MELON APHIS AND OTHER PLANT LICE

By E. W. BERGER

Florida Agricultural Experiment Station

The common cotton or melon aphis (Aphis gossypii), plantlouse, or green fly, has been reported as feeding upon more than thirty different species of plants. All but two or three of this number either grow wild or are cultivated in Florida. The following list of food plants contains those most commonly found: melons, cucumbers (and other plants of the same family), cotton, okra, mallows, citrus, bush bean, pear, clover, strawberry, careless weed, wormseed, morning glory, spinach, begonia and Jamestown weed.

Insecticides Recommended.

A good grade of tobacco dust applied dry by hand or by a powder bellows or blower, while the plants are moist with dew or rain, or applied as a decoction in water, is regarded by many in Florida as the best direct remedy for all kinds of aphids. When applied by hand the dust should be thrown so that it will strike forcibly the parts of the plants where the aphids live. In the case of cucumbers and similar crops it is quite important and yet difficult to get much of the dust to lodge on the under side of the leaves, yet after some practice this can be accomplished in a measure by giving the dust a strong throw sideways. Tobacco decoction is made by boiling one pound of tobacco leaves, stems or dust in three gallons of water. It can be used stronger if necessary. The liquid extracts of tobacco on the market are also useful against plantlice and other softbodied insects. When used dry, the finer the dust the more efficient it will be: it will adhere better when fine, and is more likely to lodge in the breathing pores and other vulnerable parts of the insect than a coarse dust. One should purchase a good grade of tobacco dust, preferably some standard brand. Cheap tobacco dust is likely to be useless, having been leached or adulterated.

Kerosene emulsion is regarded by some as the standard remedy for plant lice. Dissolve ½lb. of soap in a gallon of water, and when boiling hot add two gallons of kerosene (away from the fire), and stir or otherwise agitate violently for ten to fifteen minutes. For use against plantlice dilute this with 15 to 20 parts of water.

Whale-oil soap, one pound to 6 gallons of water, is stated to kill readily, and is frequently employed as a spray against plantlice. If the kerosene or whale-oil soap injures the leaves add more water. Other soaps and soap powders have been used with good effects.

For spraying such flat-lying plants as melons and cucumbers, a short extension rod with the nozzle on the upturned end of an elbow is necessary in order to spray the under surface of the leaves where the aphids principally live. Some have found it more effective to have one person lift the vines while another did the spraying, than to use the upturned nozzle. Again, the vines could be turned over on the ground and sprayed, and turned back again when finished. The last two methods are not especially adapted for extensive work, but will be found useful in the home garden.

Useful Precautions.

When we know which plants are subject to infestation by aphids we may save ourselves trouble and disappointment in regard to the rotation and location of certain crops. It is evident for instance, that it may be unwise practice to plant cucumbers, melons, cantaloupes, or other crops likely to become infested by Aphis gossypii, near citrus trees. These latter may be harboring some of these aphids, and the result might be a rapid infestation of the crop.

Aphids live over on wild plants from season to season; it is, therefore, evident that much may be accomplished by a thorough cleaning up and burning-over of the ground immediately adjoining the field which is to be occupied by a crop subject to attack. While such a procedure might not altogether prevent the infestation, it would greatly delay it and reduce it in amount. The vegetation on the ground to be planted should be carefully plowed under, and any green stuff left uncovered should be removed and buried or burnt, to insure the destruction of all aphids.

should again be licensed in that county.

All the people of Florida rejoice at the restoration to perfect health of Hon. Frank Clark. There is not a man in the State more highly esteemed and beloved by his people, and it is fortunate for them that such a man has been delegated to look after their interests from the second Congressional district.

The Louisville Courier-Journal says: "Before the present Congress was a week old a Texas representative had introduced 128 bills, covering the greater part of the known fields of human activity and nearly everything a Congress might dare or do. Next thing we know, The Outlook may be ... port and vote of each and every citizen who is qualified. I can only

hundreds of thousands of tele... paralized communication betwee... point and another. The goveri... seems to have shown a wise an... moderation and its hands we... suredly strengthened by the v... confidence given it by Parliame...

That the government has ... passed through so great a crisis ... dence of the growing stability ... French people. The Republic ha... lasted for 39 years, a much ... period than any previous gover... in a hundred years. The well ... kaleidoscopic frequency with ... revolutions and changes of g... ment used to take place before t... auguration of the present re... made France somewhat of a lau... stock. Happily for that natio... the world those experiences a...

faithfully and impartially discharge the duties of the office should I be elected. Respectfully,

CHAS. C. WARREN.

