CORRECT USE OF STATISTICAL SYMBOLS

In teaching graduate students correlation and regression analysis, I believe it is important for them to understand the fundamental differences between the various notations used in the literature. The correlation coefficient is designated as r , and the multiple correlation coefficient is designated as R . The square of r is the coefficient of determination, r^2 . This terminology is used consistently in such reference texts as *Statistical Methods* by Snedecor (1950), *Agricultural Experimentation* by Little and Hills (1978), and *Multivariate Statistical Analysis* by Kachigan (1982). Since the designations are for vastly different relationships, I believe it behooves authors of papers in the *Journal of the American Society for Horticultural Science* and *HortScience* to use the proper notations.

I would like to refer you to a recent issue of *HortScience* (vol. 27, no. 9), where several such errors were apparent: Figs. 1 and 2 (p. 984-985), $R^2 = 0.60$ and 0.56 for linear regressions; Fig. 2 (p. 991), $R^2 = 0.24$ and 0.20

for linear regressions; and Figs. 2 and 3 (p. 995), $R^2 = 0.60$ and 0.45 for linear regressions. The appropriate designation of the coefficient of determination for a linear regression is r^2 . The correct designation of the correlation coefficient was used in Fig. 1 ($r = 0.83$, p. 1015). In addition, $r = 0.92$ and 0.84 were correct in Figs. 1 and 2 (p. 1029-1030), but R^2 was used incorrectly to indicate the coefficient of determination in both figures.

I also suggest that it would be more accurate to present probabilities as $P \leq 0.05$ or 0.01 rather than $P = 0.05$ or 0.01 , since the probability is seldom exactly 0.05 or 0.01 .

Literature Cited

- Snedecor, G.W. 1950. Statistical methods. Iowa State College, Ames.
Little, T.M. and F.J. Hills. 1978. Agricultural experimentation. Wiley, New York.
Kachigan, S.M. 1982. Multivariate statistical analysis. Radius, New York.

STANLEY RIES
Dept. of Horticulture
Michigan State Univ.
East Lansing, MI 48824-1325

Corrigendum

•In the article "Improvement of Rose Achene Germination by Treatment with Macerating Enzymes," [*HortScience* 27(9):1018-1020], the authors would like to point out that the correct authorship is as follows: Yoshiko Yambe, Kiyotoshi Takeno, and Takashi Saito.

How much water did your plants use today?...How is the environment affecting transpiration?...How effective is growth regulation on your plants?...What is competition for water resources doing to your plants?

Find the answers directly with **DYNAGAGE**
SAP FLOW SENSORS

- For field or greenhouse
- Easier and smarter sap flow measurement
- Systems for 2-32 plants available - **Flow32™**
- Automated retrieval and real-time sap flow graphics for PCAT or portables
- Measures stem water flow electronically
- Direct transpiration sensor
- Wraps around plant stems/non-invasive
- Ranges from 3/8" to 5" dia.

DYNAMAX (713) 771-4224

9888 Bissonnet, Suite 150 - Houston, TX 77036 • Fax: (713) 771-4102