Horticulture in a New Environment or It's Time to Communicate: But with Whom?

Presidential Address¹

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ASHS Southern Region President, 1992–93

It has been a high honor and a distinct privilege to serve as your president and preside over this 53rd meeting of the Southern Region of the American Society for Horticultural Science. This has been especially meaningful, because my father served in a similar capacity some 60 years ago. The title of my address is appropriate if one considers the vast changes in science and society that have occurred between my father's time and now.

Important issues abound

As I began "to ponder potential topics for this address, a number of important issues came to mind. Among these were several education-related topics, including shrinking undergraduate horticulture emollients, the reduced number of American graduate students, and the increasingly difficult job situation faced by our graduates. With the fast-paced changes in science and technology, another persistent issue is the modern horticulture department's teaching philosophy. That is, should the student attend college to receive an education, learn to think critically, and become a life-time learner, or should he or she receive technical training in horticultural techniques or both? If both, how can they be accomplished in a 4-year curriculum? The increasing cost of education in our land-grant universities, which is being passed on to students in response to budget shortfalls, has led parents to demand that undergraduate teaching receive greater emphasis.

Environmental issues, including water quality (surface and underground) and reducing our dependency on pesticides, are also important. The public desires a cleaner and safer environment "at a time when many departments have eliminated or cut back their plant breeding programs. This is somewhat ironic, since disease- and pest-resistant varieties with

efficient mineral uptake are the cheapest, most economical, and effective way to deliver safe and nutritious foods to consumers in an environmentally friendly manner.

Another important issue deals with integrating discipline-oriented scientists into horticulture departments and whether these departments are becoming too basic or discipline-oriented and turning their backs on the mission-oriented research that has been associated with land-grant universities for so many years. This is a critical issue, as I believe that the most current and up-to-date science and technology *must* be brought to bear on horticultural crops. At the same time, we must recognize that many of our discipline-oriented colleagues have different agendas from those of traditional horticulturists. The real issue, and a vital one for our horticulture departments and professional organizations, is how we integrate these important new resource people into our departments, the ASHS Southern Region, and the national Society.

Indirect costs or overhead, and variety patenting and the royalties derived from them are other issues for current debate.

Funding crisis-The central issue

While all of these issues are important and deserve our attention, I believe that none is more important to us as horticulturists than the current funding crisis. This crisis represents a significant threat to our departments as we know them, as well as to us as individuals, to say nothing of the horticultural industries we serve. All one must do is ask our colleagues who have had the misfortune of being employed in states that have done one or more of the following: initiated salary or time reductions (furloughs), including conversion from 12- to 9-month appointments; encouraged early retirements or position closings following retirement; or, worse, eliminated positions. What a dramatic effect these actions have had on their lives, and on the departments with which they have been associated! Likewise, there are again discussions in several states regarding combining horticulture departments with agronomy, forestry, or other related areas to form plant science departments or, even worse, completely eliminating the horticulture department and its faculty and staff.

Sources of dilemma. How did this dilemma come about? What can we learn from it? And most importantly, and the focus of my presentation today: What can we as individual horticulturist do to slow, reverse, or even prevent some of the negative manifestations of the

funding crisis from affecting us and our departments? First, it is important to recognize that many reasons for the crisis, such as the national debt and recent economic slow down, are problems beyond our control. Also, the public increasingly has become suspicious of universities and their faculties. And why should they not be, considering recent reports of researchers publishing self-serving and dishonest science, and questionable indirect costs and expenditures by such great universities as Stanford. None of us would or should accept blame for these events. We also recognize that the problem of shrinking resources is not unique to horticulture, but rather is one faced by all higher education. Additionally, we must accept the fact that higher education, including university research, is and will continue to be a poor competitor for public funds with schools, highways, prisons, and many of the pressing social programs.

Actions that we can take. Where then does this leave us? What can we as individual horticulturists do to help ease the current financial situation and reduce its negative impact on horticulture, agriculture in general, and science and society? I suggest that there are at least three steps that each of us can and should take.

- 1) We must redouble our efforts to establish industry linkages to ensure that we are doing relevant research and to determine definitively whether our respective industries are willing to fund our research.
- 2) Based on what we learn from step one, we must reassess our individual programs and then set out to accomplish our revised goals as efficiently as possible, i.e., we must continue to work hard, but, more importantly, we must work harder at working smart.
- 3) Perhaps most important, we must communicate our individual horticultural stories, and not only through slick publications, as in the past. We must reach as wide a popular audience as possible. Let me elaborate.

Step one—redoubling our efforts to win grants—is nothing new, since our administrators continue to barrage us with the notion that we must seek more grant funds. Administrators seem to believe that this is far and away the best solution, since we not only obtain funds for our programs, but also in the process bring in overhead or indirect costs, which they depend on to run their shops. Unfortunately, this administrative intoxication with indirect

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¹Presented at the 53rd Annual Meeting of the American Society for Horticultural Science Southern Region, Tulsa, Okla., 2 Feb. 1993.

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costs seems to be so strong that the amount of grant funds received becomes the primary yardstick for determining raises and promotions, sometimes irrespective of what was accomplished with the funds or despite the fact that the subject of the grant may have little relevance to the department's mission. This approach to funding also has allowed some higher administrators to transfer their fund acquisition responsibilities to the individual scientist. Most of us also recognize that the grant funding pot is getting smaller while the number of individuals seeking these funds is increasing, i.e., there are many fine ideas and scientists who are not receiving funds, especially through competitive grants. We also recognize that because much of our training as horticulturists is in applied sciences, competing for grants in basic science is difficult.

