

400-word comment written at the request of the organizers of the Smithsonian's Botanical Symposium on "Linnaean Taxonomy in the 21st Century", Washington, DC, 2001

I am trying out phylogenetic naming in the groups I am working on. Definitions of phylonamed lauralean and melastome clades have been placed in a time capsule to be opened on 1 January 200x, the starting date of the *Phylocode* (web, 8 April 2000). Will less ambiguous and stabler names result from basing names on two to many 'specifiers', rather than single specimens (loc. cit., Art. 9.4; specifiers are species, specimens, or synapomorphies; I went for the options of specimens and English, not Latin)? I'll find out. How to assess the effects of getting rid of ranks? The meaning of ranks is negotiated by cohorts. Spermatophytata (*Nature*, 1 Feb. 2001: 619) to some is a typo, to others it's a cohort. Clearly, to assay the effects of rank-less single word names (Art. 9.2), information exchange using such names needs to be studied. I am trying phylonames on my global-patterns-of-diversity-studying partner. He has often counted taxa with the same endings, conceived as mutually exclusive and roughly equivalent, to compare regional diversities. Phylonames —based on the best nucleotide bases— force him to change his ways (a stated goal of the *Phylocode*) and count meaningful entities. Research on global biodiversity may come to a temporary standstill as non-systematists decide which clades, and on whose trees, to count (Linnaean and phylonames will not mix) and figure out where newly discovered monomial species belong. The last will actually be easier than now as all phylonames will be registered (Art. 14.3). I am unclear about the absence of rank endings for non-specialists who thus far are thought to use rank as a rough guide to the exclusiveness as well as inclusiveness of taxa. More worrisome seems that the absence of rank may lead to less information about relationships being recoverable from non-illustrated classifications.

While still assessing the effects of phylogenetic naming, I am uneasy about the philosophy underlying it. The *Phylocode*'s preface repeats: clades are real. But do we classify real clades or abstract classes? Surely we classify the twigs in a horizontal section through the tree of life, not long and tangled strips of bark running down to the roots. How can the set of rules laid out in the *Phylocode*, although ostensibly developed for naming ancestors and their descendents, change our reliance on the twigs to infer monophyly? Might as well classify the twigs in the traditional box-inside-a-box system and conceptualize the boxes (where shown to be monophyletic) as evolving clades.