

Rotation Plan to Foil Chinch Bugs

Locate Legume Crops So as to Isolate Small Grain, Corn and Grass.

By A. L. Lane, Asst. Chief of Soil Experiment Field, University of Illinois—WNU Service.

Threatened with the heaviest chinch bug infestation ever recorded in the history of the state, Illinois farmers should consider revising their rotations as a means of partially protecting their 1934 corn crop.

By this is meant the location of legume crops in the rotation so as to isolate the small grain, corn and grass fields where the chinch bugs are prone to breed and feed. It has been proved that legumes are distasteful to this insect pest, and separating the bug's "favorite" crops with legumes is suggested as one of several control measures. Furthermore, the addition of one or more legumes will improve the fertility of the land on which they are grown.

A five-year rotation supplying this dual purpose may consist of corn, oats, clover, corn and soybeans. In this case, not only is 60 per cent of the farm in legumes, but 80 per cent is in cash crops. One crop of corn is completely set off between two legumes, which in many cases will prevent serious damage from chinch bugs. The fact that the oats field will have a spring seeding of clover may deter rapid multiplication of the insects in this crop. If the clover gets a strong, early start.

When wheat is grown with a maximum of corn, a rotation of corn, corn, beans, wheat and clover can be planned. An important feature of this combination is that the small grain crop, which is always the early breeding ground of the chinch bug, is isolated from the corn crops by a legume on either side. With a good, growing spring seeding of clover in the wheat, this crop is not susceptible to the bugs. Where a four-year rotation of corn, oats, wheat and clover is followed, a protective division would be to substitute soybeans for the oats. This would carry the rotation advantages of the wheat rotation above and, with a good stand of clover in the wheat, would keep 75 per cent of the land in legumes throughout the growing season.

New Strains of Alfalfa Culture Being Developed

Three strains of alfalfa nodule bacteria, capable of fixing more nitrogen and producing a somewhat greener color in the leaves of the alfalfa plant, have been added to the stock from which the Wisconsin college of agriculture is preparing its alfalfa seed cultures.

These strains, recorded in the laboratory as pedigree numbers 107-1, 109, and 113, were carefully tested in greenhouse trials last winter when they proved to fix more nitrogen and to stimulate the production of higher yields of hay than most other strains tested.

Inoculation tests in these greenhouses show that while most root nodule cultures found in the soil of fields which have grown legumes are helpful to the plant, some are less beneficial or even actually harmful. Before any strain of inoculating bacteria is used for the preparation of culture in the laboratory of the university agricultural college, it must first have proved to be beneficial as shown by greenhouse and field tests.

Fertilizers in Ohio

Fertilizers used by Ohio farmers in 1933 amounted to 208,800 tons, according to the annual report of fertilizer sales in the state, released by the agronomy department of the Ohio State university. This is 23.4 per cent more fertilizer than was used in 1932, most of the gain occurring in the fall when fertilizers were purchased principally for wheat. The fall tonnage was 40 per cent above that of the previous year, according to the Ohio Farmer.

Wood for Fuel

Many farms have a good woodlot that provides an ample supply of fuel for winter needs. Some of these are being destroyed through improper cutting. Trees which are defective, trees which overtop valuable young growth and softwood trees which have little value for lumber should be used for fuel. A crooked stick burns as good as a straight one and good trees should be left for timber and should be given every possible chance to develop.

Traveling Farm School

Because of the success of the tour of the Better Farming train, which has ended in Australia, the traveling exhibition and school will make regular journeys hereafter. Crowds gathered at every stopping place, and the lectures were well attended. The train consisted of 18 cars, two being equipped for talks and lectures. The passengers comprised all animals and birds known to farming, together with experts in every branch of the industry.

Would Reach to Moon

Postage stamps printed at the bureau of engraving and printing in a single average year, if laid end to end, would reach from the earth to the moon, according to an authority. The line would exceed 200,000 miles, or eight times the circumference of the globe, and 25 different colors would be represented in the chain. Stacked in sheets of 100 stamps each, the annual stamp production would make 92 piles as high as the Washington monument. Eight hundred tons of paper, 430 tons of ink and 240 tons of gum are used in an ordinary 12-month period.

Ninety-nine per cent of the U. S. home owners bought their property on credit.

Schipperke, One-Master Dog and Proud of Honor

Nautically speaking, the "skipper" is the captain of the ship. For more than a century, these words have fallen upon the small erect, triangular ears of the 12-pound, jet black tailless dog that watched over the cargo and killed the rats on the canal barges plying their way through Belgium and Holland, according to a writer in the Los Angeles Times.

