

What constitutes a new taxon record for Thailand?

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ABSTRACT. The paper discusses what supporting information needs to be presented in a new record manuscript for Thai Forest Bulletin, and suggests some possible pitfalls. In the absence of an appropriate baseline treatment, it may be necessary to produce a taxonomic account or checklist of a whole genus or family. The establishment of a reference database of distribution and occurrence of Thai biodiversity is suggested.

This article is intended to stimulate discussion. If you have an alternative perspective, perhaps from the background of a different national or regional flora, please write an article for submission to be published in a subsequent volume of TFB. It is intended that further such discussion-stimulating articles will be published from time to time.

Papers concerning new records at species, generic and occasionally family level form a major element of the output of Thai Forest Bulletin (TFB). Figure 1 shows that, since 2000, there have been 40 papers in TFB involving new national records, with 30 being at specific rank, nine generic and one familial. This represents over 34% of the papers published during the last seven years. These papers provide an invaluable service to the national and international botanical community in our shared quest to study and document the plants of Thailand.

One issue which is frequently raised by reviewers and editors is how to define what is a new taxon record for Thailand. Ideally, a new record should be proposed when the Flora of Thailand (FoT) account for that family has already been published and the taxon is not in the account. Given the excellent progress towards completing FoT, this is likely to be the case on an increasing number of occasions. However, many taxa have not yet been treated for FoT, so this baseline for deciding that a taxon is a new record is unavailable. In these cases, authors who believe they have a new geographical record, based on specimens they have seen or collected, should cite a published (ideally recent and peer-reviewed), specimen-based, authoritative study that clearly shows the distribution of the taxon does

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not include Thailand. Examples of this could be a worldwide monograph, regional monograph or nationally-based taxonomic study, a more general taxonomic or nomenclaturally-based paper, a national, regional or global checklist (including online checklists) or even the protologue of a taxon.

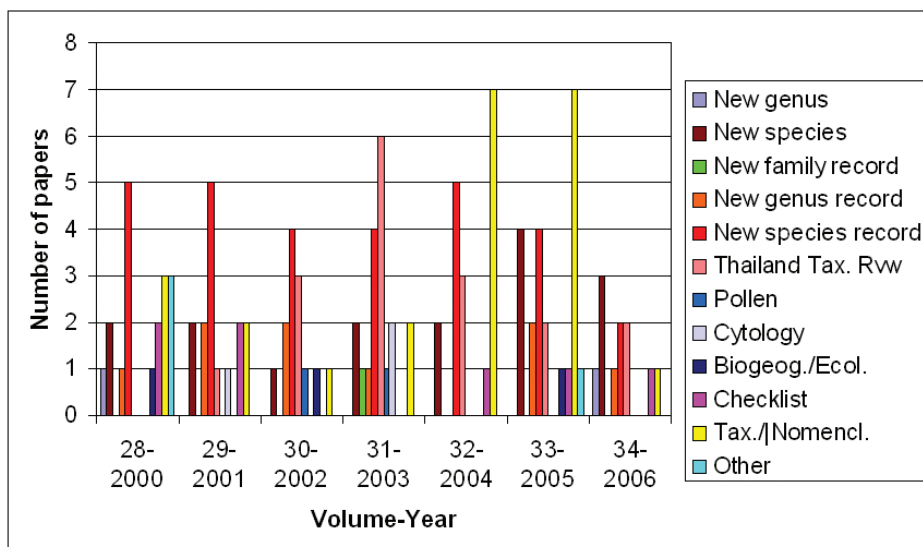


Figure 1. A histogram showing the numbers of 12 different types of papers published in Thai Forest Bulletin between 2000 and 2006. In the legend, Thailand Tax. rvw is an account of the species found in Thailand of a family or genus and Biogeog./Ecol. is a biogeographical or ecological study. Tax./Nomencl. represents a paper covering the nomenclature or taxonomy of a taxon.

Even where the FoT account does exist, care is still required as it is possible that the FoT account has been superseded by the publication of new records elsewhere. Evidence should be given that such sources have been checked. Certainly, many of the problems with new records appear to arise through inadequate research. It is not sufficient to write a manuscript about the discovery of a new taxon, based only on specimen(s) of that taxon in one or more herbaria. Further enquiry is needed.

It is particularly important that the author of the study demonstrates that they have looked at and understood the systematic context of the taxon that they are proposing as a new record. There may well be circumstances where no appropriate published works exist to establish this context. In this case authors should consider writing a taxonomic account of the whole taxon for Thailand, or at least producing a checklist for the country based on cited specimen data, so that the new record can be placed in the proper context and the necessary baseline information established. There is danger in using published works which are not founded directly on specimen-based taxonomy. For example, "Thai Plant Names" (Forest Herbarium, 2001) is an excellent guide to vernacular names of many plant species in Thailand but is not a complete taxonomic treatment of the Thai flora. All authors are advised to look carefully at the TFB guidelines on the Forest Herbarium website (www.dnp.go.th/botany/BOTANY_eng/bulletin.html) and also to examine and cite type specimens wherever possible.

At the heart of this discussion is the question as to what purpose the new taxon record paper serves. The danger is that instead of providing information of use to those interested in a thorough and accurate inventory of the plants of Thailand we will be unnecessarily increasing the number of publications by the botanical community. Therefore we all need to make clear the basis for saying that a plant taxon is new for Thailand. This will help to avoid erroneous distributional records and aid manuscript reviewers and editors.

Finally, it is instructive to consider how such new records arise and are published in regions where the flora is better documented and inventoried than the flora of Thailand currently. In many such regions, the distribution and occurrence of organisms is databased. The database then acts as a “Biological Records Centre” against which claims for new records can be assessed. To establish, maintain and develop such a database is costly but well worthwhile once the flora starts to become reasonably well known.

REFERENCES

Forest Herbarium. (2001). Thai Plant Names Tem Smitinand, revised edition. The Forest Herbarium, Royal Forest Department.