed as near April 1st as possible. Summer fallow land plowed in the spring held more moisture at time of seeding the following fall than land which had been plowed the previous fall and carried over which might be contrary to general impressions. This moisture test was carried over a period of three years.

Holding Moisture by Disking
A three-year's record on the value of disking the summer fallow land to conserve moisture indicated considerable advantage for spring disking before plowing.
Value of Deep Plowing
A test of deep plowing as compared with shallow plowing carried on at the Moro Experiment Station over a period of seven years gave an average yield of 19.3 bushels per acre for deep plowing and 18.7 bushels per acre for shallow plowing. This yield was secured on spring sown grain. Since the deep plowing was carried on with considerable cost, Mr. Stephens concludes that this fraction of a bushel was produced at a loss.
Cultivation of Fallow
The cultivation of the summer fallow land at the Moro Experiment Station has given consistently good results and should be carried on to the extent of keeping the ground free of weeds. Sherman county farmers make a practice of hoeing their fields where weeds are not interfering rather than have any remaining. One harrowing is better than no cultivation and frequent cultivation as much as necessary to control weeds has given an increase of five bushels per acre on early plowed land.

Harrowing Winter Wheat
Contrary to a practice which was very common and which is still carried on in the Grande Ronde Valley, the harrowing of winter wheat has not proven beneficial where records are kept. Mr. Stephens knows of no experiment station in any state where a test has shown an additional yield due to harrowing. The average loss from harrowing wheat has been somewhat over one bushel per acre over an average of seven or eight years. Some Wasco county farmers harrowed their wheat this year, but they did it to thin their stand which they considered too thick and most farmers of the section immediately surrounding the experiment station have abandoned this practice some time ago.

Variety Tests of Winter Wheat
Hybrid 123 and Hybrid 128 both of which have been grown in the Grande Ronde valley have been much better yielding wheat at the Moro station than variety, the common wheat grown here. Turkey Red is the highest yielding wheat at the experiment station but Mr. Stephens advises against its use in the Grande Ronde valley because of the danger of the development of yellow berry, which makes a low grade of wheat. Mr. Stephens states that the Turkey Red is the poorest winter variety grown at the station, having over an average of 26.3 bushels over a period of seven years (as compared with the Hybrid 123 which made 34.6 bushels and Hybrid 128 which made 36.6 bushels). He is developing a new Hybrid which he hopes will be better than either of the other two the chief characteristics of which is a freedom from shattering.

Spring Wheat Variety Tests
In the spring wheat variety tests at the Moro station, conducted over the period of nine years, the results produced a very light crop of berries, the bloom dropping off. It is thought that perhaps the heavy blossoming of the trees in so much of the food that it is unable to develop the fruit. In accordance with this idea, an experiment was begun this year in which perhaps three-fourths of the bloom on each tree were picked off. At the present time the trees so handled seem to have a much heavier crop than any others. This test will be carried over a number of years before any definite conclusions are reached.
Test of Strawberries
A test of strawberry varieties is being carried on to try to secure a better yielding berry than the Clark Seedling, also known as the Hood River berry. A large number of varieties have been under test for some time, but so far the berry has been secured which is as valuable as the Clark Seedling, although a number have been found which give a considerably greater yield. A new variety to be supplied, keeping quality and combining size with the increased yield before it will prove of any advantage over the Clark Seedling.

