

The Role of the Florida Department of Agriculture in the Regulation of Pesticides

By

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Members of the Hyacinth Control Society, I am very glad to be with you today attending your Fifth Annual meeting and to speak to you on "The Role of the Florida Department of Agriculture in the Regulations of Pesticides." During last year's meeting in Tallahassee, at which our Commissioner of Agriculture, Doyle Conner, was guest speaker at your banquet, I had an opportunity to listen to some of the talks which were presented so I was quite pleased when your president, John Wood, contacted me in Tallahassee with the request that I talk to you at this meeting.

I have listened with much interest to all the talks which have been presented here at Palm Beach this week and have been very much impressed with the great desire that each of the members seem to have for getting as much information as possible to do a better job in the work in which they are now engaged, that is the eradication of aquatic weeds.

Pesticides in Florida are regulated under the Florida Pesticide Law, however, until 1937 Florida had no pesticide law. At this date the Legislature passed an Agricultural Insecticide and Fungicide Law which, as stated, applied only to agricultural insecticides and fungicides. This continued as such until 1953 at which time our Legislature passed a new law entitled, "The Florida Pesticide Law" which covered insecticides, fungicides, herbicides, rodenticides, and bactericides and includes all household products of a pesticidal nature.

In 1965 this law was modified and enlarged to cover desiccants, defoliant, and plant regulators. This was in line with a previous move which had been taken by the U. S. Department of Agriculture to cover these three new groups of agricultural chemicals. Defoliant is used for causing the leaves or foliage to drop from a plant thereby aiding the mechanical harvesting of certain crops. Desiccants are substances which are intended for artificially accelerating the drying of plant tissues and act in a similar manner as that stated for defoliant. Plant regulators mean any substance or mixture of substances intended through physiological action for accelerating or retarding the rate of growth or maturation or for otherwise altering the behavior of ornamental or crop

plants but does not include substances intended as plant nutrients, trace elements, nutritional chemicals, plant inoculants or soil amendments.

Under the Florida Pesticide Law every pesticide which is distributed, sold or offered for sale must be registered yearly with the Florida Department of agriculture. At the present time there are about 1,000 companies which register in the neighborhood of 11,000 brands of pesticides.

There are two divisions of the Florida Department of Agriculture which are mainly responsible for the regulation of pesticides. One of these is the Division of Chemistry under Dr. V. E. Stewart as Director and State Chemist. The other is the Inspector Division under Mr. Lowell Woodham as Director. Under the Division of Chemistry there are six laboratories: Pesticide, Pesticide Residue, Food, Feed, Seed, and Fertilizer Laboratories. All of these laboratories named are in the Mayo Building in Tallahassee and any time any of you might have an occasion to be in Tallahassee, we would be pleased if you would stop in and visit us and see our laboratory facilities.

There are two main responsibilities of the Pesticide Laboratory. One, is the approving and acceptance of all pesticide labeling, and two, the analyzing of all pesticides submitted, against label guarantee. In examining labels which have been submitted for registration, we must check to see that they contain the proper ingredient statement, the proper directions for use, the proper limitations to prevent excess residue on food crops, the correct warning or caution statements to prevent harm to the user, and the necessary decontamination and disposal statements if the chemical is of a highly toxic nature.

Be sure and check all of the pesticides which you buy for your work in weed control for proper labeling in all respects. The pounds per gallon may be shown on the labels but the percentage of chemicals *must* be shown. The reasoning behind this, of course, is that most recommendations for the use of an agricultural pesticide is stated for the application of so many pounds of toxicant per acre and this is information which is very helpful to the applicator. At the present time

there are 34 Department of Agriculture inspectors in the field to sample your pesticide products and we will be glad to furnish you with the name of your local inspector if you will make your request to our Tallahassee office. If you care to have your pesticide sampled, be sure that it is not opened before the inspector is called since the inspector himself must be the first to open the pesticide container if it is to constitute an official sample.

Each inspector is requested to send a minimum of 14 pesticide samples per month for analysis. This amounts to about 500 samples per month which the Pesticide Laboratory must process. About 8 to 10% of these pesticide samples are deficient, however, we feel this is due more to honest error in formulating and in unstable organic chemicals than to intentional efforts to cheapen the product by any manufacturers.

At the present time there are 500 different chemicals in the pesticide field and about half of these are in use today in various phases of pest control. When deficiencies occur in these pesticide products, the inspector is instructed immediately to stop-sale, at the warehouse or the dealer, any of these lots which are involved in the deficiency. The stop-saled product must then be picked up, remixed, and rechecked by the laboratory before being released for sale. Pesticide control officials of the United States have never been able to agree on a practical way to assess penalties for deficient pesticides, however, I am sure that the cost of reprocessing probably adds up to quite a penalty for these deficiencies.

I would like to call your attention to the quarterly report of the Pesticide Laboratory which contains the names and addresses of the manufacturers sampled, the number of legal samples, and the number of deficient or misbranded samples for the three months period. Each of the deficient samples is presented in more detail and the chemical in which it is deficient, and also the percentage of chemical found. If any of you care to get on our mailing list for this quarterly we would be glad to add your name if you will make your desire known to our Pesticide Laboratory. This quarterly report is probably our best big stick in the regulation of pesticides.

I am sure many of you were quite interested in the applicators law which was discussed at an open hearing in Tallahassee recently. As a member of the law drafting committee which was appointed by Commissioner Conner to study this regulation, I was requested to contact each of the states in our country for copies of their applicators law, if they had one in effect, and to ask that they give us the benefit of their experience in respect to the handling of this law. The draft which the committee eventually came up with was quite similar to laws which are in effect in other states, however, it received so much opposition at the public hearing in Tallahassee it was felt that it stood a very poor chance of getting through Legislature and, therefore, was not introduced. I feel sure that an applicators law will be waiting introduction when the next Legislature meets.

