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## Editorial

# Authors, tell us more about your compounds!

Since the beginning of the year 2000, *Phytochemistry* has introduced a series of changes in response to the Regional Editors' suggestions, as well as to recommendations from the Editorial Board members and the readership at large. These changes are necessary and timely in meeting the expectations of this new millennium, and to reflect the improvement in the quality of plant sciences brought about by the attendant technological innovations. Thus the field of Phytochemistry has undergone significant change over the last decade, and the reorganization, in part, reflects some of these changes. It is our intent to provide to the *Phytochemistry* readership, to the fullest means possible, a broad range of scientific topics from natural product identification to proteomics and genomics, so that *Phytochemistry* will continue to be a flagship in the plant sciences. The explosion in our knowledge and study of plants does, however, mean that not all aspects of scientific endeavor can be covered in either the same way, or to the same extent as before. As a result we have been operating a policy which has resulted in papers that previously would have been considered for publication in *Phytochemistry* being no longer considered even for review. This has led to misunderstanding with potential authors and we now take this opportunity to explain in greater detail this policy. It mainly applies to phytochemical manuscripts but also extends to papers dealing with macromolecules.

### Phytochemical manuscripts

In all cases, whether major investigations published in regular issues or shorter papers published in special issues, chances of publication of structural elucidation papers will always be increased if authors remember these simple rules about describing their compounds:

- The general context and aim of the phytochemical study should always be explained.
- If studies have been done on related species the compounds from the species under investigation should be described in this context. Comparisons should be made chemotaxonically and, if possible, of the likely differences in the biosynthetic pathways.

- At the level of the molecules themselves comparisons should be made with their occurrence elsewhere in the plant kingdom and the variation in the elaboration of the core structure commented upon or described in greater detail.

As previously stated in this Journal (see 51:8, pp. xxi–xxii and 54:1 pp. xi–xii), we will actively discourage and de-emphasize the inclusion of fragmented studies in plant chemistry addressing, for example, a series of routine identifications of plant constituents of one or a few compounds at a time. Such studies go largely unnoticed in the scientific literature, and frequently there is no context for these investigations. Moreover, multiple fragments result in significant levels of duplication in the literature, as well as being an unfair burden on reviewers. Perhaps, most importantly of all, the impact of the overall work itself is largely missed when fragmented in this way. We already have a policy towards publication of papers describing single new compounds, which authors have appeared to accept since 2000, in that these will only be considered if they are of exceptional interest or novelty. We also actively discourage submissions that use as a rationale for the study of a particular plant its pharmacological properties, when the actual paper itself describes a few of the plant's constituents that are unrelated to the original justification. We will also actively discourage review articles that are archival in listing series of compounds, in favor of more substantive and incisive treatments. Also included in this cohort are papers that:

- Attempt to justify description of a single compound on the basis of literature claims for bioactivity,
- Contain claims for bioactivity with limited screening evidence,
- Biotransformation papers that are clearly based on limited experimentation and fail to address the enzymology involved.

### Macromolecular papers

We also seek to publish substantial papers dealing with gene expression and proteins. In common with other journals, certain types of papers are also to be discouraged; including:

- Purification of well known proteins from yet another source, without significant further insight,
- Work that fails to consider the purity of the enzyme being investigated. In this day and age providing evidence of electrophoretic purity should be routine,
- Papers mainly built around cloned genes from yet another source and data only being provided on northern and southern blots,
- Papers dealing with incomplete cDNA or gene sequences,
- Papers dealing with gene expression which lack biological importance and/or biochemical studies

## Conclusions

After considering whether their work is precluded from publication because they fall into such categories, potential authors are encouraged to submit papers which can be reviewed under the following two sets of general criteria:

*Regular Journal Articles* should be submitted with (i) a precise purpose (preferably, but not exclusively, hypothesis-driven) for the investigation; (ii) with a description of the results obtained and how the objectives were met; and (iii) with conclusions that provide new insight into any of the subject categories within *Phytochemistry*.

*Special Issues (Structure Elucidation)*. Consideration will still be given to papers that provide a convincing rationale for inclusion of single compound papers, such as those containing highly unusual skeletons and/or significant biological activities. However submissions will be more favorably received that describe multiple new compounds possibly together with known compounds in a more complete piece of work. These papers are always likely to fare better in the reviewing process, rather than fragmented submissions. Authors should always check their claims for a new compound carefully. The editors find there are a large number of submissions being made, which deal with compounds claimed to be new, but when checked with Beilstein CrossFire, SciFinder or Science Direct they are found to be known. Additionally, it should be noted that in the Special Issues for Structure Elucidation, the Journal is striving towards substantial descriptions of plant constituents, and, in such cases, conclusions are not required. **In all these cases authors should attempt to tell us more about their compounds in terms of the criteria set out as above.**

By adopting such a policy, *Phytochemistry* will continue to advance in its role as a conduit of discovery; this is an exciting time, and we look forward to your contributions, both now and in the future.

G. Paul Bolwell  
Norman G. Lewis  
Dieter Strack  
Regional Editors