Wheat
Mr. Stephens, of the Moro Experiment Station, considers the proper time for sowing winter wheat is from September 28th to October 20th. The later the wheat was sown the lesser yield was secured. Considering the rate of sowing, the application of five to eight pecks to the acre made practically no difference in the yield. The heavier seeding is much practiced in Sherman county, but it is resorted to as a means of controlling weeds rather than because of any advantage in securing greater yields.
Smut Control
The formaldehyde treatment for grain smut control is recommended by the Moro Experiment Station above the blue stone treatment both because of easier handling and because of little danger to the seed. Wheat treated with formaldehyde should be planted as soon as possible after treating, allowing a little time for the seed to dry out, but not allowing it to get entirely dry. Mr. Stephens has developed several wheats in the nurseries which have been tested at several experiment stations and all are immune to smut. He is now breeding these and has confidence that a few years will see the development of good yielding varieties which are immune from smut. This in itself would save wheat farmers millions of dollars in the United States.
Rotation of Crops
Rotation of wheat with other crops such as peas, corn, potatoes, etc., has been carried on at the experiment station since its establishment. Under present conditions none of these crops will return a yield sufficient to pay for the extra labor involved and any of them grown have been at the expense of the following crop of wheat. The yield in every case was lessened from nine to thirteen bushels in the case of winter wheat. Spring wheat gave a better yield in the rotation as compared with summer fallow land, but the yield of the rotation crop was not sufficient to justify the extra work.
HOOD RIVER HORTICULTURAL EXPERIMENT STATION WORK
Fertilizing of Strawberries
The Hood River station has conducted tests for several years on the fertilization of strawberries. Material increases in yields have been received from supplying artificial fertilizers. The best results obtained were secured from the application of 440 pounds of Nitrate of Soda applied not on the plants, but near the row. This was applied one-half in the early spring and one-half at blossoming time. The same amount applied all at one time in the early spring gave the next best yield. There seemed to be a tendency for the use of Nitrate to develop softer berries. Professor Brown of the Hood River station recommends that a mixture of fertilizer be used as a check on the Nitrate when testing out Nitrate in a new section. Some growers have been unsuccessful in growing cherries due to a failure of pollination. This can best be supplied in the above section by drawing a few individuals of the Long Stem Waterhouse or the Abundance varieties. The Long Stem Waterhouse cherries will sell commercially as a Royal Ann and both varieties find a market. The effect of growing these varieties has meant success to some districts which formerly were unable to secure crops.
The necessity for fertilization of orchards is very clearly seen in the Hood River section. Professor Brown recommends that trees be clean cultivated until they are well established after which alfalfa may safely be grown as a cover crop where the orchard is under irrigation. Nitrate of Soda has given good results applied at the rate of five pounds per tree. The general practice in the Hood River section at the present time is to apply either Nitrate or a complete fertilizer in test plots on various orchards. This is followed up on the land as a whole wherever the increased results are large enough. Fertilizers have returned a considerable profit when applied to both clean cultivated orchards and orchards in which a cover crop was being grown.
An interesting experiment is being carried on with the D'Arbois pear to determine the method of producing a heavier set of fruit. Trees bloom very profusely, but frequently

test for some time, but so far the berry has been secured which is as valuable as the Clark Seedling, although a number have been found which give a considerably greater yield. A new variety to be supplied, keeping quality and combining size with the increased yield before it will prove of any advantage over the Clark Seedling.
Isn't She the Cutest?
Woman, Writer—A festive touch may be imparted to rice confection by holding a fair in the heart of each—Boston Transcript.
Liberality.
Liberality consists less in giving much than in giving at the right moment—La Bruyere.

Did You Know That Our Auto PAINT SHOP

IS NOW TAKEN CARE OF BY GEORGE FAGER, WHO HAS CLOSED HIS FORMER PLACE OF BUSINESS.

BRING YOUR CAR IN AND GET AN ESTIMATE ON MAKING A NEW MACHINE OF IT.

Hilton's Garage

We Can Make Your Watch Keep Time
ALL WATCH WORK DONE
BY EXPERTS
BRING YOUR WATCH IN AND LET US GIVE YOU A PRICE TO PUT IT IN PERFECT SHAPE
WE WILL HAVE YOU MONEY
SIEGRIST CO.
Largest Jewelry Store in Eastern Oregon

STANDARD LAUNDRY CO.
THE SUMMER FLANNELS
DRY CLEAN RIGHT
We give these materials special care—no shrinking or color-changing—try us.
Phone MAIN 56

There are Three Exclusive Features in
"La Camille"
FRONT LACED CORSETS.
VENTILO BACK, the VENTILO FRONT SHIELD and LOX-IT NON-TILTING CLASP.
—Judged by Fit, Workmanship, Wearing Qualities and Style, LA CAMILLE is always found the CORSET of greatest value. A complete line of new models now on hand.
MRS. ROBERT PATTON, Corseteer
—Phone Black 81
Residence 1812 Fourth St., First Block West of P. O.

