Reviewer Guidelines for Journal of Chemical Ecology

Preamble
Journal of Chemical Ecology is committed to publishing high quality research articles, rapid communications, and selected review articles reporting novel findings or interpretations of the origin, function, and significance of natural chemicals that mediate interactions within and between organisms. The process for determining suitability for publication involves peer review of articles by scientists with appropriate expertise and a final assessment of suitability by academic editors of the journal. Peer review is a critical part of this process. Peer reviewers should focus reviews on whether or not the manuscript fits the criteria for publication and provide as much objective information as possible to support their views. Reviewers may make a recommendation as to overall suitability of a manuscript for publication, but they should be aware that the academic editors make the final decision concerning publication. The editors may reject manuscripts without external peer review if the paper is outside the scope of the journal, reports incomplete work, lacks significance, or is poorly written.

The journal publishes three types of manuscript:
- **Research articles**: Report significant accomplishments in chemical ecology. Substantive data and conclusions must be reported.
- **Rapid communications**: Are brief articles reporting on a highly novel and conclusive finding in chemical ecology. Minor progress, lacking significant novelty, will not be published.
- **Reviews**: Critical reviews and analysis of major areas of chemical ecology. Reviews must be a significant advance in synthesis of an area of chemical ecology. In general, summaries of progress will not be considered suitable.

GENERAL GUIDELINES
Where possible, a reviewer should give specific, rather than general or opinionated, criticisms of the strengths and weaknesses of a manuscript. In assessing a manuscript, a reviewer should try to address all or most of the following:

INTRODUCTION
- **Aim and Novelty**: Does the manuscript have a clear aim/hypothesis/problem that it addresses? Are the problem and/or experimental approach novel? Does the work sufficiently advance its field to distinguish it from previously published work?
- **Scholarship**: Does the manuscript place its aim in an appropriate scholarly context with regard to the published literature? Are the cited papers relevant?
- **Suitability**: Does the manuscript address both chemical/biochemical and ecological/behavioral aspects? Would it be more appropriately published elsewhere?

METHODS & MATERIALS
- **Technical approach**: Are the methods appropriate and described adequately and concisely? Do chemical and molecular methods meet minimum requirements of the journal?
  - Link for the [Chemical Guidelines](#)
  - Link for the [Molecular Guidelines](#)
  - Link for the [SPME Guidelines](#)
Experimental design: Is the experimental design sound (including replication) and described clearly? Are data analyzed by appropriate statistical methods?

RESULTS
Data: Are data (figures, tables, captions, text) presented clearly without redundancy (could some be deleted or published as supplementary)? Do the data support the conclusions? If not, what further experimental evidence is needed?

DISCUSSION
Relevance: Is the discussion valid and connected to the original aim and results? Does it contain inappropriate, excessive speculation? Is it scholarly with regard to cited literature?

SUMMARY
Quality: Overall, do you consider the manuscript to be of sufficient quality to advance the field of chemical ecology? Would you rank this manuscript in the top 40% of papers published in chemical ecology? If the manuscript is unsuitable for publication in its present form, indicate whether it has potential for publication after specific issues have been addressed.
Language: Is the manuscript comprehensible and written in Standard American English?