Editorial

Our New Impact Factor

Plant Physiology’s impact factor rose from 4.831 in 2000 to 5.105 in 2001—an increase of 5.67%! For those who do not know, the impact factor of a journal (for 2001) is calculated by dividing the number of citations made in 2001 to articles published in a journal in 1999 through 2000 by the items published in that journal during the years 1999 through 2000. Since the change in leadership at Plant Physiology occurred in mid-2000, much of the credit for this increase must go to Maarten Chrispeels, the enormously successful former editor-in-chief of our Journal (1992–2000). Some credit, however, must also be attributed to recent innovations in the Journal, to raising our standards for publication, and to the hard work and dedication of our new international Editorial Board, our reviewers, and our staff. At the very least, it can be said that the forward momentum of Plant Physiology is being maintained!

Among the over 100 journals devoted to plant biology, Plant Physiology continues to rank third among those journals that publish primarily original research articles. It is important to point out, however, that the gap between our Journal and the top two journals is diminishing. For example, in 2000, our impact factor was only 86% that of The Plant Journal: in 2001 it was 88%. Similarly, our impact factor in 2000 was only 43.5% that of our sister journal The Plant Cell: in 2001 it was 46%. Moreover, compared with The Plant Cell and The Plant Journal, the breadth of scientific topics covered by Plant Physiology is much wider. This means that some of the papers that are published in Plant Physiology concern less intensively studied subdisciplines. Although many of these papers are the top publications in these particular fields, they are not cited as often because fewer people are working in these specialized areas than in larger and more active areas of research. Plant Physiology’s impact factor would undoubtedly be higher if calculations concentrated on these more active fields.

Here’s another remarkable finding relating to citation rates—there’s surprisingly little difference in terms of numbers of citations between publishing a high-quality plant physiology article in Nature or Science and publishing a similar paper in Plant Physiology. How is this possible? After all, aren’t the impact factors of Nature and Science six to seven times higher than Plant Physiology’s? True, but this does not mean that a high-quality plant physiology paper in Nature or Science is cited six to seven times more than a similar paper in Plant Physiology. Not by a long shot. Indeed, plant physiology papers in these elite journals are cited at much lower rates than the average article in those journals. Indeed, in a recent citation analysis that compared the 10 most highly cited original Plant Physiology papers published during the last six months of 2000 with the 10 most highly cited original plant physiology papers published in Nature and Science, it was heartening to discover that the median citation rates of the papers in Plant Physiology (18) compared favorably to the median citation rates of the plant physiology papers in Nature (22) and Science (44). No, I am not asserting that a publication in Plant Physiology is as prestigious as a publication in Nature or Science. The most stellar plant physiology papers truly do need to be published in these elite journals if our science as a whole is to get the attention it rightfully deserves. The point is that “hot research” published in Plant Physiology does get noticed. Given that these elite journals reject roughly 90% of the articles submitted to them, it is not too far-fetched to suggest that the authors of some of the more “long shot” submissions to these journals might fare better if they were to submit their work directly to Plant Physiology. Indeed, I ask you to consider the following points the next time you are confronted with the question of where to publish your hot research:

- Is it possible that your paper may get scooped while it undergoes an ultimately unsuccessful review at one of the elite journals?
- Do the relatively few plant biologists on the editorial boards of Nature and Science have the breadth of expertise necessary to give your manuscript the thoughtful evaluation it deserves?
- Does the limited space available in Nature and Science allow you to discuss all the important aspects of your scientific contributions?
- Does your high-quality paper stand a better chance of being featured in a front-of-the-journal summary section if it is published in Plant Physiology or in Nature or Science?
- Which of these journals is most likely to feature your hot research on its cover? (Incidentally, our Journal would love to receive more cover submissions!)

To keep our Journal progressive and to sustain competition is a never-ending and relentless process. In closing, I would again like to express my appreciation to the Editors and staff for their dedication, creativity, and help in making our Journal the wonderful publication it is today.

Natasha V. Raikhel
Editor in Chief, Plant Physiology