

# DOWNLOAD PDF A TAXONOMIC TREATMENT OF THE PALM SUBTRIBE ATTALEINAE (TRIBE COCOEAE)

## Chapter 1 : *Attalea rostrata* - DISCUSSING PALM TREES WORLDWIDE - PalmTalk

*A taxonomic treatment of the palm subtribe Attaleinae (tribe Cocoeae) by Glassman, Sidney F. Publication date Topics Palms, Palms.*

Abstract Various scientific names are usually found for the babassu in current literature: This multiplicity of names leads to great confusion in the scientific community causing mistakes to be successively propagated. This note aims to clarify the problem, reviewing the species nomenclature history since the first description by Martius, in , and reporting the successive name changes which occurred. Consequences of the lumping of four closely related genera, of recent phylogenetic studies and of the last changes in palm classification on the species nomenclature are also briefly discussed. In addition, searching results on scientific names at the main Plant Name Indexes are presented here. As a conclusion, we recommend the adoption of *Attalea speciosa* Mart ex. Spreng as the most suitable name for the babassu and highlight that a broad taxonomic review of the *Attalea* group is necessary. It is associated with "quebradeiras de coco", traditional women who break the coconut to sell the rich-oil seeds. Data records from indicate that more than , tons of babassu seeds were commercialized in Brazil IBGE The information above leaves no doubt about the species in question. However, the scientific literature displays discordant information in relation to its scientific name. Palm taxonomy and classification has shown to be a great challenge. Large fruits, inflorescences and leaves make it difficult to prepare and preserve exsiccatae, resulting in low representation in herbaria Tomlinson ; Balick et al. In addition, the great variability in morphology, habit and fruit size within species, as well as the occurrence of interspecific hybridization, common among palm trees, further complicates the delimitation of species Henderson According to Pintaud , the taxonomy of the genus to which belongs the babassu is hampered not only by its large size, but also by the seasonal phenology and functional dioecy, which hinder the collection of full material. As a result, many extremely abundant species were described only recently and are still little known. Thus, in the history of babassu nomenclature, descriptions based on incomplete samples are common. Furthermore, the species has been described more than once, which took too long to be realized. Such problems lead to successive nomenclatural changes. Moreover, other problem is the adoption of different genus concepts by different taxonomists Pintaud The babassu is considered as either *Orbignya* or *Attalea*, depending on each author, a fact discussed here afterwards. Lack of consensus indicates that a comprehensive taxonomic review is necessary Zona ; Pintaud , possibly in monographic style. All the issues above lead to the use of various scientific names for the babassu in recent literature: Ferreira ; Gama et al. It is also common to find papers which avoid using the specific epithet, referring to the babassu as *Orbignya* sp. Other palm trees are also popularly known as babassu according to Lorenzi et al. *Attalea brasiliensis* Glassman, A. With so many scientific names, the vast majority of researchers studying the babassu is relatively unwilling to dedicate deep study to taxonomy papers and search for bibliographical updates, adopting the most commonly cited names in publications and propagating mistakes. In this text, we present a review of the nomenclatural history of this species. In order to allow a better understanding of the issue, we organize information that is spread out in various publications and, finally, suggest the adoption of a given binomial. History of the babassu nomenclature Four independent descriptions in the nineteenth century start babassu nomenclature: The same author described a specimen in Bolivia in as *Orbignya phalerata*. Later, in , Barbosa Rodrigues considered that *O.* To solve distinction problems between this species and *O.* The other species mentioned *O.* All of this confusion caused various scientific names to be used by the scientific community throughout the past two centuries. Initially, the authors considered the name *O.* However, comparing the illustrations and descriptions to *O.* They concluded that the first proposed name, *O.* However, there is a discussion about the validity of the genus *Orbignya*, as presented below. Several genera compose this subtribe, and Dransfield et al. A group of related genera, known as "Attalea Alliance" Glassman , can be recognized within Attaleinae: *Attalea* Humboldt et al. In this case, the valid name for the group must be the first proposed, *Attalea* and the other

