

The Laurens Advertiser.

VOLUME XXXVIII.

LAURENS, SOUTH CAROLINA, WEDNESDAY, DECEMBER 20, 1922.

NUMBER 23

WEEVIL POISONING

PROBLEM PERSISTS

David R. Coker Surveys Results Obtained in Control of Cotton Pest by Various Methods and Submits Certain Conclusions That He Has Reached.

To the Editor of The State:

Your editorial of December 4 seems to call for some further information from me as to the success of the calcium arsenate-molasses method of weevil control.

Let me say first, however, a few words as to my whole attitude on the subject of weevil control: For more than a dozen years I have been studying the subject, have been breeding varieties that might be expected to successfully meet the weevil and have been endeavoring to work out methods of farm practice which might prove successful under weevil conditions. I carefully watched the government work on weevil control and when he arrived in force last spring put these methods into operation on the majority of our cotton areas. We also in limited way tested the molasses-calcium arsenate method, of which we had heard good reports.

Our experiments with the dusting method were comparative failures, as these fields became heavily infested with a small yellow plant louse following the dusting and these lice severely damaged the cotton. No damaging infestation followed the molasses method and good results were obtained where it was used. This season we again treated one field with the dusting method and observed the same reaction of heavy plant louse infestation, which we checked by an application of sulphate of nicotine.

Notwithstanding our unfortunate experience with the dusting method and that of several other farmers in this section, I freely admit that the dusting method has usually proved to be profitable and that it is apt to save a large proportion of the cotton crop where properly applied.

There are several very serious objections to it, however, and I feel that some method of weevil control must be worked out which will overcome these objections. Until such a method is put before the people there is no hope that weevil control will become general and that any large proportion of the cotton crop can be saved.

Objections to Dusting
The principal objections to the dusting method, as recommended by those in charge of the weevil control work last spring are:

1. It does not advocate poisoning of the weevils until they have had an opportunity to reinfest the fields by puncturing the first appearing squares.

2. It requires that the poison be applied under certain conditions of moisture and absence of wind, which conditions are not usually present except at night and are not present every night.

3. More or less expensive machinery is necessary for its application.

4. The government recipe requires the application of large quantities of calcium arsenate variously estimated at 20 to 40 pounds and under certain conditions much more, per acre. It is estimated that the available supply of calcium arsenate present and prospective will treat not more than 10 per cent. of the cotton acreage.

5. The expense and difficulty of the government method put it completely out of reach of the average cotton producer.

It seems perfectly evident that if and when the bureau of entomology succeeds in convincing any large proportion of the cotton raisers, that their method of control is necessary to successful cotton raising under boll weevil conditions, an immediate scramble for the available supply of calcium arsenate will occur, the price will be lifted sky high, not another acre will or can be treated by their method than was treated the past year, only a comparatively few of the more able planters can secure their share of the material and the whole cotton industry will be worse off than it now is, just to the extent of the advance in price of calcium arsenate.

Calcium Arsenate Supply

The above will not be true if an unlimited supply of calcium arsenate were available, but as the entire available supply was exhausted this year and as there is no likelihood of a great increase in production, the above statements are evidently true.

It has for some months, therefore, seemed to me absolutely necessary that some cheap and simple method of weevil control be devised. Some form of the calcium arsenate and molasses method, I believe, offers this remedy.

I have read the Florida bulletin No. 165 referred to in your editorial and think it recounts one of the most constructive pieces of experimental work ever done. Mr. Smith is a careful experimenter of repute and he has gotten hold of and demonstrated an idea which will almost certainly be of great benefit to the cotton producer. I do not think, however, that Mr. Smith's experiment (or any one else's for that matter) are the last words in weevil control. The finally accepted idea on control will probably embody some of the features of most of the methods now employed.

Experiments which we have conducted here seem to show that Mr. Smith could probably have gotten as good results with the use of far less calcium arsenate per acre in the single application which he made.

hope that next year he will apply after square picking a mixture of calcium arsenate molasses and water, containing not more than one-half pound of calcium arsenate per acre. Our results and those of many other farmers in the state show that the over wintered weevils can be killed out on the young cotton by such an application. Other experiments which we have carried on this year seem to show that very minute amounts of calcium arsenate—as little as one ounce or two ounces per acre in a mixture of molasses and water may affect a high degree of weevil control. We must do further experimenting, however, before making this assertion. Mr. Smith would, I think, also have gotten better results if he had followed his first application with other applications of calcium arsenate, molasses and water after the cotton began to show weevil damage.

