

new crop feasibility. The resource profile should include natural (land and water), human (management and labor), and capital (venture, debt, and equity) resources present in the region. The total and potential hectareage of the current traditional crops should be identified. Present production schedules can then be examined. The new or supplemental crops must fit into the present production schedules of traditional crops, or the present schedules must be sufficiently flexible to allow for the incorporation of the new crop. The possibility of using existing facilities and equipment should also be examined. Other factors to consider include the present demand for labor, grower knowledge and/or receptiveness to training, and grower commitment. An assessment of grower attitudes toward cooperation within the region may be needed to assess the feasibility of regional new crop enterprises. Grower involvement in the various phases of the feasibility analysis is critical.

#### Assessment of economic potential

A simultaneous evaluation of market demand, cultural adaptation, and the determination of economic feasibility is essential. Establishing cost estimates of production, packaging, and handling are needed. Profitability must be possible in both the short-term (covering only variable costs) and in the long-term (covering fixed and variable costs). The evaluation of economic options, both individually and as a region, can be critical to the successful incorporation of new crops into the traditional production system. For many of these crops, the coordination of production by some form of grower association would provide a consistent supply of quality product to the market. This would protect the market from over-supply, which adversely affects market value. Quality control must remain a high priority for growers to maintain a place in the market.

This systems approach delineates areas of potential economic risk in the production and marketing of the new or alternative crops studied. Successful crop diversification is then possible through the development of individual or regional marketing and production opportunities.

#### Literature Cited

- Council for Agricultural Science and Technology. 1984. Development of new crops: Needs, procedures, strategies, and options. CAST Rpt. 102.
- Kline, R.A., P. Minotti, D. Wolfe, P. Stevens, D. Bell, C. Tenbroek, J. Port, L. Ward, and B. Henchan. 1986. 1985 specialty crops in trial. Cornell Univ. Veg. Crops Rpt. 334.
- O'Dell, C. 1989. A procedure for evaluating production potentials and developing extension recommendations for new horticulture crops. Proc. 1st National Symp. on New Crops, Indianapolis, Ind., 23-26 Oct. 1988. (In press.)
- Runyan, J.L., J.P. Anthony, Jr., K.M. Kesecker, H.S. Ricker, C.W. Coale, Jr., and C.R. O'Dell. 1986. Determining commercial marketing and production opportunities for small farm vegetable growers. USDA Agr. Mktg. Serv. Mktg. and Res. Rpt. 1146.
- U.S. Dept. of Agriculture. 1987. Vegetable situation and outlook yearbook. USDA Econ. Res. Serv. TVS-243.

# LETTERS

## FRAUD, SLOPPINESS, AND MISTAKES IN HORTICULTURAL SCIENCE

It is hoped that Science Editor Lipton's opinion [*ASHS Newsletter* 5(2):1-2] that horticultural research publications are free of fraud is correct, as fraud is typically very difficult to prove and there are considerable pressures to "publish or perish", even in horticulture. Unfortunately, a type of fraud seems widespread in commercial horticulture in the form of "miraculous" claims for horticultural products, such as fertilizers and biocatalysts. This type of fraud reflects badly on horticultural science; therefore, horticultural scientists have a duty to conduct research that tests such claims.

Any sloppiness or mistakes in refereed articles have to be largely, if not totally, the responsibility of the editors and reviewers. This may seem harsh considering the lack of or meager compensation they receive, but the whole basis of refereed publications is to eliminate sloppiness and mistakes. Because of their critical role, reviewers and associate editors need to be selected very carefully and given appropriate recognition and support.

An important mechanism for revealing sloppiness and mistakes in publications is the forum provided by letters to the editor. Unfortunately, this does not seem to work well in *HortScience*, because letters to the Editor

questioning published research typically receive no response or irrelevant or hostile comments from the research author, rather than an objective and substantive discussion of the issues raised. An author of a refereed scientific article should welcome the opportunity to objectively discuss his/her research in such a public forum. Also, any reader who detects errors in published research has a professional responsibility to correct them.

Since all ASHS Members have a stake in the integrity of horticultural science, we need to develop a greater intolerance to sloppiness and errors in our own manuscripts, in manuscripts we review, in claims for horticultural products, and in the horticultural articles we read, be they scientific or popular. As horticultural scientists, we have to serve as the guardians of "truth" for all of horticultural science.

DAVID R. HERSHEY  
Dept. of Horticulture  
Univ. of Maryland  
College Park

### Corrigenda

- In the article "Callus Production and Somatic Embryogenesis from White Ash", by John E. Preece, Ji-liang Zhao, and Fan H. Kung [*HortScience* 24(2):377-380, April 1989], the authors wish to note the following: In Table 3, "2,4-D" should replace "NAA" under the heading "PGR in primary (DKW) medium".

# MSTAT-C

Design and Analysis of Agronomic Research

---

**NEW MSTAT C**

Design and Generate Experiments -  
RCB, LATTICE, CRD

Create and Maintain Research Records

Create and Maintain Master Accession Files

Create and Generate Books, Labels, Maps

Spreadsheet Style Data Entry

Statistical Analysis

ANOVAs - one and two-way, lattice, hierarchical,  
nonorthogonal, diallel, factorial with covariance

SUMMARY STATISTICS - means, frequencies

REGRESSION ANALYSES - linear, multiple

DATA ANALYSIS - multivariate statistics, CHI-square  
mean separations - LSD, Duncan's, S-N-K, Tukey's  
orthogonal contrasts, transformations, calculations

REPORT WRITING/DATA INPUT - ASCII input-export

PLANT BREEDING - accession files, books, labels

EQUIPMENT REQUIREMENTS:

IBM or Clone with hard disk, 320K, 5 or 3 in. disks

PRICING (US Dollars):  
Commercial \$ 595    Non-profit/Individual \$ 295  
Licensing available

FOR ADDITIONAL INFORMATION:

Dr. Russell Freed, Director  
MSTAT/Michigan State University  
East Lansing, MI 48824-1325

TELE: (517) 353-1752