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genera should be considered a synonym. This suggestion has split the scientific community: For this reason, Zona proposed a new name for the species: *Attalea glassmanii* Zona the eighth proposed name for the babassu. Although correct, this new name was not well accepted by the scientific community. Recent publications and the advent of molecular biology Dransfield et al. In this proposal, some clades emerged, some groups already established were split into different groups and some groups were collapsed. *Orbignya*, which was accepted on the latter, is considered as a synonym of *Attalea* by Dransfield et al. Although Dransfield et al. This publication was a preview of the new classification of palm trees published in the second edition of *Genera Palmarum* Dransfield et al. In *Genera Palmarum* Dransfield et al. The "Scheelea group" appeared to be monophyletic, but the "Orbignya group" appeared to be paraphyletic. This demonstrates that the traditional circumscription of *Orbignya* may be artificial. The babassu in plant nomenclature indexes Indexes or lists of scientific names maintained by research institutions in plant taxonomy are reliable because they are developed and updated by renowned specialists. Table 1 shows searching results for the two main names used for the babassu *Orbignya phalerata* and *Attalea speciosa* in some of these indexes. *Attalea* is an accepted name and *Orbignya* is a synonym in all consulted indexes, except one, which does not present status of the names.

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## Chapter 2 : A taxonomic treatment of the palm subtribe Attaleinae (tribe Cocoeae) / - CORE

*Title. A taxonomic treatment of the palm subtribe Attaleinae (tribe Cocoeae) / Related Titles. Series: Illinois biological monographs ;*

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reconstructing the phylogenetic relationships within the subtribe Attaleinae, and represents the most intensive sampling of the group so far in a molecular analysis. We use sequences of seven putatively independent, single copy WRKY loci originally isolated from *Cocos nucifera* in order to resolve the closest extant relative of the coconut, the evolutionary relationships of the other genera in the subtribe, determine how paleohistorical events shaped the evolution and biogeography of the Attaleinae, and demonstrate the utility of WRKY loci for phylogenetic inference within the Arecaceae. Maximum parsimony MP strict and maximum likelihood ML bootstrap consensus trees are available as supplemental Figures S1 – 4. Consistency indices CI were above 0. Adding a coded indel matrix contributed little additional resolution to the trees, though bootstrap support BP was slightly increased for some clades not shown. For each gene matrix, ML produced a tree identical in topology to one of the trees found by MP.

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### Chapter 3 : IDEALS @ Illinois: A taxonomic treatment of the palm subtribe Attaleinae (tribe Cocoeae) / 59

*A Taxonomic Treatment of the Palm Subtribe Attaleinae (Tribe Cocoeae) SIDNEY F. GLASSMAN ILLINOIS BIOLOGICAL MONOGRAPHS 59 UNIVERSITY OF ILLINOIS PRESS Urbana and Chicago.*

List of *Attalea* species *Attalea crassispatha*, a Haitian endemic, is the most geographically isolated species in the genus. Experts disagree about the number of species in the genus *Attalea* broadly defined. In 1978, Dutch taxonomist Jan Gerard Wessels Boer estimated that there may be as many as 65 species in the genus. In their Field Guide to the Palms of the Americas Andrew Henderson and coauthors recognised 29 species in the genus, while Sidney Glassman recognised 65 species in his treatment of the group. An important element of this disagreement is the decision by Glassman to define species more narrowly than Henderson. As a result, what Henderson interpreted as variation within species, Glassman took as differences between morphologically similar species. This problem is complicated by the fact that many of these species are poorly represented in herbarium collections. The large size of the leaves, inflorescences and fruit of many *Attalea* species makes them difficult to collect. In addition, many important collections, including type specimens, have been lost or destroyed. The remainder account for either nine species or more than 10. For example, what Andrew Henderson considered a single species, *Attalea attaleoides*, [15] other authors have considered a species complex consisting of four or five species. Glassman doubted the validity of *A. attaleoides*. However, Jean-Christophe Pintaud was of the opinion that *A. attaleoides* Henderson recognised *A. govaertsii* and Dransfield accepted *A. govaertsii*. *Attalea vitiviridis* was recognised as a distinct species by Michael Balick and coauthors; [16] Glassman and Govaerts and Dransfield concurred, but Henderson considered it part of *A. govaertsii*. Glassman also described a fourth member of this group, *A. govaertsii*. Seed germination is remote tubular [20] during germination, as the cotyledon expands it pushes the young shoot away from the seed. Three species are present in the Caribbean – two in Trinidad and Tobago, along the southern edge of the region, and one in Haiti. *Attalea* includes both large trees and small acaulescent palms which occupy a number of different ecological niches. Dense stands of some of the larger species are conspicuous elements on the landscape, while smaller species are found in both in the forest understorey and in savannas. Rodents, including agoutis, fed upon the fruit and, as the fruit availability declined, they fed on the seeds. Carbonised *Attalea maripa* seeds have been found in archaeological sites in Colombia dating back to 10,000 BP. The leaves of *Attalea butyracea* and *A. govaertsii*. Several species are oil palms, with *A. govaertsii*.

