

## APHIS AND LADY BUGS

Pests Not Exterminated by Bugs May Be Destroyed by Emulsion Sprays.

There is somewhat of a misconception in the minds of many of the ranches of the valley regarding the lady bug beetle and its effect upon the aphis, says W. E. Packard. The State Horticultural Board has collected millions of these insects in the Northern counties of this State, and has sent some 13,000,000 to this valley with the hopes of introducing them in sufficient numbers so that they may propagate here and increase enough so that in a short time they would control the aphis. The number imported, although large, can not begin to affect the aphis already here. These may increase sufficiently to be of value in the year to come, for there is no doubt but the lady bug beetle is a bad enemy to the aphis.

Probably a good many of the lady bugs imported will die before breeding, because of the sudden change in climate, and only those hardy enough to stand the change will thrive and gradually increase. At present however, a rancher who has melons, any garden stuff, or ornamental plants should not depend upon the lady bugs, if he wants to save his present crop.

There are other insects besides the lady bug, such as certain syrphid fly, lava, and aphid lion or larvae of lace wing and hemerobius flies, which live on the aphis. The fly parasites can be found clinging to the stems of the plants in any part of the valley. The remarkable fecundity of the aphis, however seems to insure them against extermination by these insect enemies, for although vast numbers may be killed, so many are hatched that they still thrive. Slight changes in temperature or humidity may cause the aphis to disappear although the effect does not always seem to be the same. Ordinarily the females lay eggs, which sometime hatch before leaving the body of the mother and which develop to maturity in about a fortnight and are then ready to continue egg laying. Some of these are winged, and some are not, the condition of food, temperature and general development seeming to determine this. The winged forms may fly away and cause a sudden disappearance of the pest. In the fall the female lays one fertilized egg which remains over winter.

Many species will start on one kind of plant, and then develop a winged generation which appears in the air in great numbers and flies to other host plants, from which they may return in the fall to the original host to lay the fertilized eggs for next year's crops. The apple aphis, for example, may appear on trees in the spring, migrate to grasses in the summer, and return to the apples in autumn. A similar migration is probably such as happened here last year, when the valley aphis disappeared. It is quite likely that this will be repeated this year with the aphis now found on the melons. Whether this will happen or not, spraying for the aphis now found on the melons and garden truck is the only safe way to insure a crop. These soft bodied insects are very sensitive to the right spray, which can therefore be applied in rather dilute form. Spraying is always more or less expensive, but with a valuable crop it most certainly pays.

It would be no fair test to put one man to thirty or forty acres, as is often done. The work must be done thoroughly to get any results of value. One man to ten or fifteen acres will have his hands full. The plants should be sprayed over several times until the aphis disappear. Badly infested vines should be burned and the ground around sprayed and tramped to kill any young that may be found there. A five gallon spray pump that can be carried on the back is a good kind, as it gives a constant pressure and throws the spray in a fine mist, which reaches to the more hidden parts of the leaves. A right angle nozzle should be used, as it can be held so that the spray will reach under parts of the leaves.

The aphis are killed by contact sprays, not by poison. Their soft bodies are easily burned or the insect smothered. Sulphur, lime or ashes, which some are using here, does no good. Kerosene emulsion does good work, but a perfect emulsion is hard to make and if the oil separates it will burn the leaves. The oil rises to the surface and when the spray in the tank gets low the purer kerosene which comes out will kill the plants. A prepared emulsion is sold by all large seed companies in Los Angeles, but the same trouble is encountered there. The hard water of the valley is what causes the trouble. Soft water makes perfect emulsions.

If care is taken however, in mixing to get as perfect an emulsion as possible and in spraying to stop before the purer kerosene, some of which is almost sure to rise to the top, is reached, good results can be obtained. It costs less than tobacco spray and

is more effective than the soap solution.

The following are the sprays recommended: Tobacco spray, four pounds of tobacco to 50 gallons of water. The tobacco should be put in cans containing water enough to soak it thoroughly. This is boiled for two hours until all the strength of the tobacco is boiled out. The solution is then drained through a perforated pan, and the solution can be diluted to 50 or 60 gallons, which under ordinary conditions, should be sufficient to cover 10 acres for one spraying if plants are not too large. Tobacco can be secured for 47 cents a pound. Soap Solution: Soap one pound, and water ten to twelve gallons. If soft soap is used one quart of the soft soap equals one fourth pound of hard soap.

