

Train Yourself for Plant Pest Control

By A. B. KENNERLY

"Contract applicators have a big field waiting to be developed in controlling insects and diseases in ornamentals, lawns and shade trees," observes C. F. Garner, entomologist at Texas A & M College. "And this field is the logical opportunity for CAs and pest control operators who are willing to add this lucrative line to their present business."

New suburban developments bring new homes with new plantings. Older plantings in the established neighborhoods also need care and attention. A tree becomes a landmark. It becomes important to the family, an emotional strength, a symbol of security, and residents will spend money to preserve the tree when insects and disease threaten its existence.

"Operators who go into this business must be well qualified," Garner insists. "The business must be built entirely on satisfactory service by operators who have the answers."

Can the present operators with little experience in plant insect and disease control become proficient in this kind of work?

"Everyone should recognize that he must start where he is right now," Garner explains. "There are logical steps to take to go into this business."

First, make a survey of potential business. This survey should point up the probable demand for the service. Is the community growing or declining, or is it presently at a standstill? What is the expected life of the community in point of homeowners? Will it likely develop soon into an area of cheap boarding and apartment houses?

Assuming that the area in which the CA operates has a good opportunity for future growth and stable home ownership for another 10 to 20 years, how much time can be taken from present operations to devote to plant insect and disease control? This will determine whether it would pay to add this line to present services.

If surveys encourage the firm

It's no simple task to learn how to fight insects and diseases of lawns, shrubs, and trees as a full-time business, but many spraymen have paved the way to success with hard work and a self-education plan.

to go further, information should be collected on insects and diseases it will be called upon to control. "Plant insects and diseases differ in all parts of the nation," Garner reminds. "It is not necessary to learn about all insects — only those that give trouble."

Microscopes a Must for CAs

Collect specimens of the insects. These can be placed with pins in cigar boxes or any other box where the operator can refer to the insects for identification. Many CAs may not know the correct names for all the insects, but these can be identified at a land-grant college or university. Label them and include the dates they were collected and what they were feeding on. Later, the CA may wish to purchase his own microscope and

use it for identifying insects as he becomes more skilled. There is nothing that will add more prestige to an operator's professional ability than a microscope.

Next, start building a file of useful information that will be needed to know about insects, their controls, what they feed on and when, and something about the chemicals used in their control. It takes time to do these things, but they are the foundation of the pest control business dealing with plants.

"A library is essential to keep informed on plant pest controls," Garner points out. "No one book or publication is complete. Copies can be obtained from state experiment stations, county agents, from the U.S. Department of Agricul-



CAs in plant pest control who're teaching themselves "how to do it" can make use of insect identification displays at local extension stations. Here Texas A & M Extension Entomologists C. F. Garner (left) and H. R. Burke examine a handy exhibit. Extension people like to lend a helping hand.

ture, and from commercial concerns who manufacture pest control chemicals."

Keep Reference Library

Two books which Garner recommends are *Diseases and Pests of Ornamental Plants*, published by the Ronald Press Co., 15 East 26th St., New York 10, N.Y., and *Handbook of Pest Control*, published by MacNair-Dorland Co., 254 West 31st., New York 1, N.Y. For 35¢, CAs can purchase "Handbook on Insects of Flowers and Shrubs," U.S. Department of Agriculture, Washington 25, D.C. A new book, *Scientific Guide to Pest Control Operations*, is available from *Pest Control*.

With this backlog of information, the next step is to learn through actual experience. "Applicators will learn that regardless of how much knowledge and experience they gain," Garner observes, "things go wrong and plants are damaged. There are several ways to reduce this damage."

First, Garner suggests establishing a small experimental plot where the operator can try out insecticides and fungicides. Or, he can arrange with some grower who is willing for him to use his plantings. This experience will help to establish confidence in the operator for handling the control measures.

Another idea is to try the controls on one shrub or a small part of the lawn, then return later to observe results. Keep records on these for future reference.

Spray Early or Late in Day

Conditions outside the control of the operator may cause damage. For example, if plants lack water, foliage is more easily burned. Midday is not as good a time to spray as the early or late hours.

"Plant damage is a part of the business," Garner insists. "Be prepared to replace an occasional plant. Make cost estimates to cover this expense over an average period."

Another point to remember in control of plant insects is that it will often be necessary to make repeat applications. There are few one-shot treatments. Have an understanding with the owner regarding these additional treatments and the cost.

CAs can make arrangements with a noncompeting nurseryman for any needed replacements and at the same time learn much from him about plant disease and insect controls. He will be a good source of referral business since he is interested in satisfactory service and good livability of his shrubs and trees. Sometimes the nurseryman may be providing this service, but would rather give it up to devote his time to his nursery business.

By now the aggressive CA will be ready to take on some jobs. Keep detailed information on each contract. Include the conditions, the kind and costs of insecticides or fungicides to do the job, the time of year, the results, and charges. This information will be valuable when a similar job comes up. It could save losses in making estimates.

Disease Control Logical Adjunct

Learning how to control diseases in plants may be difficult. The homeowner, usually unable to distinguish between insect damage and disease damage, will expect contractors to treat for either. However, methods for learning plant disease control are similar to those for learning control of insects. One can learn where plant diseases can be diagnosed from state universities, although this service is limited in many states. It may be difficult to keep disease specimens.

Garner gives 5 essentials to be observed for controlling ornamental pests:

1. Use the best equipment you can buy to apply the insecticides and fungicides.
2. Select the right control measures.
3. Apply the controls in the proper manner.
4. Start control measures before serious damage occurs. This may not always be possible if homeowners delay, but the CA with contracts for regular care can avoid these situations.
5. Repeat applications must be made in 7 to 10 days for certain pests such as scales, white flies, and spider mites.

In time CAs will learn some short cuts such as combination sprays that will save time and

money. These combinations can control a variety of insects.

Once established, there are several ways to obtain new business. Nurserymen can be helpful by referring their customers, unless they offer a similar service. Newspaper advertising, radio spots, direct mail to new homeowners and to selected mailing lists are helpful. One operator gives demonstrations on television.

Another operator who has an established business in pest controls on ornamental shrubs, lawns, and trees has collected a file of color slides showing various activities of his work. He shows these to garden clubs, womens' clubs and other organizations who ask him to give a program showing how to control insects in their ornamentals. While giving self-help ideas, he is also indirectly reminding them that his work is pest control. This brings him considerable business.

Future possibilities in this work are unlimited. Harlan E. Smith, plant pathologist for Texas A & M College, points to the many opportunities in controlling plant diseases and the lack of qualified people to handle the work.

"Trends now point to graduating students from colleges and universities who are fully trained to handle every kind of trouble in plants," Smith predicts. "These people would be as capable of attending to every need of plants as the veterinarian is of animals. We are arousing interest in this need and students are becoming interested. In addition to entomology and plant pathology, students who desire to qualify themselves for this work should also learn agricultural chemicals. These would include herbicides, insecticides, fungicides, and nematocides. Then, there should be additional training in plant physiology and soils."

Contract applicators who are presently training themselves in these fields will continue their search for efficient business and finance management. And this will be good. These young fellows who graduate with skilled training in the sciences of pest control work won't have business experience. They will want to go to work for you.