Taking his title "Schipperke" (which is Flemish for "Little Skipper") seriously, he seems to have inherited its full significance. Tolerant of other members of his household, he instinctively assumes the ownership of but one master, whose protection he deems a special duty, watching over him with an air of guardianship.

His disposition, while most affectionate, is tinged with jealousy, particularly of other animals. An excellent and faithful watchdog, he does not readily make friends with strangers. Very active and always on the alert, he is very courageous in the defense of objects left in his charge. He is particularly gentle with children.

Characteristic of his cat-like inquisitiveness and lively interest in everything that goes on about him. At the end of a moderately long, fine but not weak muzzle, is a black nose that is poked into everything. Each strange object or slightest noise that arouses his interest must be thoroughly investigated for its cause. Moving about with the agility of a cat, he seldom makes a false move. Sure-footed, he never upsets objects, and when he hops, he has a curious way of catching up his hind legs. His excitement is expressed by sharp barks (dubbed in Belgium, the "burglar alarm"), and a bristling mane.

Use of Arch Dates Back to Days of the Romans

No one knows who invented or first built an arch, but according to Sir John Gardner Wilkinson, the Egyptians and Assyrians were acquainted with the principles of the arch and used it in their buildings. The Greeks also must have had a knowledge of it, although it does not occur in any of their surviving structures, observes a writer in the Washington Star.

The Romans probably derived their acquaintance with it from the Etruscans, and it is to the former that the nations of modern Europe are indebted for the traditions of arch construction.

It is said that the oldest arch in the world probably is that in the Cloaca Maxima at Rome, built about 600 B. C.

But Chinese bridges of great antiquity were built with arches, some of them of great beauty.

Triumphal arches were a prominent feature of Roman architecture. Of the type are the arch of Titus, the arch of Constantine, the arch of Septimius Severus, and the arch of Trajan, not to mention many of lesser note scattered over France, Spain, Austria and every part of Italy.

Early Prima Donna

According to John Tasker Howard's book, "Our American Music," a history to be compared with the furor that Jenny Lind created in the 1850s. Her first concert was given at Castle Garden, New York city, on September 11, 1850. There were other famous singers, Maria Malabran, daughter of the Manuel Garcia who gave New York its first taste of Italian opera, had been in this country with her father in 1825 and had stayed two years. Henriette Sontag had made a great success in opera and a sensation in concert. She was in America when Jenny Lind was here, and she went to Mexico City in 1854, where she died of cholera. Earlier even these famous singers, Mrs. Oldmixon and Miss Broadhurst were famous on the concert stage in the United States as early as 1795.

O for Short

The abbreviations used for some of the states in America are interesting. The most geological is Me. (Maine). The most religious is Mass. (Massachusetts). The most Asiatic is Ind. (Indiana). The most maidenly is Miss. (Mississippi). The best in time of flood is Ark. (Arkansas). The state of exclamation is La. (Louisiana). The most astonishing is O. (Ohio). The most unhealthy is Ill. (Illinois). The state to cure the unhealthy is Md. (Maryland). The clean state is Wash. (Washington). The state where failure is unknown is Kan. (Kansas).—Tut-Bits Magazine.

Boston Peace Jubilee

Patrick Sarsfield Gilmore, who had been a bandmaster in the United States army, organized two enormous music festivals in Boston called "Peace Jubilees" in 1859 and 1872. The first had an orchestra of 1,000 and a chorus of 10,000; the second an orchestra of 2,000 and a chorus of 20,000. A large organ, chimes of bells and the detonations of the artillery were added to the orchestral effects. Soon after the second jubilee, Gilmore moved to New York and organized a brass band there which became widely known through its concert tours.

The Scottie Dog

The Scottie is one of the many breeds which shows the result of painstaking care in its gradual development in shape, size and coat texture down through the years. There was a bit of controversy over this little fellow back some years ago. One belief holds that the Scottie has come from the hard-haired Highland dog of Scotland, which has developed to be the Cairn terrier.

Ultraviolet Rays and Marble. Ultraviolet rays enable the art connoisseur to distinguish ancient marble from marble fresh cut and from ancient marble reshaped at a later date.

Velvet Beans Are Good for Forage

Dairy Farmer Finds They Produce Well Planted With Corn Crop.

By Elmer C. Blair, Agronomist North Carolina State College of Agriculture—WNU Service.