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## Chapter 4 : Attalea nucifera - Useful Tropical Plants

Full text of "A taxonomic treatment of the palm subtribe Attaleinae (tribe Cocoeae)" See other formats.

New combinations in *Odontadenia* and *Mandevilla* Apocynaceae. Really just one new combination not relevant to Costa Rica, plus two lectotypifications. The lectotypification here of *Echites puncticulosa* Rich. Pulle] is apparently predated, and thus superseded, by that of Francisco Morales Bull. The genus *Aniseia* Convolvulaceae. This genus of three spp. Choisy has been introduced and is naturalized in the Old World. Previously defined on the sole basis of enlarged outer sepals, *Aniseia* has harbored 28 additional sp. These are now apportioned among eight other genera, with the understanding that enlarged outer sepals have evolved independently in several lineages. A more stringent definition of *Aniseia* invokes a single style, globose stigmas, rugate pollen, and four-valved capsules, in addition to enlarged sepals. No illustrations, and skeletal specimen citations, but with a key to all eight genera of tribe Convolvuleae, a generic description, key to spp. The *Massangea* and *Sodiroa* s. Their status is here evaluated by means of a cladistic analysis of 25 morphological characters. The results indicate that *Massangea* is paraphyletic, while *Sodiroa* s. The authors conclude that *Sodiroa* s. Clearly, as acknowledged by the authors, more taxa need to be included in the analysis, representing other groups of *Guzmania* and other genera in subfam. For the record, Costa Rican spp. Revision of *Spathacanthus* Acanthaceae. Includes a key to spp. The introductory section features pollen micrographs and a cladogram, based on an analysis of 10 morphological characters. Revision of *Stenostephanus* Acanthaceae in Mexico. *Habracanthus* and *Hansteinia* are formally synonymized under *Stenostephanus*, until recently a genus of six South American spp. This contribution treats the 15 spp. New combinations had already been made by the author for the only two Mexican spp. Combinations have yet to be validated for most of the other Central and South American spp. The name *Andropogon bicornis* L. All the available original material corresponds to spp. The two last-mentioned spp. This would result in "the displacement of either *Andropogon glomeratus* or *Schizachyrium scoparium* with an entirely new application of *A.* An emerging infrafamilial classification of Rubiaceae will recognize three subfamilies, with tribe *Rondeletieae* belonging to subfam. The author of this work has redefined *Rondeletieae* to include tribe *Sipaneae* and two subtribes *Condamineinae* and *Pinckneyinae* of tribe *Condamineae*, based on a cladistical analysis of morphological characters the cladogram is presented here. So circumscribed, *Rondeletieae* embraces ca. This contribution treats the neotropical members 10 genera and 39 spp. *Rustia* and *Chimarrhis*, with 14 spp. Promised for future installments is coverage of *Augusta* including *Lindenia*, *Bathysa*, *Elaeagia*, the "Rondeletia complex," *Simira*, *Sipanea*, and *Warszewiczia* to mention only those genera occurring in Costa Rica. The author has apparently not yet decided whether to circumscribe *Rondeletia* broadly to include *Arachnothryx*, *Rogiera*, etc. Features detailed descriptions at all levels, sp. The main introduction serves for the whole tribe, with a historical summary, discussion of phylogenetic relationships, tabular summary of the neotropical genera indicating sp. A subsidiary introduction, focusing on the genera treated in this volume, mainly addresses morphological and anatomical variation, with an emphasis on seed and pollen morphology plenty of SEM micrographs of both. A splendid, scholarly, and authoritative piece of work. This well-researched and extremely useful volume provides Spanish and Amerindian names for an astonishingly comprehensive selection of Costa Rican tree spp. The book is divided into two main parts, in which spp. Typographical errors are surprisingly few. This contribution will facilitate our work on the Manual, and we hope there will be a second volume covering other life-forms. Distinctions among three *Simarouba* species. *Simarouba* *Simaroubaceae* is accepted a priori as a neotropical genus of six spp. Three of the spp. The three continental spp. The authors use cluster and principal-component analysis to differentiate the continental spp. Porter, in the *Flora of Panama*, Ann. Some representative specimens are cited in Appendix 1. *Simarouba amara* is restricted to wet forests and *S.* We like this study! This weighty opus treats all New World spp. In addition, 24 new spp. Among the 11 spp. Highlights include a key to all eight genera of tribe *Malvaceae*

