

The naming of plants – a radical proposal

‘The names which can be named are not the eternal names’ says Lao Tzu in the *Tao Te Ching*. And ain’t it the truth? We old folk can remember when a *Barbula* was a *Barbula*, a *Tortula* was a *Tortula*, and you knew a *Drepanocladus* when you saw one (except when it was a *Cratoneuron*). Now all this order has been reduced to a chaos of Warnstorffias and Syntrichias by taxonomists. And even as I write, research students are probably looking at bits of DNA that will prove that *Bryum capillare* belongs in *Brachythecium*!

Here’s the problem, I think. Soon after the publication of *Systema Naturae* it was recognized that the artificial ‘sexual’ classification was unsatisfactory in that morphologically very similar plants were assigned to quite different genera of the binomial system, so it was replaced by a ‘natural’ system based on general morphology. After Darwin, the natural system acquired additional kudos from the reasonable assumption that morphology reflected ancestry, so the system was also ‘natural’ in the sense that it reflected evolutionary relationships. And evolutionary relationships gradually came to dominate morphological similarities. Nowadays, decisions about ancestry need not be based on gross morphology, and where there is conflict the evolutionary aspect is given precedence.

My solution? A plant should have two names: a stable name based on morphology and a fluid name reflecting its ancestry. There is no reason why names should be binomial; in fact it is high time we purged Aristotle from biology as we have from physics; we no longer think that plants can simply be classified as kinds (genera) and specific examples of each kind (species). Logically, the taxonomic name should be a single word which completely specifies the plant’s classification (as the current binomials patently do not). This kind of scheme was first proposed in the 17th century by Bishop John Wilkins (he thought that all names should intrinsically define what they specify). In the language Wilkins invented (Steven Pinker tells us) the name for dogs (*Zita*) informs us that dogs are animals (*Z* specifies animals), four-legged (specified by *i*) and so on. Unhappily, there

seem to be too many bryophytes for the English language to cope with in this way. There are no such limitations on numbers, however, so we could assign names like the categories of the Dewy decimal system. Thus the plant currently called *Brachythecium rutabulum* might be designated by 5.27.13.53.7.2 where the 53, for example, specifies Brachytheciaceae.

What about the morphological name? My preference would be to go back to John Ray’s names, short descriptive phrases like ‘*the little epiphytic Uloa with a ring of small cells around the top of the capsule*’. I would like that because that’s what comes into my head when I see the plant; it is often difficult to get my ramshackled old neurons to come up with *U. crispa*. But that is perhaps impractical. My second choice would be English names. I have in the past been dismissive of them, but changed my mind when sorting herbarium sheets of ferns, noting ‘Narrow buckler fern’ persisting like the rock of ages through all the permutations of *Dryopteris*, *Lastraea*, *carthusiana*, *spinulosa*, etc.

It will be necessary to maintain correspondence between the morphological names (as used in various countries) and the taxonomic names. Each species must be assigned a morphological name (together with other-language equivalents) and an initial taxonomic name. Both names would be kept on a database and there would have to be a rule that any taxonomic name change must be recorded in the database so that when cited it can be traced back through all previous assignments to the fixed morphological name. There are minor problems to do with things like relegations of species to subspecies, etc., but I leave such minor details to lesser minds.

In summary, I quote Samuel Johnson, ‘*Language is only the instrument of Science, and words are but the signs of ideas; I wish, however, that instruments might be less apt to decay, and that signs might be permanent, like the things which they denote.*’

More serious suggestions would be welcomed!

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