Letter to the Editor

Effects of editorial periodicity on taxonomic publications

Efectos de la periodicidad editorial en las publicaciones taxonómicas

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Dear Editor,

The editorial system of scientific journals has grown from a printed system in which articles were disseminated in paper journals and offprints to the digital format of the present day, allowing for rapid scientific dissemination of an exploding number of manuscripts every year. With this growing number of publication options, researchers have several possibilities for publication and will vary their selection criteria according to particular interests, notably, journals' indexation level. However, in cases where several journals have similar indexing levels, authors consider other factors, such as costs and speed of publication. Well-indexed open-access journals, often free for authors, abounds in Latin America. Unfortunately, these journals often threaten the work of taxonomists with their practice of accumulating accepted but yet unpublished manuscripts assigned to "future issues".

According to the International Code of Zoological Nomenclature, if two taxonomists simultaneously describe the same species, the one who *publishes* first becomes the recognized author. Thus, the one who has access to a faster journal "wins" according to the so-called principle of priority. This rule has long affected researchers with fewer resources in smaller countries, whose species become invalid and synonymized because of a disadvantage in accessing fast journals.

This commentary addresses the implications of journals' publishing speed for taxonomic production by presenting a hypothetical example of the effects of traditional fixed publication date versus continuous publication.

Hypothetical example with a new species of wasp (Hymenoptera: Mutillidae)

In our example, the first researcher finds what they believe is a new species of Mutillidae, and based on a single female, prepares a manuscript that is accepted but assigned to an issue that will be published the following year.

A second researcher finds a female and a male of the same wasp, but based on the male, concludes that both belong to an already-named species, and publishes a complementary paper describing the female of the species. This second paper, written after the first author's paper, is sent to a journal with a higher periodicity and is published first.

Is the new description, based on the single female, also valid? What should be done about it? What would happen if this double publication went unnoticed, as some cases do?

A species is valid if it complies with the regulations of the International Code of Zoological Nomenclature that applies to it. In this case, the description published first is the valid one, but a third article would be required to synonymize the invalid "new species" and to explain the causes that led to this new publication.

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When there is a preprint of an article where a "new species" is mentioned, drawbacks to the sequence mentioned above can occur. In such cases, a note should be published explaining the reasons why this first researcher published a description of a "new" species that ended up having been already described a year earlier, emphasizing the journal's time gap between acceptance and publication.

However, when publication of the erroneous manuscript is still pending, cancellation of the article should be requested. In both cases, all the first investigator's work ends up useless, except at most for supplementary information that could be used in a modified report.

In small taxa, taxonomists work closely together and such an error can be detected with some ease during informal interactions. Nevertheless, if the troublesome species description appears in a low-visibility journal, or researchers are few and with little relationships amongst them, the publication could go unnoticed and, sadly, the error could persist for a long time.

To avoid these problems, we recommend that journals give priority to publications describing new taxa, without compromising the journal's other requirements. We strongly advise authors to check projected publication times with the chosen journal, and to rapidly change to a faster journal if those times are not acceptable. Additionally, we encourage one to enhance awareness of their work visibility by all possible means, such as sending it to colleagues for diffusion and sharing it on sites with high visibility in search engines.

Fortunately, many editors and reviewers know the importance of immediate output for this type of publications and give them priority accordingly. These journals developed a strong reputation for working seriously, for enhancing visibility of their published articles and for treating the authors respectfully.

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