

## A case of inappropriate use of unpublished data in a scientific publication

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In most international scientific journals, high publication standards are achieved and maintained through peer review of submitted manuscripts. Reviewers may agree or disagree with interpretations, but this is part of the scientific debate, and their comments help improve the scientific content and general relevance of papers. Peer review of manuscripts implicitly involves the access of specialist referees (usually colleagues) to original, unpublished data. This access to privileged information is based on the assumption that reviewers will keep such data confidential until the manuscript is published, or at least in press (standard practice involves obtaining permission of the author(s) prior to use or citation of data that are in press). This is one of the principal responsibilities of referees. Unfortunately, this basic assumption is sometimes transgressed. Herein we report on an example of breach of referee confidentiality. The example concerns the results of an unpublished (submitted) phylogenetic analysis, which were used and published by one of the reviewers of the manuscript, without mentioning their origin and without asking the consent of the authors. The bare facts leading to this conclusion are given below.

In August 2002, we (S.B. Lee, B. Lefebvre, and D.K. Choi) submitted to *Palaeontology* a long manuscript on stylophoran echinoderms from the Lower Ordovician of Korea. In this manuscript, we proposed assignment of the mitrate species *Anatifopsis cocaban* to a new genus, *Taebaekocystis*, and we produced both morphometric and phylogenetic analyses of peltocystid mitrates.

In January 2003, we were informed by the editors of *Palaeontology* that our manuscript was rejected, and we were invited to split it into two papers. One of the two reviewers was Marcello Ruta, and the other one remained anonymous. Following the suggestions of the referees, we split the manuscript into two parts. The first of these, the morphometric analysis, has now been published (Lee et al. 2004), and the second portion (systematics and phylogeny) was submitted to another palaeontological journal in 2004.

In late 2003, Ruta published in *Acta Palaeontologica Polonica* a supertree analysis of stylophoran echinoderms. Supertree analysis is a recent method that involves the simultaneous combination of two or more character-based source trees into a single consensus supertree. In the supertree published by Ruta (2003: fig.2) a "new peltocystidan" was mentioned, although no corresponding taxon is found in any of the 19 source trees listed by Ruta (2003: 563). Examination of the original data set used by Ruta (2003) for his supertree analysis (available online at: http//www.app.pan.pl/acta48/app.559-matrix.rtf; see Ruta 2003: 562) shows that the origin of the "new peltocystidan" lies in one unpublished source phylogenetic analysis that is not mentioned by Ruta (2003), but is reported as "Bae Lee et al. in press" in his online data set. This unpublished source tree corresponds to the results of the phylogenetic analysis originally submitted by Lee et al. to Palaeontology. This conclusion is confirmed by the fact that the "new peltocystidan" is referred to as *Taebaekocystis* in Ruta's original data set (see online document), although the name of this genus remains unpublished to date (this name was proposed in the manuscript originally submitted to Palaeontology in 2002 and rejected by that journal in early 2003; see above).

In conclusion, examination of the bare facts indicates that: (1) Ruta (2003) omitted mention of one source tree upon which his supertree analysis was based; and (2) this omitted source tree was unpublished. As a reviewer of the manuscript submitted to *Palaeontology* by Lee et al., Ruta had access to these unpublished data in 2002, and he subsequently used and published them. His use of our data was made without mention of their origin and without requesting our prior consent. This misuse has serious complications for us, in that it compromises the novelty of our own results. The aim of this short note is simply to inform the scientific community that, although extremely rare, such breaches of referee confidentiality do occur, and that they may have negative consequences for the authors from whom the data were obtained.

## References

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