WOULD HE?
"Yes, Doc, if I told you I didn't have the money for an operation, would you still think I needed one?"
—London Evening News.

SYNOPSIS OF THE ANNUAL STATEMENT OF THE KANSAS CITY LIFE INSURANCE COMPANY
of Kansas City, in the state of Missouri, on the 31st day of December, 1920, made to the Insurance Commissioner of the State of Oregon, pursuant to law.
Capital
Amount of capital stock paid up \$ 500,000.00
Reserve fund for policyholders' interest, dividends and profits 6,834,276.26
Total premium income for the year 879,828.59
Premiums from other sources during the year 119,250.25
Total income 999,078.84
Disbursements:
Paid for losses, endorsements, claims, and surrenders 1,371,654.28
Interest paid to policyholders 565,228.23
Dividends paid to policyholders 37,000.00
Amount paid for the year 1,933,882.51
Taxes, licenses and fees paid 2,154,055.11
Total disbursements 4,017,165.82
Total assets 4,197,127.72
Assets
Value of real estate owned 142,472.64
Value of stocks and bonds owned 1,036,324.25
Loans on mortgages and collateral 12,014,848.00
Premium notes on policy 2,241,482.32
Cash in banks and on hand 596,573.90
Not collected and deferred premiums 556,557.74
Interest and rents received 549,610.77
Other assets 18,500.11
Total assets 41,730,444.20
Liabilities
Net reserves 412,210,432.26
Gross claims for losses unpaid 167,576.24
All other liabilities 1,000,231.27
Total liabilities, exclusive of stock of \$200,000 in Oregon for the year 413,788,239.77
Business in Oregon for the year:
Gross premiums received during the year 167,705.83
Premiums and dividends received during the year 2,700.27
Losses paid during the year 21,000.00
KANSAS CITY LIFE INSURANCE COMPANY
J. R. REYNOLDS, President
C. N. SCHAUB, Secretary
Statutory audit and service for service, CHAS. E. GRAHAM, Portland, Oregon.

PROFESSIONAL DIRECTORY

OSTEOPATHIC PHYSICIANS
DR. J. L. INGLE and DR. MARGARET INGLE—Diseases of women and children, a specialty. Office Phone Main 186, Res. Phone Main 478. La Grande National Bank Building.
PHYSICIANS AND SURGEONS
DR. J. L. McPHERSON—Dentist, Suite 4-5, over La Grande National Bank building. Phone: Office, Main 719; residence, Red 2081.
DR. R. J. RUCKMAN, Dentist—Room 14-15 Palmer-Rosch Building, phone Main 76. La Grande, Oregon.
Mrs. M. Williamson, Professor of Practical Clinical Midwifery, 1213 Madison, phone Red 12. 8-18-np
NATURE CURE
DR. A. N. MAYVILLE—Specialist in chronic diseases. Methods, Mechanotherapy and Naturopathy. Skin and blood diseases, nervous diseases, Chronic Headache, Eczema, Sciatica, Appendicitis, Constipation, Bowel Trouble, all kinds of Chronic Diseases successfully treated. Phone Main 803. Room 1, 2, 3, second floor Coolidge Bldg., opposite Star Theatre. Office hours, 10 to 12 a. m.; 1:30 to 5:00 p. m. Consultation free.
ATTORNEYS
COCHRAN & EBERHARD—Geo. T. Cochran and Colon B. Eberhard, Attorneys, La Grande National Bank Building.
R. J. GREEN, Attorney at Law—Practices in all State and Federal Courts. Office La Grande National Bank Building.
R. J. KITCHEN, Attorney at Law—Practice in all Courts. Office rooms 21-22, La Grande National Bank Building, La Grande, Oregon.
CONTRACTORS
D. J. McLELLAN—Registered professional Civil Engineer, surveying and map. Room 13, La Grande National Bank building. Phone Main 51.
ARCHITECTS
C. H. MILLER, Architect—Room 11, La Grande National Bank Building, La Grande, Oregon.