I was very glad to hear the talk given by Bob Blackburn on the proper mixing, use, and application of herbicides and I would certainly go along with him in the request that you keep a very complete log of your spraying operation. This was one of the requirements which the drafting committee placed in the applicators law and I am sure that it will also appear in the next law when it is forthcoming.

I would like to give you a little background on the talk which Mr. Myers gave on the subject, "Florida's County Chemical Education Groups." The need for a program of

this type became apparent several years ago after a series of unfortunate accidents due to the careless disposal of supposedly empty pesticide containers. These accidents involved both children and adults and as a result pressure was brought on the Department of Agriculture to regulate the use of certain pesticides. The National Agricultural Chemical Association was quite aware of this pressure on the Florida Department of Agriculture and asked that no action be taken until they had tried a safety program in Florida. They believed that the answer to these accidental poisonings was in education and not in regulation. This program by the Florida Agricultural Extension Service in cooperation with the National Agricultural Chemicals Association, has proven to be quite successful in Florida and as a result control officials in various states requested information regarding it. I understand this type of program is now being conducted in a number of other states at the present time.

Several weeks ago I attended a meeting in Atlanta which was held by the National Agricultural Chemicals Association to present work which was done by the Grady Committee. This committee was assembled under the Chairmanship of Mr. Howard J. Grady, Vice President of California Chemical Company, to investigate problems which were nationwide and which National Agricultural Chemicals Association felt were of prime importance. These problems were (1) the decontamination and disposal of empty pesticide containers (2) the prevention of cross-contamination of pesticide chemicals and (3) the waste disposal from pesticide manufacturing and formulating operations. At this meeting all in attendance were presented with individual copies of booklets in regard to the three above mentioned subjects. This information assembled in booklet form is also to be presented to other control officials in various major cities of the United States at future dates.

I would like to call your attention to two regulations which the Department had adopted in the past in an effort to prevent injury to humans by pesticide formulations. One of these is in regard to parathion or methylparathion and reads as follows: "Pesticides containing parathion or methylparathion are acceptable for registration only when the label or labeling bears directions for uses not involving lawns, turfs, or ornamental plants. This rule does not apply to commercially field grown or commercially greenhouse grown ornamental plants." The purpose of this regulation is to try and keep these two highly toxic chemicals out of the hands of homeowners where it might be used on their lawns or ornamentals. We feel that by keeping directions for such use off the label the homeowner would be less likely to purchase it for that use.

The other regulation referred to is one which requires all labels of highly toxic pesticides to show decontamination and disposal statements for the empty containers. The purpose of this regulation is to get the pesticide washed out of the container and make it as nontoxic as possible or to destroy and dispose of the container in an area where it would not be likely to come in contact with humans.

During the past few years we have been involved in court cases which developed when we refused registration on certain pesticide products because the labeling recommended uses of this product in a way which we felt would be unsafe to the users or the purchaser. One of these court cases involved the use of lindane vaporizers for continuous use in the home. We took the position advanced by the American Medical Association that "while brief or occasional exposure appears to be harmless it is not reasonable to expect that

human beings can avoid injury if they are exposed for longer periods year after year to a toxic agent in atmospheric concentrations that can kill insects in a few hours. It is further advanced that resultant injury may be cumulative or delayed or simulate a chronic disease of other origin, thereby, making identification and statistical comparison difficult or impossible." The judge apparently felt the same way we did in this case and gave his ruling in our favor. We do accept lindane vaporizers for use in the home that are for spot fumigating, that is, they are used when all humans and pets are removed from the closed room and after a period of vaporization of the lindane the room is opened, aerated, and reoccupied. Lindane vaporizers are accepted for continuous use if the label very prominently states that it is to be used in industrial or commercial establishments only. In uses of this type humans are exposed to these vapors only on an eight hour basis.

The other court case I would like to discuss with you briefly is the one in which a veterinarian requested registration of a flea powder, for use on dogs, which contained one percent parathion. We have never accepted parathion for use in any household products and we took the same position on this material. The judge again upheld our refusal to register this product for general sale to the public.

Another area in which we have expanded our work over the past few years is in checking the contents of sodium hypochlorites which are sold quite extensively in Miami and other areas in Florida for use in swimming pools as a germicide. Our Department of Agriculture received complaints from a swimming pool association in Miami that certain peddlers were buying sodium hypochlorites from the manu-

facturers, cutting this material to half strength with water and peddling to swimming pool owners with the result that the safety of the water was not being effectively controlled. Our inspectors in the Miami area made a very complete survey both at the manufacturing plants and at various stores and places where this product was being sold. The inspectors had been furnished with equipment for checking the sodium hypochlorite content on the spot and found none of this dilution of material being practiced on the lots they analyzed. We still, however, continue to keep a close check on the sodium hypochlorites which are sold in Miami and other cities in Florida for the use of homeowners in their swimming pools.

Another important use of sodium hypochlorite is in the dairies in Florida as a means of keeping the bacteria count in milk down to the required number. The sodium hypochlorite used here is diluted to a very low percentage and is used to flush out the milk equipment. In this instance if the sodium hypochlorite is below guarantee to start with, the resultant dilution can give a product which is ineffective in keeping this bacteria count down to the necessary level. In view of this use the inspectors make it a point to check with the various dairies in their area and to sample any hypochlorites which they have purchased for use. The results of our laboratory analysis is then furnished to the dairyman for his information.

It has certainly been a pleasure to meet with you here in Palm Beach and to discuss with you "The Role of the Florida Department of Agriculture in the Regulation of Pesticides."