The Title Question ?

Are you of the number who are afraid that there is some defect in their titles, and with that for an excuse refuse to have an Abstract of Title? Send for our FREE booklet on "The Title Question." **None are so blind as they who will not see.** We have the information on YOUR title. —CONSULT US—

ALACHUA COUNTY ABSTRACT CO.
Gainesville, Florida

FOR TAX ASSESSOR.

To the Voters of the City of Gainesville:

I respectfully announce myself a candidate for City Tax Assessor for the year 1909. Having been Tax Assessor for four years, I am fully prepared to fill the office, as my record will show, the city assessment having been increased in that time from a little over $600,000 to over $1,000,000. I was prevented from running for this office last year on account of sickness, and now respectfully solicit your votes.

W. M. BRADFORD.

To the Voters of Gainesville:

I hereby announce that I am a candidate for re-election to the office of City Tax Assessor for the year 1909, in the election to be held on April the 13th, and most earnestly request you all to give me your vote and support for the position.

Thanking you for your past endorsement, I remain, Yours very truly,

B. R. COLSON.

DR. KILMER'S SWAMP-ROOT
THE GREAT KIDNEY, LIVER & BLADDER REMEDY

THIS GREAT REMEDY IS RECOMMENDED FOR
Acute and Chronic Diseases of the Kidney, Liver, Bladder or Urinary Organs and Acute, Chronic Rheumatism, Uric acid, lumbago or gout.
PREVENTS
BRIGHT'S DISEASE
Dissolves and expels Gravel or Gall Stones. It heals and removes irritation, Inflammation, Ulceration or Catarrh of the Bladder.
TRADE-MARK

THE TEST THAT TELLS.

Dothan, Ala., Jan. 21, 1909.
Dr. Kilmer & Co., Binghamton, N. Y.

Gentlemen: About one year ago two of my children suffered badly from weak kidneys and diabetes; their urine was very bad and they would have severe spells of dizziness, and were all run down in health. I was just about discouraged. I tried several remedies and finally a doctor, but they did not seem to improve. I knew of a friend who was taking Swamp-Root for kidney trouble with good results, and I decided to get some for the children. I noticed there was some improvement after they had taken two large bottles, and continued to give it to them until they had taken a half dozen bottles and were well on the road to recovery. I think Swamp-Root has done more for my children than any other medicine I have tried and I recommend it to one having children who sufferer as mine did.

R. W. LINSENBY,
City Clerk, Dothan, Ala.

A GEORGIA WOMAN.

Sparks, Ga., Jan. 11, 1909.
Dr. Kilmer & Co., Binghamton, N. Y.

Gentlemen: Some time ago I was troubled with kidney trouble; had severe pains in back and hips. Was treated by a physician, but without any benefit. I noticed some Swamp-Root advertised and resolved to give it a trial. After taking four bottles I was completely cured. Have not suffered any pain at all since and can recommend Swamp-Root to anyone suffering from kidney trouble. Sincerely,

MRS. E. V. STEVENS.

BAPTIST MINISTER.

Brinson, Ga., Jan. 20, 1909.
Dr. Kilmer & Co., Binghamton, N. Y.

Gentlemen: Some time ago I suffered severely with pain in my back and hips. My back pained me continually and I felt miserable. A friend recommended Swamp-Root. I obtained and took the contents of two bottles when I felt relief. My back has not troubled me since and I can thoroughly recommend Swamp-Root to anyone suffering from kidney troubles, as I find it afforded me great relief.

Yours very truly,
REV. E. T. DAWSON.

RESULTS AFTER USING.

Boston, Ga., Jan. 13, 1909.
Dr. Kilmer & Co., Binghamton, N. Y.

Gentlemen: Some time ago I was troubled with kidney trouble. I thought for some time I was suffering with diabetes. I had severe pains in my back and hips. A friend recommended Swamp-Root and I decided to give it a trial. I obtained a bottle from a druggist and after taking a few doses, felt relieved. After taking several bottles the pain was entirely gone and I have not suffered the slightest since. I cannot be too enthusiastic in my praise of this wonderful medicine and it gives me great pleasure to give my testimonial in regard to its merits.

J. B. ROUNTREE,
Former Mayor and Member Legislature.

We have sold Mr. Rountree Swamp-Root and have also sold it in a number of cases for kidney trouble and always with perfect satisfaction.

