

FUTURE OPPORTUNITIES IN WEED SCIENCE: MY VIEWS. Dirk C. Drost, Head, Development Planning, Syngenta Crop Protection, Inc., Greensboro, NC 27419-8300

In the 1980's, perhaps few in the field of weed science would have predicted the coming upheaval from new technology and outside forces. Adapting to changes, such as industry consolidation, public environmental concerns and herbicide tolerant crop technology, has challenged many weed scientists. Some topical concerns, such as the control of invasive species, have generated new opportunities in the form of jobs and funding. These new areas of study are not, however, the only promising options for the future of weed science. The present paradigm will not alter the fact that our current level of agricultural productivity is dependent on herbicides for weed control. There will be a continuing need for expertise in weed control and herbicide technology. The advent of herbicide-tolerant crops has not altered the fact that expertise will be required to preserve and maintain this technology. One concern is the way the current support for new and on-going research impacts the training of weed scientists. A dialogue needs to begin on how many weed scientists we will need in the future and what skills they must have. The basics of agronomy, agricultural engineering, biochemistry, botany, horticulture, plant physiology, problem solving and production agriculture must remain an integral part of the weed science curriculum in order to continue serving core interest groups and the public overall. Controlling weeds is no longer a matter of simply applying herbicides. Weed scientists will continue to face the delicate but important task of helping farmers maintain or increase yields, while taking full advantage of new technology without abusing it. The next generation of weed scientists must also be trained in a cost-effective and efficient manner.

The key to the future lies in having open discussion now and in forming partnerships between academia and industry so that our planning for the future succeeds. It is essential that this planning take place. The field of weed science will require even sharper minds and more specialized training going forward because of the tremendous challenges presented by spreading herbicide resistance and the incredible leaps in technology made over the last decade. To meet these challenges, we must build a regional society with long-term stability and begin identifying and training the next generation of professionals who will affiliate with it. We must help the agricultural community preserve existing technology as we develop new weed control tools, even as we deal with the stresses of having fewer researchers, less funding and fewer active ingredients. Finally, we must seek out new public and private partnerships to address the needs of farmers and other end users for weed management.