

The *Acacia* retypification debate: Perspectives of African amateur botanists

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Abstract Amateur botanists represent an important constituency that makes significant scientific contributions in fields such as biogeography and is the source of important funding for research and conservation issues. We argue that the African amateur botanical constituency has not had a platform to make a contribution to the *Acacia* retypification debate. We further raise concerns that what we perceive as the failure of the Spermatophyta Committee to adhere to nomenclature guidelines has the potential to undermine nomenclature processes, and the legitimacy of botanical decision-making bodies. It exposes these bodies to accusations of marginalization of Third World countries, especially those in Africa, and has possible legal ramifications, all with the potential to disrupt research and conservation priorities.

Keywords *Acacia*; African conservationM savanna; taxonomic nomenclature

The initiative to replace the original African type of *Acacia* (*A. scorpioides*, a synonym for *A. nilotica*) with that of the name of an Australian wattle species, triggered what has arguably been one of the most heated and polarized debates over botanical nomenclature. The protagonists have largely been professional botanists, although some specialist interest groups—for example Australian wattle-growers became aware of the issue (John McNeill, pers. comm. in 2011), allowing them to participate in the debate. In Africa, however, there is a much more diffuse group of highly interested stakeholders who were not alerted to the issue because they are unfamiliar with the specialist literature in which the debate has been conducted. This constituency includes stakeholders in the tourist industry, which is a major employer and income generator in many African countries, as well as ecologists, amateur botanists, and the large group of naturalists familiar with the savanna ecosystem. Members of this diverse group are often highly informed on botanical issues, make important contributions to plant biology, and especially taxonomy and biogeography, and represent a highly significant source of funding for research and conservation issues. The following comments by two African amateur botanists on the *Acacia* retypification debate represent a synthesis of impressions from discussions with members of this interest group from countries across southern Africa (Zambia, Zimbabwe, Namibia, Botswana and South Africa).

The southern Africa stakeholders in the economically important tourist industry, as well as amateur botanists and other naturalists, have expressed view ranging from extreme unhappiness to (more commonly) profound outrage to learn of the *Acacia* retypification *fait accompli*. A common concern is that because the debate was conducted via specialist journals and professional scientific meetings, they were not alerted to the issue and thus did not have the opportunity to express their

views. The unhappiness expressed by this constituency is in part an emotional response—the *Acacias* are one of the most charismatic groups of trees of the African savanna. But this highlights an important economic dimension—*Acacia* is an icon of the savanna, with all of the intangible value of a well-established brand name for the African tourist industry. This is underlined by selection of the characteristic spreading form of an African *Acacia* as the logo of one of southern Africa's largest banks. These two examples underline important economic implications over and above any highly emotive concern over who can “employ” the *Acacia* brand name. Irrespective of the relative economic values of the brand name to Africa and Australia, this raises what must surely be a critical issue in the whole debate.

Precedence of a scientific name is an exceptionally important principle in biological nomenclature, and only waived under exceptional circumstances. One of the guidelines for waiving precedence in the case of botanical species (McNeill & al., 2003) is that:

Committees will not be sympathetic to proposals to avoid disadvantageous change in usage in one part of the world at the expense of creating disadvantageous change in another. These situations are what the principle of priority is for.

This guideline was surely established for precisely such issues as the *Acacia* retypification debate. In this case, as Luckow & al. (2005) point out, transferring the type to an Australian wattle is to the (economic) advantage of one country of some 20 million people at the expense of 47 countries and almost a billion people in Africa alone. In short, disregarding this underlying precedence principle has completely asymmetrical economic impacts in the case of the *Acacia* retypification, to

the detriment of the continent least able to afford the cost. Further, does this not establish the precedent that committees will in future not take decisions based on the underlying guidelines, but on the basis of the best-organized lobby group? Does this, in turn, not risk undermining the integrity and credibility of the botanical nomenclature system? These concerns are compounded by the highly debatable ratification of the Spermatophyta Committee decision at the International Botanical Congress in Vienna by a minority vote?

This leads to a further aspect that should give rise to grave concern. Nomenclature systems that can be manipulated by the best-organized lobby group, and also voting systems at botanical congresses, will always be inherently disadvantageous to the Third World. Votes cast by herbaria are weighted by the extent of their taxonomic activity, which will always favour the institutions of the better-funded First World. Further, under-funded herbaria from Third World countries will be the ones who are least able to afford the cost of attending botanical congresses. This effectively disenfranchises the Third World both in determining the make-up of nomenclature committees, and in subsequent decisions to ratify/reject committee decisions. When nomenclature committees ignore the principle that precedence will not be waived to the benefit of one part of the world if this is to the disadvantage of another part of the world, does this not expose them to the accusation of discrimination against the Third World by the First World? Such an undesirable outcome will be highly disruptive to the core scientific and conservation botanical issues that are at stake; especially should perceptions of the legitimacy of nomenclature committees become muddled—or worse. An extreme result could be the fission of decision-making organs—the last situation needed in botanical taxonomy.

This in turn leads to a further serious concern. International law is playing an increasingly important role in global society, including professional scientific organizations. This

is highlighted by a recent paper on the possible legal ramifications of the *Acacia* retypification (Glazewski & Rumble, 2010). Whatever the legal merits—or otherwise—of the conclusions reached by these legal experts, our perceived failure of the Spermatophyta Committee to follow underlying nomenclature guidelines raises the question of whether this could lead to costly and time-consuming legal challenges to nomenclature decisions.

It may be tempting for members of nomenclature committees to debate and lobby a route around underlying guiding principles in the interests of personal, economic or other agendas. However, this must be weighed against the potential economic costs, risks of accusation of improper practice, and potential loss of moral authority by nomenclature committees. It is submitted that these risks are too high to entertain. Whatever the inconveniences of botanical guidelines and principles are, if followed, they serve to avoid unnecessary conflict, and the potential to disrupt research and conservation priorities.

Literature cited

- Glazewski, J. & Rumble, O. 2009. A rose is a rose but is an *Acacia* an *Acacia*? Global administrative law in action. *Acta Juridica* 9: 374–394.
- Luckow, M., Hughes, C., Schrire, B., Winter, P., Fagg, C., Fortunato, R., Hurter, J., Rico, L., Breteler, F., Bruneau, A., Caccavari, M., Craven, L., Crisp, M., Delgado, A.S., Demissew, S., Doyle, J.J., Grether, R., Harris, S., Herendeen, P., Hernández, H.M., Hirsch, A.M., Jobson, R., Klitgaard, B.B., Labat, J.-N., Lock, M., MacKinder, B., Pfeil, B., Simpson, B.B., Smith, G.F., Sousa, M.S., Timberlake, J., van der Maesen, J.G., Van Wyk, A.E., Vorster, P., Willis, C.K., Wieringa, J.J., & Wojciechowski, M.F. 2005. *Acacia*: The case against moving the type to Australia. *Taxon* 54: 513–519.
- McNeill, J. Redhead, S.A. & Wiersema, J.H. 2003. Guidelines for proposals to conserve or reject names. *Taxon* 52: 362–363.