Fraternal Directory

S. P. O. ELKS—La Grande Lodge No. 432. Lodge meets each Thursday evening at 8 o'clock. Home and club privileges cheerfully extended to all brother Elks.
SOLAN SKIFF, Exalted Ruler
F. L. PEARSON, Sec'y.
MODERN WOODMEN OF AMERICA—La Grande Camp No. 1742 meets on the first and third Thursday evenings of each month, in the K. of P. Hall. Visiting brothers welcome.
H. C. BILLS, V. C.
JAKE ROSTOCK, Clerk.
A. F. & A. M.—La Grande Lodge No. 41. A. F. & A. M. holds regular meetings first and third Fridays at 7:30 p. m. Cordial welcome to all Masons.
E. R. GIVE, W. M.
A. C. WILLIAMS, Sec.
U. O. M.—La Grande Lodge No. 155. Meets every Friday night at 8 o'clock in Eagles Hall. Visiting members welcome.
J. A. MURCHISON, W. P.
J. H. HIRSHBELL, Secretary.
WOODMEN OF THE WORLD—La Grande Camp No. 155. Meets every first and third Monday at 8 o'clock. Dues payable at the office of the clerk. Rooms 21-22, La Grande National Bank Bldg.
R. J. KITCHEN, Clerk.
L. O. U. M.—La Grande Lodge No. 432. Meets every Wednesday night at 8 p. m. in Eagles Hall, next to Elks Building, on Wednesday evenings. Visitors always welcome. Dues payable at La Grande Pharmacy and at J. G. Holm's Grocery Store.
D. E. SHANKS, Dic.
J. G. HOLM, Sec.
KNIGHTS OF PYTHIAS—Red Cross Lodge No. 37. Meets every Monday evening in Castle Hall (K. of P. Hall) at 8 p. m. A Pythian welcome to all visiting Knights.
C. W. MOORE, C. C.
C. L. GRAHAM, K. R. S.
WOMAN'S BENEFIT ASSOCIATION of the Macabees, La Grande Lodge No. 27, W. B. of E. Meets first Thursday at 2 p. m. and third Wednesday at 2 p. m. at K. of P. Hall. Visiting sisters welcome.
NORA H. MACKAY, Commander
MARJORIE EATON, Record-Keeper.
O. E. S.—Hope Chapter No. 13, O. E. S. holds stated communication the second and fourth Wednesday of each month. Visiting members cordially welcomed.
HULDA HUMPHREYS, W. M.
FLORENCE BACON, Sec.

Thirteenth Annual Exhibit
of the
UNION LIVE STOCK SHOW ASSOCIATION
June 8, 9 and 10, 1921
Fine Stock Exhibits, Wild West Shows, Horse Racing, and Special Amusements of Various Kinds.
Larger premiums and more special prizes than ever before. Three bands will furnish the music. Band Concerts, Street Carnival and dancing at night.
Ample hotel accommodations in Union's new \$125,000 hotel—the finest in eastern Oregon.
Stockmen should arrange for stall-room early. Judge W. L. Carlisle, one of the best stock judges in America, will judge live stock at the Union Show.
Make no other engagements for June 8, 9 and 10, and come to the Union Live Stock Show.
For any further particulars, address
W. B. Davis, Secretary,
Union, Oregon.

Long Distance Service to the Coast

The summer season at Oregon coast resorts will soon be here. It will soon be time to move the family to the cottage on the ocean beach. Long-distance lines of the Pacific Telephone and Telegraph Company reach all coast points—Seaside, Gearhart, Long Beach, Sea View, Cannon Beach, Newport, Tillamook, Rockaway Beach.
Why not reserve your cottage by long distance—make your arrangements for the summer season by using Pacific Long Distance service. It will save you a trip to the beach and will be quicker and just as satisfactory.
Then plan to keep in touch with the family during the summer by telephone. It is better than writing a letter and more satisfactory. Every effort is made to expedite calls by day or night. You will find the service quick, efficient and courteous.
Ask for Pacific Long Distance.

The Pacific Telephone And Telegraph Company