Emulsion: (Hard to prepare well) Soap one-half pound, kerosene one gallon, and water 20 to 25 gallons, dissolve soap in one gallon of hot water, add one gallon of kerosene, when the water is still boiling hot, and stir thoroughly with the spray pump by turning nozzle back into the mixture, and dilute to 20 or 25 gallons. Pure kerosene must not touch plants.

## BREAD FROM COTTON SEED

New Flour Tested in Texas and Declared to be Better Than Wheat Flour.

The demand for cotton seed flour is spreading so rapidly that the manufacturers of cotton seed products in Texas and other Southern States are preparing to supply the new food product on a large scale.

Cotton seed flour is no more than very choice cotton seed meal finely ground and carefully bolted, and there are no secrets or mysteries either in its manufacture or use. In breads requiring to be kneaded, the cotton seed flour, being practically without gluten, a sufficient quantity of wheat flour, say 30 to 40 per cent., will have to be added to make the dough stick together. In breads, cakes and puddings, where the dough is poured and not kneaded, the cotton seed flour should be used alone. Anything that can be made of wheat flour can be made better of cotton seed flour or its mixture.

Cotton seed flour contains 54 per cent. of protein and 7.17 per cent. of fat. It contains practically no starch. It is claimed by dietetic authorities who have been conducting experiments with the new flour recently that its high protein and fat and absence of starch makes it a valuable remedy in many diabetic diseases and gastric disturbances. The statement is made that cotton seed flour has a nutritive value more than three times that of wheat flour, nearly three times that of lean round of beef as bought in the markets and from three to thirty times that of many of the best known and most frequently used articles of food. The flavor of the bread made from the new flour is very appetizing.

## EGGS ARE PLENTIFUL

Never before have eggs, home produced, been so plentiful in Imperial Valley. The Valley Department Store besides using a large quantity of eggs to supply town customers, is sending out from twenty-five to thirty cases per week to the Los Angeles and Arizona markets. Each case holds thirty dozen eggs.

## NOTICE

Notice is hereby given that all cotton seed for Imperial Valley must be consigned to the County Board of Horticulture at El Centro, there to be examined, treated and held, until they are satisfied that the seed contains no insect infection. This notice is given under the State quarantine order of April 23, 1908.

W. E. WILSIE,  
County Horticultural Commissioner.

## OILING ESPEE MAIN LINE

During the past week a work train has been oiling the main line road bed of the Southern Pacific from Yuma to Imperial Junction. The oil is spread by a sprinkler attached to a tank car and about twelve miles of road per day can be treated. The load of one of the largest oil cars, from 12,000 to 13,000 gallons, is required to oil three miles of track.

## HOW TO OBTAIN CREDIT

Merchants obtain and build up their credit:

1st. By giving satisfactory references as to character responsibility, etc., together with a statement of their resources and liabilities.

2nd. By using credit privileges conservatively.

3rd. By meeting all obligations promptly and regularly.

ALL MERCHANTS are anxious for business with customers who can and will comply with similar credit requirements.

YOU CAN ESTABLISH OR STRENGTHEN YOUR CREDIT ANYWHERE IN THE VALLEY by applying to the secretary of the Business Men's Protective Association, he will gladly assist you in any way possible.

A thorough knowledge of conditions is a safe guard to the consumer as well as to the merchant. Deceit and lack of knowledge lead to distrust and distrust to disaster.

If you want credit anywhere in the valley consult

W. R. STEVENSON, Sec'y.  
Imperial, Calif.

Serial No. 04885  
Contest No. 1182  
CONTEST NOTICE

Department of the Interior, United States Land Office, Los Angeles, California, March 2, 1910.

A sufficient contest affidavit having been filed in this office by Joseph J. Chappell, contestant, against Desert Land Entry No. 4054, Serial No. 04885, made September 20, 1907, for NE quarter Section 10, Township 16 S., Range 11 E. S. B. M., by Jacob R. Armijo, Contestee, in which it is alleged that said Jacob R. Armijo has failed to reclaim said land; that he has not spent \$1 an acre during the first and second years of said entry in the necessary reclamation of said land, and no annual proofs have been filed in this office. Said parties are hereby notified to appear, respond, and offer evidence touching said allegation at 10 o'clock a. m. on May 10, 1910, before the Register and Receiver at the United States Land Office in Los Angeles, Cal.

