



Synonymies in *Ananas* (Bromeliaceae)

GEO COPPENS d'EECKENBRUGGE¹ & RAFAËL GOVAERTS²

¹CIRAD, CIRAD, UMR AGAP, Avenue Agropolis, 34398 Montpellier, France. geo.coppens@cirad.fr

²HLLA, Royal Botanic Gardens, Kew. Richmond, Surrey TW9 3AE. England. r.govaerts@kew.org

Abstract

To clarify the last pineapple classification, which only recognizes the tetraploid crownless *A. macrodontes* and the diploid *A. comosus*, with three cultivated and two wild botanical varieties, we re-establish *A. comosus* var. *microstachys* and revise ancient synonymies, underlining misinterpretations and distinguishing horticultural names from botanical names whenever possible.

In 2003 Coppens d'Eeckenbrugge and Leal published a new classification of pineapples, regrouping all of them into the genus *Ananas* Miller, with two species, *A. comosus* (L.) Merrill, including five botanical varieties, and *A. macrodontes* Morren (1878). The latter can be readily distinguished because its inflorescences and fruits generally lack the crown of leaves that typically tops the cultivated pineapples and their wild relatives, and it reproduces vegetatively by stolons instead of stem suckers. Furthermore, it is tetraploid and appears to lack the gametophytic incompatibility system of its diploid relative.

The new classification came after an unprecedented effort of collecting pineapples in their continent of origin, with particular emphasis in Brazil (states of Amapá, Amazonas, Acre, Distrito Federal, Espírito Santo, Goiás, Maranhão, Northern and Southern Mato Grosso, Pará, Paraná, Piauí, Rio Grande do Sul, Roraima), Paraguay, Venezuela, French Guiana, Perú, and Colombia (Leal *et al.* 1986, Bello & Julca 1993, Ferreira *et al.* 1992, Ferreira & Cabral 1993, López *et al.* 1992, Duval *et al.* 1997), followed by studies and reviews on reproductive biology as well as morphological, biochemical and genetic diversity (García 1988, Duval & Coppens d'Eeckenbrugge 1993, Coppens d'Eeckenbrugge *et al.* 1993, 1997, Aradhya *et al.* 1994, Duval *et al.* 2001, 2003). The classification intended to use all the generated information to put an end to a long and chaotic history of pineapple taxonomy (Leal *et al.* 1998), often related to (i) an incomplete knowledge of pineapple diversity and systematics; (ii) the predominance of horticultural concepts; and (iii) the effects of dominant clonal reproduction leading to an overemphasis on seemingly stable differences.

A decade later, although the new classification has been well received in the pineapple scientific community, this has not always been the case among botanists, as it has only been accepted in the USDA Genetic Resources Information Network (2013) and in the New Bromeliad Taxon List (Butcher and Gouda (2013; cited in Butcher and Gouda 2014). Indeed, despite the historical revision of pineapple taxonomy that preceded the 2003 classification, the reasons to assign ancient names as synonyms of the new species and botanical varieties were not understood. Furthermore, Coppens d'Eeckenbrugge and Leal (2003) made a formal error in using the epithet “*ananassoides*”, instead of “*microstachys*”, a varietal name used by Mez (1892). In the present note, we are correcting formal errors, and restating the reasons for synonymies as given in the 2003 treatment of the pineapples. We shall mostly use the World Checklist of Selected Plant Families (WCSP 2013) as a source of reference for pineapple synonyms, and focus on those that are older than the names considered in 2003. Readers interested in further synonymy may consult the WCSP website (<http://apps.kew.org/wcsp/>).

Ananas macrodontes Morren (1878: 140)

Synonyms:

- *Ananas microcephalus* Bertoni (1919: 250).
- *Ananas microcephalus* var. *major* Bertoni (1919: 252).
- *Ananas microcephalus* var. *minor* Bertoni (1919: 252).