

ment, green manure and fertilizer practices to give a more steady, sturdy, plant growth; to furnish plant nutrients that will be available to the plant as needed but will not be leached out severely by excessive rain.

OTHER ACTIVITIES

Many lines of work besides those mentioned are in progress mainly at locations outside the South, but which will doubtless prove beneficial in the South. Seed investigations in the West and at Beltsville have a direct bearing upon the vitality and freedom from disease of the seed you plant.

At Beltsville rather extensive studies are being made to try to determine the possible hazards and also the safe limits of use of the various chlorinated hydrocarbons, such as DDT, and other new compounds now used as insecticides. Some crops, such as beans, vine crops, tomatoes, and some varieties of rye, are slightly to very sensitive to some of these compounds in the soil. Depression of growth is caused by a smaller amount on some soils than on others. And even varieties of a single crop differ in their sensitivity to these compounds. Although most of these compounds are

apparently very persistent in soil, we don't know how long their toxicity will last or how long it will take to accumulate harmful amounts in any particular soil. At the rate some growers are using these materials at present, some of us fear that harmful residues will be accumulated in their soils in a very few years. This is one of our urgent problems and I wish the States were doing more work on it. We need the answers now, but unfortunately a number of years will probably be required to get many of the answers.

Our division also conducts extensive studies on the methods of handling, packing, prepackaging, shipping, and storing of vegetables. Other divisions of our Bureau are working on specific problems of soils, fertilizers, irrigation, weeds, and disease surveys that are of importance to vegetable growers. The Bureau of Entomology and Plant Quarantine has a large amount of work in progress in the South on the control of insects that attack vegetables. The work in each of these several fields is a story in itself and can not be presented here. They are mentioned, however, to indicate the breadth of Federal work that is concerned with vegetable crops.

EXTENSION WORK WITH VEGETABLES IN FLORIDA

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The job of the Cooperative Extension Service in Agriculture and Home Economics is education. The primary objective is to serve rural people, however the benefits have extended to the people in

urban areas and to others. This is the division of the University which carries to the farms the application of scientific developments and of agricultural research which result in the use of more efficient methods that apply to crops, livestock, and forest production and to land improvement and water conservation. Through Home Demonstration work with farm women and through 4-H

Boys and Girls Club work and activities. Extension work has resulted in improving family diets, family living conditions, better health, and economic improvement. Through 4-H programs club members have developed skills and acquired useful information of value as farmers and homemakers of the future. Extension aids rural people to help themselves and to develop leadership and group action. What Extension has helped people do for themselves is where the greatest results are achieved.

When we single out a specific commodity and talk about Extension work with this commodity we need to cover some of the past and also plans for the future. Also when we single out a commodity there are other related items and in the case of vegetables these would involve cover crops, irrigation, drainage and crop rotations in addition to production, preparation for marketing, and marketing.

The County Extension worker is a general practitioner and cannot know all about everything in the agriculture of his county so he must know where the technical information can be secured in case of unusual situations. He must also keep informed about the research work being done so he can help to carry the results to growers in his county. He also assists the research workers in arranging field days when growers can come to see the progress being made and learn new methods and procedures.

In Florida with its varying soils and diverse conditions the vegetable growers problems are in many cases extremely localized. The Main Station, Branch Experimental Stations and laboratories are always at work on research problems and some of these institutions work solely on vegetable problems. These

are the chief sources of information used by Extension workers. The U. S. Department of Agriculture is also engaged in research work with vegetables both in production and in marketing. Various agencies of the department have a part in the over-all vegetable picture. There are the market news and crop reporting services, the frost warning service, the outlook and commodity reports. All of these services are used as well as those of the Farm Credit Administration which finances many producers in Florida. Varieties, fertilizers, insecticides, and fungicides are all items of concern to the County Agent and to the vegetable grower.

In the Extension Service we have a number of specialists who act as a subject matter clearing center and serve as contact people with the research workers. They are two way conveyors of information and bring to the research people their field observations and carry to the field things they learn from research workers. Until recently we did not have a vegetable specialist on the staff. Now arrangements have been made so Dr. Jamison is half time research and half time Extension worker. We feel very fortunate in this arrangement and think it is good in many instances to have one person head up State-wide the various lines of work relating to a commodity. This seems to be very desirable with vegetables where the research work is widely scattered. Not all people could handle a situation of this kind but we believe Dr. Jamison can and that all of us—the growers and research and Extension workers—will also benefit by this arrangement which will get everything working along the same beam.

