

## Comment

# The binomial nomenclature, the English language and the Tower of Babel

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The binomial systematic nomenclature, which is largely Latin based, was first devised by the Swedish professor Carolus Linnaeus in the 18th century in his *Species Plantarum* (1753). The starting point of zoological nomenclature is officially deemed to be 1 January 1758 when the 10th edition of Linnaeus' *Systema Naturae* was apparently published (International Commission on Zoological Nomenclature 1999). This system of classification of organisms has since become a cornerstone of the biological sciences. As a result, the International Code of Zoological Nomenclature was developed, which was devised "to promote stability and universality of scientific names in taxonomy" (Weaver 2005, p. 481). This was fundamental to the creation of a universal language that overcomes linguistic and cultural barriers.

Without this binomial system, the international scientific community would be faced with a Tower of Babel. Common names given to the organisms we now refer to as "species" not only obviously differ among different languages, but they may also have marked regional variations within an area with a single spoken language. In the absence of this universal system, communication between those dealing with organisms would be close to impossible.

The system has difficulties, however, which are unavoidable. It is common for example, for the same species to be given different scientific names, or for one previously named species to be separated into two or more new species. These problems are the consequences of a system that relies on constant exchange of information between scientists, not only through published material but also through verbal interchange, as, for instance, during conferences. This direct exchange of information gives rise to a problem that seems to hinder communication: the mispronunciation of the Latin words.

Until the early part of the twentieth century French was widely used as an international language. After the Second World War, the worldwide influence of the United States increased dramatically, and as a result, English, already widespread due to Great Britain's imperial influence, became increasingly utilised internationally. English has consequently become an essential language for any scientist, since the most important journals in any field are published in this language. As English established itself as the *de facto* international scientific language, the pronunciation of the Latin names from the binomial system seems to have been progressively corrupted.

It should be pointed out that the modern English language incorporates foreign words without any graphic or phonetic standardisation. It is therefore possible to imagine what happens when scientists with no knowledge of Latin pronunciation "create" their own pronunciations for scientific names.

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The author and other Portuguese- and Spanish-speaking colleagues have regularly faced situations where a species in question could only be identified once its scientific name had been written down. For scientists who are not regularly immersed in the English language, it is often not possible to understand the species being referred to by many English-speaking colleagues. Moreover, those with a Latin background often have their pronunciation “corrected” by well-meaning colleagues anxious to point out “errors”.

As a result, it would be useful if more people in the scientific community overcame the borders of their own languages and attempted to adopt whenever possible the Latin pronunciation of scientific words. No one expects perfection, but a more accurate pronunciation of the binomial names would likely improve communication. As a starting point it is suggested that those unfamiliar with Latin learn the basis of correct pronunciation.

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#### **REFERENCES**

- ICZN 1999. International Commission on Zoological Nomenclature. International Code of Zoological Nomenclature. 4th ed. London, The International Trust for Zoological Nomenclature. Available from <http://www.iczn.org/iczn/index.jsp> (date accessed 30 July 2008).
- Weaver S 2005. Journal policy on names of aedine mosquito genera and subgenera. *American Journal of Tropical Medicine and Hygiene* 73: 481.