Editorial

Youth Programs in Plant Pathology

ROBERT W. MILLER
Extension Plant Pathologist, Department of Plant Pathology and Physiology, Clemson University, SC

One-third of our nation's 45 million youth (ages 9–19) participate in organized youth programs. All of them attend school and are consciously or unconsciously preparing to lead our nation and the world through difficult times ahead. Does plant pathology have something to contribute to their preparation? If so, will and can programs be developed that successfully compete for their time and talent?

I believe that plant pathology youth programs can contribute to learning such practical skills as diagnosis, prevention, and control of plant disease. At the same time, youth programs can increase participants' awareness of biology and agriculture and develop inquiring minds that can apply science and technology. Youth can be made aware of certain emerging societal concerns related to plant pathology, such as pesticides in our food and environment and our ability to have a stable food and energy supply without shortages brought on by disease epidemics. An awareness of these concerns can contribute to development of productive citizens who make intelligent decisions about public affairs.

Young persons want to know and be involved in decisions that affect their lives and futures. Programs in plant pathology for youth can provide positive opportunities to share and evaluate societal problems. It is a chance to combat ignorance, apathy, and even distrust of agriculture and its problems in maintaining "healthy plants" and "healthy people."

Currently, only seven or eight states have identifiable efforts in extending knowledge about plant pathology to youth. Most of these are using 4-H, a Cooperative Extension Service youth program. Four-H programs are excellent. What is needed is a national level of competition in 4-H plant pathology with concomitant guidelines, minimum criteria, and perhaps an inexpensive source of core program materials. Such an effort could minimize problems 4-H programs suffer because of different state 4-H organizational structures, funding cutbacks, and lack of initiative.

These 4-H program problems require each extension pathology unit to spend precious time integrating plant pathology resource materials into the state's system. In most states, development of resource materials is not enough. The extension specialists who commit time to 4-H plant pathology find themselves involved in state 4-H conferences, 4-H achievement days, 4-H committees, promotional efforts, donor awards banquets, etc., for at least 10—and probably more like 20—man-days a year. The department head or chairman may view this effort as a nuisance that drains resources away from short-term specific objectives with immediate visibility. The results of youth program work are distant in time, general in objective, and anticipated to have obscure impact.

The 4-H pathologist will find few, if any, volunteers to multiply his effort. Most "volunteers" have had no previous exposure to the science or art of plant pathology. They are usually insecure in their knowledge of the subject, believe they require more tools than they have at their disposal, and feel the subject lacks the excitement to capture a youth's imagination.

What is needed, then, is a way to integrate plant pathology into the human experience. Grade school and high school biology textbooks could include plant diseases as examples. A unit on plant pathology might be added to core curricula. Girl Scouts and Boy Scouts could include merit badges in plant pathology designed to fit audience interest and needs. Similarly, numerous other youth organizations directed at specific audiences could incorporate plant pathology as it relates to their interests. The development of resources for these youth programs will require innovation. The quality of educational resources must be better than that currently available.

How can we accomplish the above? Many youth organizations generate their educational materials at the national level, so input at the local or state level is not possible except as one-on-one or small group contact. Many of these youth organizations, including 4-H, belong to the National Confederation of Youth. These organizations want assurances that educational materials are of high quality, represent true societal concerns, and are not self-serving. To address these concerns, an ad hoc committee on youth programs needs to be established by the American Phytopathological Society. The objective of the committee would be to integrate plant pathology into the youth experience. Immediate specific goals might include: 1) determining communication channels and requirements for input into youth educational materials, 2) determining the manpower requirements and exploring sources of manpower to accomplish the objective, 3) reviewing existing youth educational materials to develop the scope of the problem, 4) initiating a national 4-H program plan and providing for its continuation, and 5) generating a project proposal to solicit funding.

Industry representatives attending a discussion session on youth programs in plant pathology at the 1981 APS annual meeting indicated that significant funding was possible provided a program was developed to spend the money effectively.

The president of APS, industry representatives, private consulting representatives, department head representatives, extension representatives, National Confederation of Youth and Boy Scouts of America representatives, a national 4-H representative, and a youth representative all agreed that youth programs are needed. Shall we proceed?