Arsenate With Molasses

You say that you have heard little of the results of the calcium arsenate-molasses treatment. This is quite natural as there has been no organized propaganda in its favor while the Southern Fertilizer association, the Southern experiment stations and the bureau of entomology have all seen to it that the successes with the dusting method have been widely and constantly advertised.

There is a gentleman in Georgia who has for years operated a small but successful agricultural paper. His success has been largely due to the fact that he spends a great deal of his time traveling, observing the methods of good farmers and reporting their results. He is open-minded unprejudiced and has done much good in disseminating sound agricultural practice as he has observed it on the farm. He has recently been studying the subject of boll weevil control in South Carolina and Georgia. Allow me to quote from his editorial in the Southern Cultivator of December 1:

"On our recent trip through the state of South Carolina, going from Anderson county down through to Orangeburg, the chief topic of interest among the farmers was the best method of boll weevil control by the use of calcium arsenate."

We were given many instances of experiments made with both the dusting method and the application of the liquid form. We talked with several who have given most of their time this year to the subject. We did not find one who tried the arsenate, syrup and water mixture that was not well pleased with the results obtained. Mr. Turner of Denmark put 40 weevils on stalks sprayed with this mixture and in four hours' time every weevil was dead. Naturally, he will adopt this method exclusively on his farm for 1923. We were also told of an experiment made by a farmer in Greenwood county. He took eight acres of land and divided it into three equal tracts. On the first he used no poison; on No. 2 he applied the dust according to government instructions; on No. 3 he used the arsenate, syrup and water. On No. 2 he gathered twice the yield of cotton as made on No. 1, while on No. 3 he gathered twice as much cotton as was obtained from No. 2. Now, we have no axe to grind in advocating the arsenate and syrup mixture. Neither have we one iota of hostility to the government dusting method. But we are simply giving our readers the facts as we find them, from the actual tests made by the practical farmers themselves. We know this much; many of these tests are made by as high class farmers as Georgia and South Carolina contain."

His statement that he "did not find one who tried the arsenate, syrup and water mixture that was not well pleased with the results obtained" is completely borne out by my own experience, for I have yet to be told by one farmer who gave it a fair trial that he does not think he got profitable results and at a cost which was usually far less than that of the dusting method.

Many different mixtures of calcium arsenate, molasses and water were used all apparently with similar success. This shows that the method has not been perfected and suggests that comprehensive experiments are badly needed to reveal the minimum effective amounts of calcium arsenate and molasses in the mixture and the correct number of and intervals between the applications.

We tested here this year many different mixtures of calcium arsenate, molasses and water and many methods of application. All were successful to a greater or less degree. The rainfall of this section was abnormally frequent and abnormally heavy from May 14 to August 20. On our best drained soil we made from 75 per cent. to 100 per cent. of an average crop. On lands less well drained we made from 40 per cent. to 60 per cent. Our total average yields were fully two-thirds of a normal crop. On most of our crops we used six or seven treatments beginning June 12 (which was at least one week too late for best results) and ending August 4 (which we now think was too early to quit).

We treated several fields on August 21 with spray pump and secured excellent results. I have before me a report of the operations on one 14 acre field treated six times from June 13 to August 4 at a cost of \$2.53 for material, \$1.51 for labor; total cost \$4.04 per acre; 8 3/4 pounds of calcium arsenate and six gallons of molasses per acre being used. Twelve bales weighing 6,175 pounds were produced.

Drawing Conclusions

Our experience and that of many other farmers all over South Carolina and Georgia point definitely to the following conclusions:
First: A mixture of about one pound of calcium arsenate, one gallon of water and one gallon of molasses applied at the rate of about one gallon per acre to the young cotton just before the squares begin to form will destroy practically all of the old weevils on the cotton.
Second: Further applications extending to the end of the period of emergency will destroy nearly all of the later emerging weevils.
Third: This will protect the cotton crop from serious infestation until around August 1, and will allow a fair crop to be made without further treatment. The total cost of the above treatment will not exceed \$1.50 for materials and the labor cost, which is usually borne by the tenant, will run between 15 cents and 40 cents per acre per application.

Our own experience has convinced us that applications should be begun again in late July or early August when further infestation from neighboring fields begins and should be continued at least until the bolls begin to open.

