VIEWPOINT

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Perspective in Graphics

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Presentation-quality graphics can be produced quickly and easily on desktop computers. Recent developments in graphics software enable production of sophisticated graphical compositions that frequently include perspective.

Perspective or 3-D can be an effective way for presenting continuous data where information is presented on each axis. When used in bar or line graphs, perspective (pseudoperspective) implies information that is not to be found in the graph. Figure 1 illustrates a 3-D bar graph and two alternative means of presenting the same information more clearly in 2-D bar and line graphs. This is an extreme abuse of perspective; some of the data are hidden from view. In slide presentations, pseudoperspective confuses the observer and prevents quick and clear understanding of the information presented. Excessive color coding can add to the confusion.

Pseudoperspective is used frequently in slide and poster presentations at ASHS Annual Meetings. I have seen only a few examples of pseudoperspective in the *Journal* and *HortScience*. Two recent examples of pseudoperspective in ASHS publications are several bar graphs in *HortScience* (Ng et al., 1990) and a pie chart in the *ASHS Newsletter* (Martin, 1990).

There is an extensive literature on graphic design, but one does not have to become a student of graphical design or cognitive sci-

Fig. 1. A pseudoperspective 3-D bar graph and the same data in 2-D bar and line graphs.

ence to produce high-quality graphics. Tufte (1983) presents an elegant overview of graphics practice and theory. Wilkinson (1989) addresses the issue of "perspective mania" in the manual that accompanies SYGRAPH and provides numerous references to the literature for those so inclined.

I suggest that the *ASHS Publications Manual* update include specific guidelines regarding graphic design to prevent unwarranted perspective. The slide and poster guidelines for ASHS Annual Meetings should be similarly updated.

Literature Cited

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