The said contestant having, in a proper affidavit, filed March 2, 1910, set forth facts which show that after due diligence personal service of this notice can not be made, it is hereby ordered and directed that such notice be given by due and proper publication.

Record address of entryman—428 Mansfield Street, Los Angeles, California.

FRANK BUREN,  
Register.

O. R. W. ROBINSON,  
Receiver.

1-4t

## NOTICE

A large quantity of lady birds are now ready for shipment into the valley. These lady birds are to destroy the cabbage and melon aphids that are so prevalent here.

Growers who are members of Associations will be supplied through their several Associations, but growers who are not connected with an association will be supplied by making application to the office of the Horticulture Commissioner, El Centro, Cal., or they may apply direct to the State Insectary, Sacramento, Cal.

The applications to this office should be in at once, as shipments will begin to arrive soon, and will have to be distributed.

No grower should fail to put in an application, for there is a good supply to distribute.

W. E. WILSIE,  
Horticulture Commissioner.

## GREATER EL CENTRO.

New city map for real estate, insurance, general business, etc. Scale, 1 inch=50 feet.

Price—Book, 16 inches by 20 inches, white paper and colored, \$10. Blue-print, 16 inches by 20 inches, \$6.

Wall map, 4 feet by 8 feet, on cloth with colors, \$12.

Single sheet, 16 inches by 20 inches, white with colors, \$1. Blue print 60c.

Sold by El Centro News Co. and O. R. Miller, at postoffice.

H. A. F. THENBERG,  
Postoffice Box 272.

## NOTICE

For the protection of the public health and to prevent possible fires, notice is hereby given to all property owners and the occupants of all lots within the city of El Centro to clean up and remove or destroy all litter, trash, papers and waste material on their premises within ten days from date hereof under penalty of the law.

W. B. GIBSON,

Health Officer of the City of El Centro.

Dated September 18, 1909.

## WARNING

All property owners are warned to clean their property at once of Johnson Grass, Wild Morning Glory, Cockle Burr, Wild Asparagus, Wild Sun Flower, as the same is declared a public nuisance, and injurious to the agricultural and horticultural interests of the county.

FRANCIS HEINY

WM. ALLEN,

W. E. WILSIE,

Board of Horticultural Commissioners.

12-1t

## NOTICE TO BEE-KEEPERS.

Owing to the reports of the appearance of European and American foulbrood in bee colonies of adjacent counties, it has been decided that all bee colonies shipped into Imperial county must be inspected at Imperial Junction by the Imperial County Bee Inspector.

A. F. WAGNER,  
Bee Inspector for Imperial County

## NOTICE OF THE SALE OF SCHOOL BONDS FOR THE McCABE, FORMERLY ADAIR, SCHOOL DISTRICT

Notice is hereby given that the Treasurer of Imperial County, California, will receive sealed bids until 2 o'clock p. m. of the 7th day of May, 1910, at his office in the Court House of Imperial County, California, at El Centro, California, for the purchase of the following described school bonds of the McCabe, formerly Adair, School District, duly and regularly issued by the Board of Supervisors on the 5th day of April, 1910.

Bond No. 1. For Four Hundred Dollars, to run five years, due and payable on the 5th day of April, 1915, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 2. For Four Hundred Dollars, to run six years, due and payable on the 5th day of April, 1916, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 3. For Four Hundred Dollars, to run seven years, due and payable on the 5th day of April, 1917, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 4. For Four Hundred Dollars, to run eight years, due and payable on the 5th day of April, 1918, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 5. For Four Hundred Dollars, to run nine years, due and payable on the 5th day of April, 1919, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 6. For Four Hundred Dollars, to run ten years, due and payable on the 5th day of April, 1920, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 7. For Four Hundred Dollars, to run eleven years, due and payable on the 5th day of April, 1921, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 8. For Four Hundred Dollars, to run twelve years, due and payable on the 5th day of April, 1922, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 9. For Four Hundred Dollars, to run thirteen years, due and payable on the 5th day of April, 1923, with six per cent. interest from date of issue, payable semi-annually.

Bond No. 10. For Four Hundred Dollars, to run fourteen years, due and payable on the 5th day of April, 1924, with six per cent. interest from date of issue, payable semi-annually.

Said bonds shall be sold to the highest bidder or bidders therefor for not less than par. All bids shall be for the purchase of said bonds as soon as they shall be ready for delivery. Each bid shall be accompanied by a check, certified by a responsible bank, for five per cent. of par value of bonds, payable to the County Treasurer of Imperial County, California, as an assurance that the bidder will take so much of the bonds as he shall bid for, and will pay the price therefor should they be awarded to him. Upon delivery of and payment for said bonds to the amount awarded to such bidder his certified check or checks will be returned to the bidder.