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characterized by 10 styles and stigmas, but just five mericarps, a key to subgenera, sections, and subsections of *Pavonia* with sp. The introductory section is comparatively brief. A taxonomic treatment of the palm subtribe Attaleinae tribe Cocoeae. According to this view, subtribe Attaleinae Arecaceae consists of 65 spp. Acknowledged but not heeded is the recent initiative by Andrew Henderson NY and associates Field guide to the palms of the Americas, to reduce the number of spp. Cook, regarded as "probably of intergeneric hybrid origin, involving certain species of *Orbignya*, *Attalea*, and *Maximiliana* The author, who has apparently done little or no field work in Mesoamerica, cites very few, "representative" specimens indeed, few are available, and none of his own. Our cursory herbarium crawl at MO has effectively demolished any notion that more than one Mesamerican *Scheelea* sp. Because of the competing systems described above, two radically different names are in current use for the single sp. *Attalea butyracea* Mutis ex L. Boer, fide Henderson et al. Burret, fide Glassman, who restricts *S.* We side provisionally with Glassman on the latter issue the obsolete petioles of *S.* This revision features a key to genera, discussions of relationships within genera, extensive generic descriptions, keys to spp. Nomenclatural and taxonomic notes on Costa Rican palms Arecaceae, with five new species. *Chamaedorea hodelii* is segregated from *C.* The prevailing application of the name *Chamaedorea zamorae* Hodel based on a specimen cultivated in Hawaii is upheld. A key is provided to separate the Costa Rican and Panamanian spp. *Stephanostachys Klotzsch* with spicate inflorescences. The application of the name *Desmoncus costaricensis* Kuntze Burret is restricted to the rarer of two *Desmoncus* spp. The name *Desmoncus schippii* Burret is accepted for the second, more common sp. Two new species of *Clusiella* Clusiaceae with a synopsis of the genus. *Clusiella* is a genus of eight epiphytic spp. All but two of the spp. Most Central American material previously identified as *C.* The largely Colombian *C.* Despite their similar names and shared epiphytic habit, *Clusia* and *Clusiella* are not considered close relatives; rather, *Clusiella* "would seem to be closely related to *Symphonia*. Except for the somewhat brief sp. Synopsis of *Chrysochlamys* Clusiaceae: Recounts the "tortuous taxonomic history" of the complex for which the generic names *Chrysochlamys*, *Dystovomita*, *Tovomita*, *Balboa*, and *Tovomitopsis* have been variously employed, and fires the latest salvo: With cladistic analyses yet to be accomplished, further refinements of this scheme may become necessary. *Chrysochlamys* here emerges as a genus of "perhaps as many as 50" mostly South American spp. Eight of the 13 Mesoamerican spp. One other new sp. The somewhat problematic sp. Features a key to the three accepted genera in the group, a description of *Chrysochlamys*, and a key to the 13 *Chrysochlamys* spp. Domingo de Heredia, Costa Rica. Within these groups, the order is alphabetical, by family, genus, and sp. Herbs, trees, and shrubs account for the majority of the spp. The text in both Spanish and English includes a brief description, a summary of geographical distribution, description of the habitat in Costa Rica, and notes on natural history including distribution within the country. The introductory part features an annotated list of the families treated, and a list of the spp. At the end is a glossary illustrated by Silvia Troyo and an index to scientific and common names. The lectotype and all other original elements associated with the neglected name *Pepo indicus* Burm.

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### Chapter 5 : [PDF] Coconut Vs Baby Coconut Aka Coquito Nut Which Tastes Best

