

# Pollen Morphology Of Malvaceae And Its Taxonomic

Pollen morphology and exine ultrastructure of selected ...  
 Malvaceae - ScienceDirect  
 Pollen morphology of selected species of the subfamily ...  
 Pollen Morphology Of Malvaceae And  
 Various Pollen Morphology in Hibiscus syriacus  
 Pollen Morphology of Egyptian Malvaceae: An Assessment of ...  
 Pollen morphology of Waltheria L. (Malvaceae ...  
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 Pollen morphology of Alcea L. and Althaea L. genera ...  
 Malvaceae: Characters, Distribution and Types  
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 Pollen Grains of Asteraceae and Analogous Echinate Grains  
 [MOBI] Pollen Morphology Of Malvaceae And Its Taxonomic  
 Morphological Characteristics of Pollen Grains  
 Pollen grain morphology is not exclusively responsible for ...  
 Pollen morphological studies in the Malvaceae  
 Morphology of Flowering Plants - Malvaceae Family - Part - 2

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 Pollen morphological studies in the Malvaceae: Grana: Vol ...

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*Pollen morphology and exine ultrastructure of selected ... Morphology of Flowering Plants - Malvaceae Family - Part - 2*

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 Pollen Morphology Of Malvaceae AndIn the studies on the pollen morphology of Malvaceae, variation in pollen size, aperture and spine characteristics, as well as exine stratification were elaborated as taxonomic value (Saad, 1960 ...Pollen Morphology of Egyptian Malvaceae: An Assessment of ...Pollen grains of more than 120 species from c. 40 genera of Malvaceae were studied with light and scanning electron microscopy. The pollen grains are spiny, usually spheroidal and an evolutionary trend from a medium sized, ancestral 3-zonocolporate pollen type with small spines to a large polytrema type with long, sometimes distinctly dimorphic spines is recognised.Pollen morphological studies in the Malvaceae: Grana: Vol ...Pollen morphological studies in the Malvaceae Pollen morphology of Malvaceae 91 Fig 1 A-C Schematic drawings showing patterns of aperture distribution within the family (A) Suboblate, 3-zonocolporate pollen (B) Spheroidal, 6-colporate pollen Spinal pattern distinct (C) Spheroidal, oligo (-poly)[MOBI] Pollen Morphology Of Malvaceae And Its Taxonomic taxa (Ferguson 1986; Hilsebeck 1990; El Naggar 2002). Pollen morphology of Malvaceae or some of its representatives has been included in many studies: for example: Surova and Velieve (1984), Christensen (1986a, 1986b), Culhane and Blackmore (1988) and El Naggar (2004). The pollen of Malvaceae is characterized by large size, sphericalPollen Morphology of Malvaceae and its taxonomic ...Pollen Morphology of Egyptian Malvaceae: An Assessment of Taxonomic Value Plate 1. Pollen morphology of the studied taxa of Malvaceae 1- Abelmoschus esculentus x 500 2-Hibiscus trionum x 750 3- Hibiscus rosa-sinensis x 750 4- Hibiscusspp. x 500 5-Gossypium barbadense x 750 6- Lagunaria patersonii x 1500Pollen Morphology of Egyptian Malvaceae: An Assessment of ...Pollen morphology of Malvaceae 91 Fig. 1. A-C. Schematic drawings showing patterns of aperture distribution within the family. (A) Suboblate, 3-zonocolporate pollen. (B) Spheroidal, 6-colporate pollen. Spinal pattern distinct. (C) Spheroidal, oligo (-poly) colporoidate (-pororate) pollen. Spinal pattern very distinct.Pollen morphological studies in the MalvaceaeSaba MD, Santos FAR. 2015. Pollen morphology and exine ultrastructure of selected species of Waltheria L. (Byttnerioideae-Malvaceae). Review of Palaeobotany and Palynology 221: 204-210. [ Links ] Saba MD, Santos FAR, Esteves GL. 2004. Palinotaxonomia das tribos Byttnerieae DC., Hermannieae DC. e

