

## RATIONALE, METHODS AND RESULTS OF A PESTICIDE CERTIFICATION EXAM PREP PROGRAM

DAVID K. PALMER

Hillsborough County Cooperative Extension Service  
Seffner, FL 33584-3334

**Abstract.** The State of Florida has designated many classes and categories of pesticide applicators. Hillsborough County experienced a failure rate of 39% on these exams during 1997-1998. The high failure rate led to development of a series of exam prep classes, which have helped reduce the failure rate to 22% in 1999.

The State of Florida, through the Florida Statutes Chapters 482 and 487, has designated many different classifications and categories of pesticide applicators. Certification of these applicators requires a passing grade on one or more examinations. Nearly all of the certification exams are administered by the county extension offices. In some cases, the applicant's pay rate, promotional opportunities and even their job itself depends on obtaining the required certification.

Hillsborough County, for the past two years, has tested an average of 325 applicants per year. An apparent high rate of pesticide certification exam failure in Hillsborough County led to the analyzing of existing test data for 1997-1998. The failure rate for this period was determined to be above 39% or around 126 of those tested. Suspected causes of this high failure rate include overall literacy, English as a second language, lack of study skills, lack of math skills and the inappropriately high reading levels of both the manuals and the exams themselves. The high failure rate led to the development of a series of exam prep classes in an attempt to remedy the situation.

### Methodology

The program consists of an annual series of exam prep classes. The most requested pesticide certifications in Hillsborough County are Private Applicator, Aquatic, Ornamental and Turf, and the Limited Commercial Maintenance Certification. A Core prep class is always held in conjunction with the above classes. Minor certification categories such as Right-of-Way are available on demand, and have been held by coordinating public agencies in Hillsborough and surrounding counties. These classes are also approved for CEU's. Early in the development of the exam prep classes, it quickly became evident that lack of math skills was a serious problem. Review of basic math and sample math problems soon took up half the allotted class time in some pesticide categories.

Each class consists of a thorough review of the material covered on the exam, practice label questions when appropriate, review of the appropriate math skills, practice math problems, and a practice test at the end of the class to point out weak areas.

The exam prep program in Hillsborough County continues in 2000, but with a focus on the certification required by commercial landscapers, the Limited Commercial Maintenance Certification. It is estimated that less than 1% of the commercial landscape maintenance contractors in the State are properly licensed.

### Conclusions

The preliminary results of the pesticide exam prep program are promising. While the failure rate for 1997-1998 was 39%, the data for 1999 reveals a failure rate of only 22%, a decrease in the failure rate of 40%. While this program cannot claim total responsibility for the huge decrease in the failure rate, it did contribute.

## INTERACTIVE PESTICIDE CERTIFICATION DECISION TABLE

DAVID K. PALMER

Hillsborough County Cooperative Extension Service  
Seffner, FL 33584-3334

**Abstract.** Florida's pesticide laws are complex at best. A great deal of staff time is spent attempting to answer pesticide licensing questions. This situation led to the development of an interactive pesticide certification "decision table." While the decision table cannot answer all pesticide licensing questions, it can save agents and staff considerable time by partially automating the process.

### Situation

Florida's pesticide statutes have created 21 different pesticide certifications. Multiple classifications are available within each category. To compound the complexity, the statutes are administered by two different Bureaus of the State, each requiring different qualifications, manuals, exams, and re-certification requirements, as well as different exceptions to the rules.

The Florida Statutes are at the heart of the pesticide questions most-often-asked by extension clients. These questions are also among the most difficult to answer. Typical questions

concern which pesticide certification the client needs to apply chemicals legally in his or her particular situation, and the various requirements involved. An accurate response requires a thorough knowledge of the statutes and systematic questioning of the client. Information elicited from the client must then be utilized in a complex decision-making process to determine the proper answer.

### Methodology

A decision table was developed as an interactive, dichotomous key to provide clients and staff, having little pesticide training or knowledge of the statutes, a series of relevant questions. The interactive nature of this program has the decision-making built in and automatically leads the user to the next question. In effect, the most difficult part of determining the proper pesticide certification, the decision making, is built into the system.