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Progress and Projections at the Faculty of Agricultural Sciences Retrospectiva y perspectivas Advances in the botanical investigations in Chuquisaca: The assessment of biological diversity requires valid names and taxonomic systems upgraded for correct species identification, scientific documentation and decision making for conservation purposes. In terms of the South American region, the registration of the family Arecaceae has been modified according to new findings, based on morphological comparisons and molecular analysis of some groups. The total list of species of Bolivian native palms is updated based on recently published taxonomic contributions, regional surveys and review of undetermined herbarium material for new records. Changes in the genera *Astrocaryum*, *Attalea*, *Bactris*, *Ceroxylon*, *Desmoncus*, *Euterpe*, and *Geonoma* as well as for the species *Acrocomia totai*, *Astrocaryum arenarium*, *Oenocarpus minor*, and *Phytelephas tenuicaulis* are reported. A taxonomic treatment of the genus *Attalea* in the region formed by Bolivia, Peru and Ecuador is still ongoing, and there are also new taxonomic alignments for the neotropical genus *Syagrus*. Eight new records are added to Bolivia: A total of palm species are recorded for Bolivia distributed among 28 genera. The most speciose genera are *Bactris* and *Geonoma* with 16 and 14 species respectively. While progress has been made on the contribution of native species, there are still areas requiring exploration and confirmation is required. Bolivian palms, new list of species, taxonomic contributions. Entre al presente se han 17 M. En el relevamiento de presencia de palmeras, Pintaud et al. Actualmente Jean- Tabla 1. Para esta lista se incluyen en La Paz. Temas Fuentes Arecaceae neotropical Henderson , Henderson et al. Lista actualizada de especies de palmeras nativas de Bolivia. *Attalea eichleri* *Attalea eichleri* Moraes , a, b *Attalea maripa* *Attalea maripa* Moraes , a, b *Attalea peruviana* Glassman *Attalea phalerata* Moraes a , Pintaud et al. *Tumupasa e* *Ixiamas* probable A. *Syagrus oleracea* Posible nueva especie L. *Syagrus petraea* *Syagrus petraea* Moraes , a, b *Syagrus sancona* *Syagrus sancona* Moraes , a, b *Syagrus yungasensis* *Syagrus yungasensis* Moraes , a, b *Syagrus* sp. El caso de A. En base a las nuevas relacionada con bosques subandinos. Larry Noblick del figuraba con cinco especies, ahora tiene 11, siendo el total de Montgomery Botanical Center en Miami y al Dr. Jean- especies de 80 y , respectivamente. *Astrocaryum* *Palmae* in Amazonia. Moreira de Souza, J. A monographic study of the subfamily S. *Palmeiras* no *Phytelephantoideae* *Arecaceae*. Editorial Plantarum, Sao Paulo. *Roebelia* and *Platenia* *Palmae*. Kew Bulletin 44 2: *Oenocarpus bataua* *Euterpeae*, *Arecaceae* inferido por Bernal, R Revista Peruana de subtribu *Wettiniinae* *Palmae*. The genus *Aiphanes* Moraes R. *Flora Neotropica Monographs* Nueva York Palm forests of the Bolivian high Andes. The genus *Parajubaea* Galeano, G. Instituto de Ciencias Naturales, Facultad de Bolivia. Diversity and distribution of Bolivian Glassman, S. A taxonomic treatment of the palm palms. Illinois Biological Moraes R. Introduction and Moraes R. Novelties of the genera *Parajubaea* the *Iriarteinae*. The palms of the Amazon. The genus *Allagoptera* *Palmae*. *Neotropica Monograph*, Nueva York A multivariate analysis of *Hyospathe* Moraes R. *Flora de palmeras de Bolivia*. *American Journal of Botany* Monograph, Nueva York A revision of *Geonoma* *Arecaceae*. The genus *Syagrus* in Bolivia. The Palm *Phytotaxa* A revision of *Desmoncus* *Arecaceae*. *Phytogeographical patterns of Bolivian Phytotaxa* A revision of *Euterpe*, Moraes R. *Zuloaga*, *Prestoea* and *Neonicholsonia* *Palmae*. *Field guide Chile, Paraguay y Uruguay*. *Conocimiento actual de la riqueza de Hodel*, D. *Las Systematic Botany* Especies Mayormente Aprovechadas para Diferentes 25 M. Herbario Nacional de Bolivia, Pingitore, E. Using potential Moraes, L. *Tropical Conservation Science* 7: Colecciones de palmeras Pintaud, J. *Amigos de la Naturaleza*, Santa Cruz, Bolivia. *Syagrus* an overview. A revision of the Andean wax A revision of *Hyospathe* cladistic study of *Cocoseae*, subtribe *Attaleinae* *Arecaceae*. *Nordic Journal of Botany* 9:

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### Chapter 7 : MBG: Research: Costa Rica: The Cutting Edge

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### Chapter 8 : A taxonomic treatment of the palm subtribe Attaleinae (tribe Cocoeae) / 59 - CORE

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### Chapter 9 : Attalea (plant) - Wikipedia

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