Helicterae DC.Pollen morphology of Waltheria L. (Malvaceae ...Due to the taxonomic importance of the Malvaceae family and the need for studies to corroborate the circumscription of the group, which remains uncertain, this study aimed to characterize the pollen morphology of the Bombacoideae species occurring in the state of Rio de Janeiro, which are distributed predominantly in areas of restinga (coastal woodland) and Atlantic Forest, in order to support taxonomic studies of the group.Pollen morphology of selected species of the subfamily ...The pollen morphology of five species: Waltheria albicans Turczaninow, Waltheria brachypetala Turczaninow, Waltheria cinerascens Auguste Saint-Hilaire, Waltheria martiana Benthham ex J.G. Saunders, and Waltheria viscosissima Auguste Saint-Hilaire were studied by light microscopy (LM), scanning electron microscopy (SEM), and transmission electron microscopy (TEM), focusing on apertural type and exine. Pollen grains are medium to large, isopolar, oblate spheroidal to prolate spheroidal, 3(-4)-5 ...Pollen morphology and exine ultrastructure of selected ...Important Types of Malvaceae: 1. Althaea rosea (Fig. 38.5): Habit: Tall ornamental annual herb. Root: Tap, branched and annual. Stem: Erect, cylindrical, green, hairy, woody and solid. Leaves: Alternate, stipulate, petiolate, simple, palmately lobed with a cordate base, multicostate reticulate venation. Inflorescence: Solitary axillary. Flower:Malvaceae: Characters, Distribution and TypesConversely, distinct pollen morphology was reported by Saad (1960) in Malvaceae and he observed distinguish morphological features between the genera. Also, this family was divided into six pollen categories; on the basis of aperture number and diameter, grain diameter and spine form ( Culhane and Blackmore 1988 ).Various Pollen Morphology in Hibiscus syriacusThe pollen grains are produced within the anther of the flower. Pollen mother cells originate from the sporogenous tissue of the anther which later divide meiotically to form four pollen grains called tetrad. The pollen grains do not remain united at maturity, and are dissociated into single pollen grain called monad.Morphological Characteristics of Pollen GrainsThe Malvaceae is generally characterized by large spherical pollen grains with an elaborate system of sculpturing. The species under consideration here are pantoporate with small apertures and conspicuous echinae or verrucae uniformly distributed over the surface of the grain.Malvaceae - ScienceDirectThe pollen grains of Althaea genus are spheroidal, pantoporate, echinate which is characterized by having subglobose pattern at the base of echinae. The pollen of Alcea are spheroidal, pantoporate, echinate and baculate. Distances between pori are longer in Althaea (9.04–12.75 µm) pollens than pollens of Alcea (5.12–7.28 µm).Pollen morphology of Alcea L. and Althaea L. genera ...Pollen grains in Asteraceae family are relatively stenopalynous with less variation exhibited in the pollen morphology. Asteraceae pollens are mostly rounded triangular to square amb, sometimes circular in polar view and prolate in equatorial view.Pollen Grains of Asteraceae and Analogous Echinate GrainsMalvaceae pollen is uncollectable for corbiculate bees which has previously been ascribed to pollen size, spines, and pollenkitt. We analysed the influence of pollen grain properties (diameter, spine length, spine density) on the collectability of echinate (spiny) pollen by bumble bees (Bombus terrestris).Pollen grain morphology is not exclusively responsible for ...Both species have pollen that is typical of Malvaceae (i.e., large, spherical, spiny, polyantoporate, tectate and the endexine as thick or thicker than the ektexine. Malvaviscus arboreus var. mexicanus has spirals of short, stout, irregularly branched primary spines and shorter, stout spinules spaced at irregular intervals.Pollen Morphology of Malvaviscus arboreus var. mexicanus ...of pollen types in the family Bombacaceae, it is stated in most taxonomic textbooks, old and recent ones, that the pollen grains of the Bombacaceae are smooth, the pollen of the Malvaceae being spiny (cf. for example Schultze-Motel [22, 311], Hutchinson [11, 522], and Cronquist [4, 201]). Saad [21], in a study on "The The pollen morphology of five species: Waltheria albicans Turczaninow, Waltheria brachypetala Turczaninow, Waltheria cinerascens Auguste Saint-Hilaire, Waltheria martiana Benthham ex J.G. Saunders, and Waltheria viscosissima Auguste Saint-Hilaire were studied by light microscopy (LM), scanning electron microscopy (SEM), and transmission electron microscopy (TEM), focusing on apertural type and exine. Pollen grains are medium to large, isopolar, oblate spheroidal to prolate spheroidal, 3(-4)-5 ...  
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#### **Various Pollen Morphology in Hibiscus syriacus**

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[Pollen Morphology of Egyptian Malvaceae: An Assessment of ...](#)

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[Pollen morphology of \*Waltheria L.\* \(Malvaceae ...](#)

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