Scientific name of banana

Bananas have two nomenclature systems: one for the seeded species of banana and one for the seedless edible bananas.

The naming of wild species follows the formal scientific system of giving each species a two-part Latin name (the first part identifies the genus to which the species belongs — *Musa* in the case of bananas — and the second part the species).

The informal nomenclature system for edible bananas forgoes Latin names. It was developed in the early 1950s by Norman Simmonds and Kenneth Shepherd\(^1\). The system eliminated the difficulties and inconsistencies of a taxonomy based on *Musa paradisiaca* and *Musa sapientum*\(^2\).

The cultivars are classified into genome groups based on their ploidy — whether they have 2 (diploid), 3 (triploid) or 4 (tetraploid) copies of each gene-bearing chromosome — and the relative contribution of the wild species from which they are derived. Simmonds and Shepherd developed a scoring system based on morphological characters to assign to a genome group the cultivars related to *Musa acuminata* alone, denoted by the letter A, or also to *Musa balbisiana*, denoted by the letter B, through hybridization. The main genome groups are: AA, AB, AAA, AAB and ABB. These genome groups cover the vast majority of known cultivars.

Genome groups are further subdivided into subgroups of cultivars that are closely related to each other and as a result share a number of defining traits. Examples are the Cavendish, Plantain and East African highland bananas subgroups. This system allows people who are not familiar with a given cultivar — many of which have different names — to infer information about the cultivar based on its subgroup and genome group.

The recommendation is to put the name of the cultivar in single quotes. It should preceded by the genus (*Musa*), as well as the genome group and the subgroup when the latter are known. Example: *Musa* AAA (Cavendish subgroup) 'Robusta'.

Despite its usefulness, the genome-base nomenclature system has been only partly adopted; to some extent because of difficulties in assigning cultivars to a group and subgroup, but also because many scientists, journal editors and online index continue to use Latin binomials for banana cultivars. Moreover, it has not been applied to the edible bananas that are derived from other wild species, like the Fe'i bananas, whose wild ancestor(s) are still a matter of speculation.

Recognizing the limitations of the current system, some ProMusa and MusaNet members are discussing aligning Simmonds and Shepherd’s genome-based nomenclature system with the International Code of Nomenclature for Cultivated Plants as part of an effort to have it formally recognized\(^3\).

References

2. Linnaeus’s banana legacy: *How Linnaeus inadvertently muddled the taxonomy of bananas when he gave Latin binomials to two edible bananas*, published 22 May 2019 in InfoMus@’s News and analysis section.
3. Modernizing Simmonds and Shepherd’s legacy: The nomenclature system specific to edible bananas is the only alternative to Latin binomials, but it needs tweaking and advocates to promote it, published 22 May 2019 in InfoMus@’s news and analysis section.

Also on this website

Linnaeus’s banana legacy
Modernizing Simmonds and Shepherd’s legacy
The domestication of the banana
The nomenclature system of cultivated bananas
Portal on the diversity of banana cultivars

Contributors to this page: Anne Vézina.
Page last modified on Monday, 10 June 2019 08:45:49 CEST by Anne Vézina.
The original document is available at http://www.promusa.org/Scientific+name+of+banana