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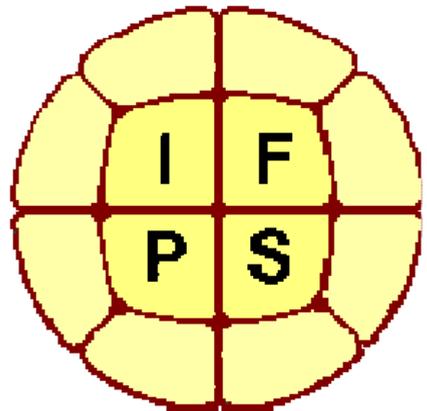
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<http://www.geo.arizona.edu/palynology/plns1406.pdf>

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NEWSLETTER OF THE INTERNATIONAL FEDERATION OF PALYNOLOGICAL SOCIETIES

Pollen morphology of palm pollen:

GENERA PALMARUM; THE EVOLUTION AND CLASSIFICATION OF PALMS.

**DRANSFIELD, J., UHL, N.W.,
ASMUSSEN, C.B., BAKER, W.J.,
HARLEY, M.M., LEWIS, C.E.,
2008.**

KEW PUBLISHING, ROYAL BOTANICAL
GARDENS, KEW, 732 PAGES. CA. €125. ISBN
978-1-84246-182-2.

Palms have a wide distribution in the tropical and subtropical lowlands. As a consequence palaeoecologists working on the reconstruc-

tion of these environments will encounter pollen grains of palms. Palm pollen do have few morphological characters in comparison to angiosperm pollen. This explains that 'tropical' pollen diagrams often include many unidentified 'palm like' pollen types and/or unknown pollen types that even have not been suggested to have a relation with the palm family. The book 'Genera palmarum' describes all 183 genera of palms including hand drawn morphological illustrations, photographs of the plants, photographs of flowers and seeds, a distribution map. For the palynologist the over 400 scanning electron microscope (SEM) images, and the over 50 light microscope (LM) photographs are important. The transmission electron microscope (TEM) images may clarify the structure of the pollen wall. Chapter 2 (pages 41-53) is devoted to the morphology of palm pollen and shows how pollen aperture types are distributed among the 21 genera of Calamoi-deae, 1 genus of Nypoidea, 46 genera of Coryphoideae, 8 genera of Ceroxyloideae, and 107 genera of Arecoideae. The authors have elaborated a table showing the systematic distribution of exine ornamentation among the five groups of palms mentioned and illustrated this variability with 12 SEM images. Although the size of pollen grains in general is variable the authors have classified palm pollen in 5 size categories from <20 μm to >75 μm and have shown that size is useful to obtain a first hint for identification. In the future more reference works of plant groups should be illustrated with images of the pollen grains. The present book is a great help in the identification palm pollen grains. The information on the geographical distribution of the palms is helpful to characterise the ecological environment. This excellently illustrated book is very useful for all palynologists working with sediments from tropical and subtropical sites.

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