In the case of the new organic insecticides and fungicides used so much on

vegetables, a team of workers representing the Industry, the Experiment Station, and the Extension Service is now working up some material that is out ahead of anything we know about, in order to have a basis for keeping up with the rapid changes and new developments in these materials.

During the war county agents were engaged in a number of wartime programs relating to such things as rationing, agricultural building restrictions, farm labor, gasoline rationing, draft deferment, and similar programs. These programs consumed a lot of time from the regular work and now we are glad to get back full time to the regular program of work. In order to strengthen and enlarge the vegetable program we have recently established a county agents' vegetable advisory committee. The five agents on this committee represent all phases of the industry. This committee will help to develop and improve the Extension vegetable program to as fully as possible to cover the field.

During the past year county agents devoted 1,473 days to work with vegetables and potatoes and some vegetable work was done in 55 counties. 1,798 farmers were assisted in obtaining improved varieties or strains of seed. 4,142 farmers were assisted with the use of fertilizers, 4,643 with controlling diseases and 5,572 with the control of injurious insects. Our records show that county agents devote approximately the same amount of time to vegetables as they do to citrus. Due to the very nature of the many vegetable problems many of the calls on the agents require personal visits to the fields, as they cannot be handled satisfactorily in any other manner and in some cases necessitate contact and may be a visit from a research worker.

We have a research and marketing administration vegetable project approved and we plan to get this underway in the near future. A good deal of the material for this project has already been secured and we hope to get it underway soon.

To some of you it might be of interest to present some facts about Extension work with home gardens and with Home Demonstration and 4-H Club garden projects.

There are a large number of Florida boys and girls enrolled in 4-H Club work and they carry on a wide variety of projects and demonstrations. Gardening has always been a popular project as it is well adapted for both boys and girls and does not require so large a plot of ground as do such projects as corn, cotton, and peanuts.

In 1947, club girls canned 123,657 quarts of vegetables and in addition they also brined a considerable quantity of vegetables and froze 2,162 pounds. They gave 2,595 quarts of food, most of which was vegetables, for famine relief. In six counties 4-H Club girls and Home Demonstration clubwomen assisted 11 communities with school gardens. In 31 counties assistance was given in 195 communities with the school lunch program where 36,476 children were fed. In these activities involving health through nutrition vegetables played an important part.

In 1947, girls completed 2,145 garden projects and 3 market garden projects while the boys completed 1,246 garden projects on a total of 1,220 acres and 127 market garden projects were grown on 174 acres.

The negro 4-H Club boys completed 912 garden and truck crop projects while the girls completed 1,410 projects. The negro agents work with the club mem-

bers and also work with adults in food and nutrition, and in this whole field they reported 3,764 gardens were grown and that 2,563 families canned 280,159 quarts of vegetables, fruits, and meat.

In a very brief way this indicates that work with vegetables is important in 4-H Club work. In nutrition and health

work our Home Demonstration specialists and Home Agents working with the mothers and homemakers in County Home Demonstration Councils have done a fairly comprehensive job on better health through better nutrition, and in this the use of vegetables, their nutritive value, and how to prepare them have been stressed.

THE FLORIDA SEED LAW: ITS GOOD FEATURES AND IMPROVEMENTS NEEDED

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FEATURES OF LAW

I believe it was the great English jurist Blackstone who said that the object of law was to discourage that which was wrong and to encourage and protect that which was right. This, we believe, should be particularly true of regulatory laws relating to agriculture. There is no good reason for any of these laws other than the protection which they afford to a good cause and the discouragement and opposition they offer to men of low ethics.

FLORIDA'S FIRST SEED LAW

Florida enacted its first seed law in 1941. We were next to the last State in the Union to pass such a measure. As originally passed the measure was, like most new statutes, inadequate and only partial in its protective features. Amendments have been made which in some respects strengthen the law. Today I am attempting to point out the good features of the present measure and some improvements that might well be made.

Turning to the better parts of the measure, we may say that its purpose is set forth in the caption, as follows: "An Act to regulate the sale, offering for sale, and transportation of agricultural and vegetable seeds and providing for inspection and testing thereof; to prevent misrepresentation and fraud in the advertising and sale thereof ***." The first step in compliance with the law by a seedsman is that he register with the Commissioner of Agriculture, giving the number and location of each place of business and pay a registration fee according to the volume of his business. These fees begin at \$1 for business not exceeding \$1,000 and are graduated upward to the highest fee of \$500 on receipts of over \$500,000. The total of registered seed dealers for the year 1947-48 reached 748. You may be interested to know that receipts from registration fees for that year aggregated \$11,845. While this is a considerable amount of money, we must point out that it does not equal the total expenses incurred in the enforcement of the law.