Velvet beans planted with corn is an excellent winter dairy forage. This is the experience of a North Carolina farmer who operates a small dairy. Last year he planted 25 acres of rather light, sandy land to corn and velvet beans. The dry weather of the summer damaged the corn but the summer drought growth, in August, the tropical storm blew the corn down so that by fall the bean growth had covered the corn entirely. Little grain was harvested.

But the farmer turned this apparent misfortune into good account. About November 1 he turned his 22 cows into the field and the beans with what was left of the corn provided sufficient feed to keep the cows in heavy milk flow throughout the winter. No other feed was given the animals except during a few cold days when they could not be turned into an open field. The cows were kept on the beans until about March 15, without other feed except that mentioned. On March 15 he began feeding hay.

With the extra hay the cows were kept on the bean field until time for spring plowing.

At that time there was still a large quantity of bean vines to be turned under.

As a result of this experience he says that velvet beans furnish a cheap and satisfactory forage. He expects to have about 25 acres available for his cows every winter now.

Urges Liberal Feeding for the Sows With Pigs

Producing milk for hungry pigs is the hardest work the brood sow does, as shown by her loss in weight of from 25 to 40 pounds, says E. F. Ferrin, swine husbandman, University of Minnesota farm. Feeds for milk production need to be high in protein and minerals because of the large amount of these nutrients in milk, but corn also is important for its high energy value. Corn is usually the cheapest grain and should be fed liberally, if care is used to supply other feeds furnishing protein and minerals.

Pasture is one of the best stimulants for milk production. Before the grazing season begins, green leafy alfalfa hay is a good substitute. Skim milk has always been a favorite for the sow and growing pigs, especially when combined with shorts or middlings as slop. Butter milk has the same feeding value as skim milk, but day to day changes in the acidity of the buttermilk will sour the pigs, especially in damp, rainy weather. Tankage and oilmeal are needed unless considerable milk is fed.

Self-feeding the sow and pigs is both logical and economical. Self-feeding can be begun when the pigs are about three weeks old, if they are in lots or on pasture where they get exercise. Shelled corn and wheat middlings are the common feeds, plus tankage or a protein mixture.

Seed Heat Sterilized

Experiments carried on last year have proven the feasibility of sterilizing seed by a hot-water treatment which kills many of the disease germs of the plant yet leaves the seed unaffected so far as germination is concerned. The tests were carried on with cabbage seed with water at a temperature of 125 degrees used. The seed was held submerged in the water for 25 minutes and found to be freed, as a result, of many of the more common ills of the cabbage.

Legume Seed Shortage

With over 30,000,000 acres of cotton, wheat, corn, rice and tobacco land either taken out or to be taken out of production this year, it is evident that a tremendous demand for legume seed will develop next spring. As a matter of fact, it will be impossible for all this idle land to be seeded to legumes and hay crops, since our estimated available seed supply is not large enough. This will undoubtedly mean a material rise in seed prices. —Wallaces' Farmer.

In the Windrows

Hybrid corns are practically free of barren stalks.

A farm census will be taken in the United States next November.

Shelterbelts of forest trees for the home garden are finding favor in dry farming areas of the West.

From 79 to 85 per cent of the populations of China are farmers, yet not enough food is produced to support the population of the country.

Nearly 13,000 acres of farm land, owned by Indians of the Wlowa reservation in Oklahoma, have been terraced in a soil conservation program.

Learn Prayers From Birds

In India the hill mynas are particularly in evidence in the vicinity of religious temples. Nesting, as they do frequently, in the eaves of these temples, they sometimes learn to repeat the prayers of the worshippers and it is even said that some illiterate natives learn to say their prayers by listening to those rendered by the mynas.

Popular Old Proverb

The proverb, "Blood is thicker than water" is frequently ascribed to Sir Walter Scott on account of his use of it in "Guy Rannering," but it was common in the Seventeenth century and Scott probably borrowed it.

Nearby News

LORENE

Oct. 30.—Herbert M. Doty, former resident, died at his home near Eugene Friday after a lingering illness. He was born in Polk county October 6, 1866. He leaves his widow, a son Maxwell; his mother, Mrs. Sarah Doty of Eugene; three sisters and two brothers. The funeral was held at Eugene Monday with interment in the L. O. O. F. cemetery here.

C. F. Hyde, democratic candidate for state legislature, spoke in favor of the 20-mill tax limitation amendment at the grand jury Thursday night. Dean James H. Gilbert of the U. of O. spoke against the amendment. The three little Hyde girls did some tumbling acts, refreshments were served by the H. E. C.