The present supply of calcium arsenate would, I believe, be sufficient to afford excellent weevil control on every acre of cotton in the United States if mixed with molasses and water and applied in two to four applications the first to be made just before the squares begin to form and the last at about the end of the emerging period.

The overwhelming problem of weevil control during the coming year is the calcium arsenate supply. It seems a great pity to me to allow 5 per cent. or 10 per cent. of the best on land owners in the South to monopolize the supply while the other 90 per cent. of 95 per cent. of the acreage is being ruined, whereas at least two methods of control are in existence (the Florida plan and the calcium arsenate-molasses plan), by the use of either of which the pest can be controlled on 50 per cent. or more of the acreage.

I trust that very many of the intelligent farmers of the South will during the coming year conduct accurate experiments on the Florida plan and the calcium arsenate-molasses plan varying these experiments as to amounts and times of application. In this way will there be worked out the cheapest and most efficient method of control. I should be glad to have tried any modification of the calcium arsenate-molasses method to write me his experience in order that I may act as a clearing house for this information.

You do me too much honor in saying I "would succeed in the Red Desert." The agricultural practices which we use on our farms are (with the exception of methods of weevil control) mainly those which are recommended by the state and national agricultural authorities. There is nothing mysterious about our farm methods as will be realized by any

intelligent farmer who will take the trouble to come here and observe them. David R. Coker. Hartsville.

WATERLOO PUPILS LEARNING BASKET BALL
Waterloo, Dec. 18.—With the close of the football season, the principal of the Waterloo high school, Prof. Ralph Shealy, a former basket ball star from Newberry college, has erected a new basket-ball court on the school grounds. Both the boys and girls are learning the game rapidly. Prof. Shealy is coaching a splendid bunch of young men and he hopes to be able to meet with the Laurens, Mountville and Cross Hill teams. In training the students along literary lines he realizes the importance of physical training as an indispensable factor in the development of an active mind in young men and women.

Those who will probably make the team are: Harold Fuller, Lawton Nichols, Rufus Womack, William Wharton, Erskine Morrow; Subs: Harold Anderson, Walter Lanford and Ross Cunningham.

If your stomach is continually kicking up a disturbance; you feel bloated and distressed; if you belch gas and sour food into the mouth, then you need MI-O-NA stomach tablets. Guaranteed by Laurens Drug Co.

Gray Court Religious Notes

The Woman's Missionary society of Gray Court held its harvest meeting at the home of our president, Mrs. Alvin Curry, on Friday, the first.

The following officers were elected for the ensuing year: Mrs. Alvin Curry, president; Mrs. O. E. Rogers, vice-president; Mrs. Clarence Shell, recording secretary; Mrs. Lander Willis, corresponding secretary; Mrs. Janie Shell, treasurer; Mrs. M. E. Gray, local treasurer; Mrs. Robert Gray, superintendent of mission study; Mrs. C. W. Watson, superintendent of social service; Mrs. John Wells, superintendent of supplies; Mrs. Adolphus Owings, superintendent of junior and cradle roll; Festus Curry, superintendent of young people.

The local W. O. T. U. was held at the home of Miss Allie Babb, on Tuesday, the 12th. The subject for the afternoon was Social Morality. Mrs. Houston Babb lead the meeting.

The relationship of alcoholism and every kind of social misery was pointed out by tracts read and talks. Our union decided to take a stand for also guarding the colored girls of our state.

Engraved Invitations and Cards Advertiser Printing Company

\$20,000 STOCK MUST GO

Sale Lasts 3 Days Longer

Folks, where can buy high class Ladies' Ready-to-Wear at the price we sell it for? Take a look at our windows and stop and think how much profit you have paid the other fellow. We want to prove to you beyond a doubt that Batson gives you more for your money. We are not going to stop. We mean to show you that you do pay too much for same goods. What's the use to work hard all the year and spend it all in one day? Take your time and shop the town, and spend your money with the one that you know gives you more value for your money. It makes us smile to show you this one big line, and would like to shake hands with the man that sells merchandise cheaper than we do, for we want to be a help to you as well as ourselves.

All Imported Toys Must Go Regardless of Cost

No Phone Orders, No Mail Orders, No Exchanges, No Charges, No Money Refunded, All Sales Final

TAKE THE GOODS AT YOUR OWN PRICE

BATSON'S READY-TO-WEAR

Enterprise National Bank Bldg.

Laurens, S. C.