J. C. ADAMS & SON.

THE VALUE OF A REMEDY IS PROVEN BY ITS CURES.

Elkwood, Ala., Dec. 14, 1908.
Dr. Kilmer & Co., Binghamton, N. Y.

Dear Sirs: I have derived such great benefit from the use of your remedy Swamp-Root, that I believe it to be most important for the public to know its worth. For the past ten years I have been the most miserable of men. Did not know what the trouble was but had to urniate very frequently both day and night; was puffed up generally. Could not sleep more than a couple of hours at a time, was greatly distressed after eating a meal and was about worn out. I had tried nearly everything I could see advertised and hear of, without helping me to any great extent, until finally in October last at Ripan, Wis., I purchased a one-dollar bottle of Swamp-Root and commenced taking it according to directions and I followed that with another bottle and experienced such great relief and benefit from same that I purchased five dollars worth at Huntsville, Ala., and continued its use and am now taking it, but in smaller doses and twice a day in place of four times a day, and believe by the time present supply is used up I will be entirely well. I am feeling better now than for ten years past. Can eat and sleep first-class, in fact, I am feeling so good that I cannot resist telling you about it. You are at liberty to publish this testimonial should you wish. Very respectfully,

THOS. STALLARD, U. S. A., Retired,
Box 7, R. R. No. 2, Elkwood, Ala.

A CLERGYMAN.

New Roads, La., Jan. 22, 1909
Dr. Kilmer & Co., Binghamton, N. Y.

Dear Sirs: I write today to the public that your Swamp-Root cured me of kidney trouble. I was almost past going; having spasmodic spells with my kidneys that were breaking down my constitution. The best medical aid was employed and they pronounced my trouble as alkali in the kidneys, but were unable to do me any permanent good.

I took four bottles of Swamp-Root and became a well man. This was six years ago and I have had no trace of the trouble. Yours for suffering men,

REV. J. R. TAYLOR,
Pastor Baptist Church, New Roads, La.

MAIL CARRIER'S EXPERIENCE.

Blountsville, Tenn.

I have been a rural letter carrier for over five years. Some two years ago was taken with severe pains in my back. I used medicine from my family physician for several months without any benefit. A friend, Mr. J. D. Nelson, advised me to try your Swamp-Root, but I had no faith in it. I continued to grow worse and at last decided to try this remedy and bought of Long Bros. a fifty-cent bottle which gave me great relief. I then bought two one-dollar bottles, which I can truthfully say have completely cured me.

Had it not been for Swamp-Root, I would have been compelled to quit the rural free delivery service.

I advise all mail carriers who get pains in their back that Swamp-Root will cure them.

I was so bad that very often my wife would have to help me to arise.

M. B. HENDRICKSON,
Rural Letter Carrier, Route No. 2.

A CONTRACTOR.

Donalsonville, Ga., Jan. 20, 1909
Dr. Kilmer & Co., Binghamton, N. Y.

Gentlemen: About four years ago I suffered from kidney trouble and rheumatism in my hips. The pain across my back became so severe that I could hardly straighten up and could not walk without dragging my feet. I would urinate frequently and would have to rise two or three times during the night, causing me to suffer from loss of sleep. And with the pain I was all run down and began to lose flesh. I saw Swamp-Root advertised and bought one bottle to try it. After taking it I felt better and could sleep all right at night. I continued to take it until I had taken four large bottles. I was entirely free from any pain in the back and began to gain in weight. I always recommend Swamp-Root to my friends as I think the cure in my case remarkable.

Yours very truly,
M. H. HICKSON,
Donalsonville, Ga.

DR. KILMER

Dr. Kilmer's likeness is on the outside wrapper of every bottle.

BENEFICIAL IN SEVERE CASES.

Edgefield, Tenn.
Dr. Kilmer & Co., Binghamton, N. Y.

Gentlemen: I hardly know how to express my appreciation for the good your Swamp-Root has done me. I had been greatly troubled with my kidneys, and with pain in the back; also with what the doctors termed inflammation of the neck of the bladder. Sometimes my back would get in such shape that I was almost helpless. I had tried several doctors and medicines to no good effect, and finally I noticed in some paper where Dr. Kilmer proposed to send a sample bottle of his kidney medicine, Swamp-Root, free by mail. I sent at once and received promptly a sample bottle. After taking it I found it did me good. I then purchased two bottles from our merchant, Mr. W. J. Elizer. After taking the medicine I felt like a new man, and each day rode five miles to teach school. You are at liberty to use this letter, or refer anyone to me, as I will always be glad to tell them what a wonderful remedy this Swamp-Root is. Mr. James Ivens, of Saundersville, Tenn., is taking it with good results. Very truly yours,

D. A. MONTGOMERY,
Member Tennessee Legislature.
Rural Route No. 24, Edgefield, Tenn.

RESULTS IT HAS PROVED.