E. S. Addison, John and Harry Skelton and Charles Mitchell spent several days last week at Siltcoos lake hunting. The Lorane P. T. A. will hold their regular monthly meeting at the high school Thursday. Prof. Grunpacher of the university will speak and a soloist from Eugene will sing.

Mrs. William Moore entertained Thursday afternoon with a shower for Miss John White, nee Marjorie Schneider. Twenty-eight women were present.

Mrs. Wilma Garoutte and baby on London are visiting her parents, Mr. and Mrs. A. H. Addison.

The high school student body held a carnival at the high school Friday night. The program consisted of singing by the girls' chorus and a play, "Not Such a Goose." Those in the play were Edna Mitchell, Walter Cowan, Paul Edwards, Thelma Herend and Ruth Galer. Each class had two booths.

Miss Velma Davis of Cottage Grove has been visiting her sister, Ruby and grandmother, Mrs. C. J. Davis.

The ladies' aid of the Christian church will hold a bazaar and chicken dinner at the church Tuesday, November 6.

Mrs. McDonald of Portland spent the week end with a daughter, Miss Ruth, at the Foster home.

MOUNT VIEW.

Oct. 30.—Mr. and Mrs. Henry Snauser are the parents of a son born Tuesday, October 23. The infant has been named Dean James. Mrs. Snauser's sister, Mrs. Curtis Annand, is at the Snauser home caring for Mrs. Snauser and the baby.

John Arne of the Rujada CCC camp was a visitor over the week end at the home of an uncle, Claude Arne.

Mrs. J. A. Schneider attended a shower Thursday of last week at the home of Mrs. William Moore, Lorane, honoring Mrs. John White, formerly Marjorie Schneider.

Mr. and Mrs. O. J. Shirley and family moved Saturday to Sutherlin, where they have property. They were dinner guests of Mr. and Mrs. C. A. King Saturday noon before leaving for Sutherlin.

Mr. and Mrs. Guy Smith of Empire were visitors the first of the week at the home of an Arthur. Claude Arne, Ralph Snauser and John Arne went on a fishing trip to Scottsburg Saturday and returned Sunday.

Mr. and Mrs. J. A. Schneider attended the funeral of Herbert Doty at Lorane Monday. Mr. Doty was a former neighbor of the Schneiders when they lived at Lorane.

Mrs. Roy Hands and son returned last week from a visit with Mrs. Hands' mother, Mrs. G. Sherman, at Reedsport. Mrs. Sherman and Miss Ada Sherman accompanied her home and remained until Sunday.

Mrs. Amanda Sears visited Sunday in Cottage Grove with Mrs. Kate Sears, who accompanied her home and visited until Monday evening.

Mr. and Mrs. Louis Layng and children of Gowdsville visited Sunday with Mrs. Layng's parents, Mr. and Mrs. D. L. Miller.

HEBRON.

Oct. 29.—Jess Culver and Carl Kebelbeck returned Tuesday evening from Merrill, where they were employed in the potato harvest.

E. J. Edwards, accompanied by Eleanor and Eunice Pickett of

SEMI-ANNUAL REPORT AND FINANCIAL STATEMENT OF THE CITY OF COTTAGE GROVE, OREGON, FROM JANUARY 1, 1934, TO JUNE 30, 1934, INCLUSIVE

General Fund	
Balance December 31, 1933.	\$1,671.47
Receipts: Taxes.	5,964.63
Recorder.	757.42
Sundry.	212.32
Disbursements: Warrants paid.	\$8,059.50
Warrant interest.	189.52
Balance June 30, 1934.	\$6,335.84

Water Fund	
Balance December 31, 1933.	\$ 533.28
Receipts: Recorder.	\$1,233.75
Disbursements: Warrants paid.	\$6,617.81
Warrant interest.	10.09
Bonds.	2,000.00
Bond interest.	27.10
Balance June 30, 1934.	\$2,203.03

Sewer Fund	
Balance December 31, 1933.	\$ 19.61
Receipts: Taxes.	1,829.43
Recorder.	10.57
Disbursements: Warrants paid.	\$1,453.39
Warrant interest.	.14
Balance June 30, 1934.	\$1,859.61

Sundry Sewer Fund	
Balance December 31, 1933.	\$ 616.35
Receipts: Principal assessments paid.	113.62
Interest assessments paid.	23.13
Disbursements:	
Balance June 30, 1934.	\$ 753.10