By order of the Board of Supervisors of Imperial County.

PAUL BOMAN,  
County Treasurer.

1-5t

# Keep Cool

BY THE USE OF

# ELECTRIC FANS

We have them for cash or on easy monthly installments. Try one.

HOLTON POWER COMPANY, EL CENTRO

J. W. COLSON — — — — — A. L. BLISS

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BLISS & COLSON, The Real Estate Men  
FOR FREE LITERATURE

EL CENTRO, — — — — — CALIFORNIA

## Breeders, Take Notice!

Black Mealy Nose Jack known as **BEN**

will make the season of 1910 as follows: John G. Beekler's ranch in No. 6, Wednesdays, Thursdays and Fridays, El Centro from Saturday until Monday afternoon. Imperial Monday afternoon and Tuesday. Terms: season \$12.50 cash; to insure, \$18, \$5 down with return privilege. Call on E. G. Irwin at the El Centro Market.

\*\*\*\*\*  
\* **J. L. TRAVERS** \*  
\* **PIONEER CONTRACTOR** \*  
\* **AND BUILDER.** \*  
\* Superintended and erected \*  
\* many of El Centro's most im- \*  
\* portant buildings. \*  
\* Estimates Furnished. \*  
\*\*\*\*\*

# Correct Methods

Over 6000 cars handled successfully by us during the season 1909, demonstrates that our *System of Selling* is based on correct methods. *Sales Consumed F. O. B. —In Transit—Delivered.*

We are in constant touch with every carlot buyer of fruit and produce in the United States and Canada.

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CARLOT SHIPPERS

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Executive Offices: Pittsburgh. Branches: Chicago, New York, Washington, Cincinnati, Jacksonville.

# Public Administrator's Report

To the Honorable Franklin J. Cole, Judge of the Probate Department of the Superior Court of the County of Imperial, State of California:

E. E. Forrester, Public Administrator of said County, respectfully makes this return of all Estates of Decedents which have come into his hands for the term commencing January 1st, 1909, and ending January 1st, 1910; including all Estates not heretofore finally reported on by him, in pursuance of the provisions of Section 1736 of the Code of Civil Procedure.

No. of Case	Date of Issuance of Letters	NAMES OF DECEDENTS	Approximate Value of Estate as far as ascertained	Money which has come into Administrator's Hands	Funeral expenses, expenses of last illness, debts and family allowance paid by the Administrator	Fees and Expenses Paid by Administrator	Balance Cash in hands of Administrator inclusive of Deposits with County Treasurer	Property exclusive of money in hands of Administrator	Distributed to next of kin or to devisees, or turned over to general Administrators and Executors.	
									In Cash	In Property
14	Feb. 25, 1908	Wm. Brandt.....	338.35	338.35	136.00	72.86				
37	Nov. 20, 1908	D. P. Duncan.....	366.50	366.50	141.50	79.30			84.15	
33	Dec. 17, 1908	J. J. Teller.....	1,151.44	1,046.44	220.75	52.65			359.67	
51	June 4, 1909	Andrew Garthe.....	3,601.35	601.35		61.50	539.85	3,000.00		105.00
4	Oct. 12, 1907	David Stocker.....	395.25	395.25		99.15	148.60			
55	Jan. 18, 1910	C. Goodwin.....	275.00	255.00			159.00			

STATE OF CALIFORNIA )

COUNTY OF IMPERIAL ) ss.

E. E. Forrester, being first duly sworn, deposes and says:

That he is the Public Administrator of Imperial County, State of California; that the foregoing is a full, true and correct return of all the Estates of Decedents which have come into his hands, which have not heretofore been finally reported upon by him; that said return contains a true statement of the value of each estate, and the money which has come into his hands from each estate, what he has done with it, the amount of his fees, the expense incurred therein, and the balance, if any, in each such case remaining in his hands; that he is not and was not at any time interested in the expenditures of any kind made on account of any estate which he has administered or which he has in course of administration; nor is he associated in business or otherwise with anyone who is so interested.

E. E. FORRESTER.

Subscribed and sworn to before me, this 18th day of March, A. D. 1910.

D. S. ELDER, County Clerk.

By L. EVERETT, Deputy.