While the original version of the pesticide decision table was paper-based, there are several major advantages having an interactive, browser-based version. A primary advantage is the computerized nature of the program which allows users to click on an answer and be presented with the next logical

question. The other main advantage of browser-based technology is the widespread availability of the Internet, making the interactive pesticide decision table easily available to clients and staff alike.

Once developed, the decision table was reviewed by Liz Braxton, the head of the Bureau of Compliance Monitoring at DACS, the Department of Agriculture and Consumer Services. The interactive pesticide certification decision table was also reviewed by several extension agents around the state who work with the commercial pesticide certification clientele. Using their suggestions, improvements were made and the decision table was added to the Professional Horticulture Services section of the Hillsborough County Extension website. It is available at <http://prohort.ifas.ufl.edu/dectble.htm> and must be opened by a web browser such as Netscape Navigator or Microsoft Explorer.

### Conclusion

While this program cannot answer all pesticide licensing questions, it can save agents and staff considerable time by automating the difficult and time-consuming process of helping clients make pesticide-licensing decisions.

*Proc. Fla. State Hort. Soc.* 113:325-327. 2000.

## THE MARJORIE KINNAN RAWLINGS VEGETABLE GARDEN AT CROSS CREEK

JAMES M. STEPHENS  
*Horticultural Sciences Department*  
*University of Florida*  
*Gainesville, FL 32611*

**Abstract.** Marjorie Kinnan Rawlings became well-known worldwide due to her writings. Her story about Jody and his little pet deer Flag growing up together in the back-woods of central Florida won her the Pulitzer award for literature in 1939. While *The Yearling* was her crowning achievement, at least one of her other books, *Cross Creek*, was not far behind. In *Cross Creek* we find that Marjorie was not only a talented writer, but she was adept in many other fields. One in particular about which she writes at length was horticulture. It was her oranges that she knew most about, for her grove was what first attracted her away from Rochester, N.Y. to rural Florida; however, Marjorie relied heavily on her little back-yard garden for her daily meals. Let us now revisit that period in 1928-1941, her first years at Cross Creek, enter the old rusty gate to her kitchen garden, and look at what sort of vegetable garden she might have grown at that time.

One of our state's little-known public treasures is the tiny kitchen garden located in the back-yard of Marjorie Kinnan Rawlings's home in the tiny hamlet of Cross Creek, Alachua County, Florida. Now a state historic site, the home and farm of this famous writer is seen annually by thousands of visitors.

I suppose I just missed meeting Marjorie Kinnan Rawlings Baskin, for I arrived at the University of Florida in 1954, less

than one year after her death in December, 1953. So while I never saw her personal garden, I am now a volunteer at her farm where I help take care of the garden. I have relied heavily on her book *Cross Creek* (Rawlings, 1941) which provides vivid details of her garden prior to 1941. In addition, various gardening guides written by the University of Florida's Extension Service in the 1930's show us how a typical Florida garden would have been grown back then (Jamison, 1935), Table 1.

As in all of her endeavors, Marjorie seemed to approach gardening with a comfortable blend of academia and osmosis, graduating early from the school of hard knocks. Her understanding of the botanical and horticultural aspects of her crops and plants was amazingly accurate. For example, she found by trial and error that her craving for asparagus was not going to be fulfilled at Cross Creek, and she explained this demise correctly on the basis of the plant's lack of dormancy due to the warm winters.

Based on the cultivation techniques she describes, Marjorie does not appear to have been what we would call an "organic" gardener or farmer. She sent her grove man Snow Slater to town for fertilizer, and had him spread it in the orange groves, and probably on the row crops. But in the garden, she used humus, mingled with the droppings of her milk-cows Dora and Lady. Marjorie wrote in *Cross Creek*, "Hammock soil is dark and rich, made up of centuries of accumulation of humus from the dropping of leaves. I dig leaf mold from this hammock to enrich my roses and camellias and gardenias." (*Cross Creek*, p. 38).