Special Fund	
Receipts: Recorder.	\$ 210.00
Disbursements: Warrants paid.	\$ 210.00
Balance June 30, 1934.	\$ 210.00

Public Library	
Balance December 31, 1933.	nil
Receipts: Taxes.	212.86
Disbursements: Warrants paid.	212.86
Balance June 30, 1934.	nil

Park Fund	
Balance December 31, 1933.	nil
Receipts: Special taxes.	146.35
Disbursements:	nil
Balance June 30, 1934.	146.35

Bond and Warrant Interest Fund	
Balance December 31, 1933.	\$ 230.26
Receipts: Taxes.	6,464.53
Sundry.	243.85
Disbursements: Warrants paid.	\$6,539.55
Warrant interest.	241.41
Balance June 30, 1934.	137.18

McKenzie Bridge, spent the week end at his home.

Mrs. George Kebelbeck spent Wednesday taking the school census.

Miss Annabelle Gilchrist of Meadowview spent the week end at her home.

Leonard Gilchrist left Thursday morning for San Francisco to enter the S. P. hospital.

Eleanor White spent the week end at her home.

Mrs. Tom Williams left Friday for Vancouver, Wash., to spend a week with her husband and brother.

The young people of the church held a candy pull Saturday night at George Clarke's on Cedar creek.

E. M. Patterson visited Sunday at the Ed Mechem home.

The George Kebelbeck family spent Sunday with the Harley team family at Lorane.

Philip Hersey returned Monday from Grants Pass, where he had been working for three months.

Hatch in Cottage Grove several days last week.

Mr. and Mrs. F. C. Fuhrer and Mrs. Tison spent the past week in San Francisco with Miss Hazel Fuhrer.

Mr. and Mrs. George Gilchrist and son Richard of Dunsmuir, Cal., came Monday to visit with Mr. Gilchrist's mother, Mrs. Jessie Gilchrist.

Mrs. Truman Clark visited one day last week in Eugene with Mrs. Heddo.

Blow Up Like Balloons. Puffer fish blow themselves up like balloons when frightened.

Always Give The Home Print Shop First Chance

Steel and Wood Filing Cabinets and Transfer Cases

The famous Macey Line

The Sentinel

REPORT OF CONDITION OF THE FIRST NATIONAL BANK OF COTTAGE GROVE, IN THE STATE OF OREGON, AT THE CLOSE OF BUSINESS ON OCTOBER 17, 1934

ASSETS

1. Loans and discounts. \$136,538.15

2. Overdrafts. 4.31

3. United States Government obligations, direct and/or fully guaranteed. 178,012.41

4. Other bonds, stocks, and securities. 128,862.93

5. Banking house, \$10,000.00; furniture and fixtures, \$8,955.00. 18,955.00

6. Real estate owned other than banking house. 4,763.36

7. Reserve with Federal Reserve bank. 38,066.73

8. Cash in vault and balances with other banks. 182,624.61

9. Redemption fund with U. S. Treasurer and due from U. S. Treasurer. 1,875.96

10. Other assets. 2,231.71

Total assets. \$691,534.15

LIABILITIES

11. Demand deposits, except United States Government deposits, public funds, and deposits of other banks. \$314,858.84

12. Time deposits, except postal savings, public funds, and deposits of other banks. 229,966.11

13. Public funds of states, counties, school districts, or other subdivisions or municipalities. 79,546.71

14. United States Government and postal savings deposits. 4,309.49

15. Deposits of other banks, including certified and cashier's checks outstanding. 4,083.25

Total of items 11 to 15: \$582,664.40

(a) Secured by pledge of loans and/or investments \$ 5,895.28

(b) Not secured by pledge of loans and/or investments. 575,969.12

(c) Total deposits. \$582,664.40

16. Capital account: Common stock, 500 shares par \$100 per share. \$50,000.00

Surplus. 10,000.00

Undivided profits—net. 11,369.75

Total liabilities. \$691,534.15

Memorandum: Loans and Investments Pledged to Secure Liabilities:

17. United States Government obligations, direct and/or fully guaranteed. 37,500.00

18. Other bonds, stocks and securities. 7,500.00

19. Total pledged (excluding rediscounts). 45,000.00

20. Pledged:

(a) Against circulating notes outstanding. 37,500.00

(b) Against public funds of states, counties, school districts, or other subdivisions or municipalities. 7,500.00

(c) Total pledged. 45,000.00

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