Regardless of the problems associated with grants, some of which I have just mentioned, we must continue to be persistent and creative in pursuing grant funds from both competitive and industry sources, which I hope will supplement our ongoing programs rather than dictate their direction. Those of us with strong commitments to industry and production horticulture must seek to strengthen ties to these industries in an attempt to gain increased support, both monetary and political. We must determine whether industry support exists for our current projects or for new projects that the industry would like to see undertaken.

This effort will require that we spend more time "kicking clods with producers" and less time in the comfortable and friendly confines of our college campuses or research and extension centers. We must convey to our industries in no uncertain terms that the day of state-supported horticulture research is over, and that we have now entered an era of state-assisted research—an era that requires their financial participation, especially in the form of operating funds.

This exercise will help each of us to determine the extent to which we can or, just as importantly, cannot depend on industry for support and to identify our clientele in this new environment. In addition, it will indicate the degree to which we must redirect our efforts into new areas that do offer funding potential. This is precisely why I listed obtaining grants first among the three points that we must address.

Self-evaluation and increased efficiency in meeting our clients' needs are areas that require our attention in these days of tight funding. Tough times frequently result in substantial gains in productivity over the long haul, whether in business, government, or any other enterprise. This is a time for departments and for us as individuals to reflect seriously on what we are all about. We need to ask: What are we doing? How are we doing it? And why are we doing it? Is the focus of our teaching, research, and extension programs still necessary in light of current circumstances? Are the

ways we approach our respective programs still appropriate in 1993? Is our mission the same as it was 10 or 20 years ago? If so, how can we accomplish it more efficiently and effectively and with fewer resources, both personnel and monetary? How can we use new computer software to help replace lost resources and increase our efficiency? How can new molecular techniques be used to address important horticultural problems?

Another important aspect of self-examination is determining if our clientele has changed. Are our clients still primarily the small-farm or nursery operators or florists, or are they now the large producers?—the Krogers, the Wal-Marts, and other major processors or marketers of horticultural products. Are the users of our information still the producers that we reached through county agents in the past, or should we now focus on our former students and/or supplier representatives to serve as our technology transfer or change agents?

Finally, while educational and research clientele may change, we must always remember that our primary support clientele are the states' taxpayers. I frequently hear colleagues say that they now receive very little money from the state. This may be true as far as operating budgets go, but we must never forget that our salary and most of our physical facilities come from state or federal funds, i.e., from taxpayers' dollars.

The third, and I believe the most important point, is that we must begin to communicate as we have never done before. Most of us have done a respectable job of communicating with one another through professional publications. However, I suggest here that the audience we must focus on now is our industry clientele—the general tax-paying public, elected and appointed officials, and others who affect policy. We should focus special attention on building bridges with those concerned with the environment. We must lead the way in solving environmental problems. We must let people know what we are doing as horticulturists, and how it has a positive effect—physically and mentally—on their lives.

I am challenging each of you to release to the communications media at least one, but preferably two, articles about your work between now and our next meeting. Use both printed and electronic media. Most of us have agricultural communications departments or similar entities associated with our respective institutions, or perhaps we personally know a TV or newspaper reporter. It does not matter, just so the job gets done. Some will say that they do not have two articles' worth of new developments or information to share with the public. Or, they do not like being forced to discuss anew finding or variety until they are sure of the results. I am suggesting that interesting articles can be written not only about what we find or what we have developed, but also about how we as horticulturists go about our work. We do need to think about how we slant the articles or, to use a current term, what

kind of spin we put on it to reach the broadest audience possible.

For example, my experience has taught me that while growers are still very interested in yield advantages and pest resistances of a new variety, the general public shows much more enthusiasm about attributes such as increased health and nutritional benefits. Likewise, our environmental friends are interested in varieties that ripen early, thus saving a pesticide application, or in pest-resistant varieties, which are environmentally friendly as a result.

Educators can write articles on new teaching methods, job opportunities for horticulture graduates, curriculum revisions, departmental quality as determined by ranking in publications such as the *Gourman Report*, etc. The spin here could be how effective and innovative we are with the public's tax dollars.

Extension articles can be written on the success of the Master Gardeners Program in your state, or how your program was instrumental in implementing new integrated pest management methods with an industry, resulting in saving millions of dollars in pesticide costs or, better yet, thousands of pounds of pesticide applied, and on and on. I believe that we now must forget about depending on extension personnel alone to tell the total horticulture story. I think you will agree the Cooperative Extension Service has its own problems and, thus, its hands full telling its own story.

This proposed publicity campaign will require a total effort on all our parts. This should not be a problem since we all have much at stake. How much this publicity campaign will help to slow or arrest some of the negative fallout from the current funding crisis is unknown. However, it cannot hurt. One of my concerns is that we will have no clientele to support us politically as administrators consider combining or eliminating horticulture departments or positions. Frankly, the administrators probably would not seriously consider such actions if we all had effective and aggressive clientele. However, if they know the horticulture clientele is weak or they approach them and are told, "I don't care what happens to that position or department because they haven't done anything for me or my industry in years," we are definitely in trouble. Unfortunately, I am afraid the latter is frequently the case. And, regrettably, while it is often true that we have not always served the needs of all our producer clientele, much of the problem results primarily from a negative perception because we have not told our story to the right people.

In summary, we must redouble our efforts to build industry bridges to obtain monetary and political support from established and newly identified clientele. We must reexamine *what* we are doing and *how* it can be done more effectively and efficiently. Finally, we must communicate, but with whom? I think we know. Tomorrow really does depend on what we do today.