Dothan, Ala., Jan. 21, 1909.
Dr. Kilmer & Co., Binghamton, N. Y.

Dear Sirs: Have been suffering more or less from kidney trouble for the last five years and was induced to try your Swamp-Root. Am happy to say, or give you testimonial, that it has cured me. I as a traveling salesman for Messrs. Colgate & Co., New York, and am always traveling on the road. Drinking the different waters affected my kidneys.

Yours respectfully,
SAMUEL WOLF.

A PROMINENT MASON.

Jackson, Tenn.

According to my experience, I do not consider there is anything to equal Swamp-Root for kidney affection.

Twice it relieved me when I was completely helpless.

The last time I was traveling in Texas, when my kidneys become affected, and for ten days I suffered excruciating pains, accompanied with severe chills. Several years previous, having been relieved of a similar attack, I naturally sought relief as before from Swamp-Root.

After using four of the large-size bottles, I was completely restored and went on my way rejoicing and praising Swamp-Root. This was three years ago and I have had no indication of a return of the affliction.

J. C. SMITH, Jr.,
Thirty-third degree Mason.

FULLY SATISFIED.

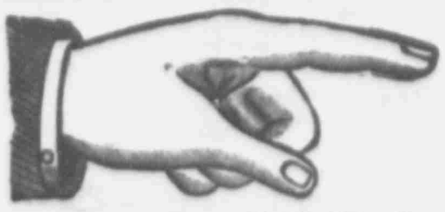
Waycross, Ga., Jan. 5, 1909.
Dr. Kilmer & Co., Binghamton, N. Y.

Dear Sirs: During last October I suffered from my kidneys.

I consulted my physician, who prescribed for me, but his treatment did not benefit me. After reading some Swamp-Root literature, I decided to give it a trial. After taking a few doses, I felt somewhat relieved, and after two one-dollar bottles had been taken, I had no pain and was completely cured. I have not had the slightest pain in my back or hips since. From my own experience, I can cheerfully recommend Swamp-Root to anyone suffering from kidney trouble.

Yours very truly,
SIMON MARTIN.

Mr. Martin conducts a carting and transfer business.



Every mail brings unsolicited testimonials from people from all over the United States and foreign lands, expressing heartfelt gratitude for what Dr. Kilmer's Swamp-Root has done for them.

Do not let anyone sell you some other medicine to take the place of Swamp-Root—if you do you will be disappointed—insist on getting what you ask for—there is no other medicine as good as Dr. Kilmer's Swamp-Root.

IF YOU NEED A MEDICINE YOU SHOULD HAVE THE BEST

Swamp-Root is not recommended for everything, but if you have kidney, liver or bladder trouble or obliged to go often during the day and get up many times during the night, have smarting or irritation in passing or heart disturbance due to kidney trouble, Swamp-Root will be found just the remedy you need.

Don't Be Misled—For example, when you ask for Dr. Kilmer's Swamp-Root, the Great Kidney, Liver and Bladder Remedy, don't allow any druggist, drug clerk or store keeper to persuade you into buying something else in its place. Every time he succeeds in selling you a worthless substitute he makes more profit, but you are humbugged at the expense of your health.

NOTE—Every reader of The Sun who has not tried Swamp-Root, the great Kidney, Liver and Bladder Remedy, may address Dr. Kilmer & Co., Binghamton, N. Y., and receive a sample bottle free by mail.

At all dealers' in 50c and $1.00 sizes.

A Sworn Certificate of Purity With Every Bottle--See Inside Wrapper

Parties having job printing done at The Sun office are entitled to one vote in the Bush & Safford Piano Contest for each cent paid for such work. Don't forget this when in need of printed stationery. Read the advertisement giving particulars regarding the contest and vote for the lady of your choice.

Isn't there something which only a want ad. can do for you today?

If its worth more to someone else than to you—no matter what it is—a want ad. will be a good investment.

As advertising finds the best market for everything else, why not for your personal services?