Supplementary Material

to the paper

Depositional systems of the late Eocene Yolomécatl Formation, northwestern Oaxaca, southeastern Mexico: a first approach

by:

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Table S1. Palynoflora of the Yolomécatl Formation, Late Eocene of northwestern Oaxaca.

Taxa	Remarks
CHLOROPHYTA	Fresh water algae
Family Botryococcaceae *Botryococcus* sp.	Colonial algae abundant in euthrophic waters
Family Zygnemataceae *Spirogyra*	Cysts
Order Coleochaetales Algae *incerta sedis*: *Tetraporina*	Undescribed cysts of cf. Coleochatales
FUNGOSPORES	Mushroom spores
Dicellaesporites sp.	Saprophytic
Monosporiporites sp.	Saprophytic
Paleomycites sp.	Saprophytic
Pluricellaesporites sp.	Saprophytic
Quilonia aff. *Q. dentata*.	Saprophytic
Eumycetes *incerta sedis* *Acalospora* spp.	Present only in paleosols, where is abundant
PTERIDOPHYTA	Ferns
Family Salviniaceae *Salvinia* spp.	This fern is aquatic, so it is abundant in the lacustrine sediments
Family Schizaceae *Anemia* (*Cicatricosisporites* sp.)	Tropical climate
Family Polypodiaceae	Several genera, tropical and temperate climate
Family Aspleniaceae *Asplenium*	Temperate climate
Family Gleicheniaceae *Concavisimisporites* *Gleichenia*	Tropical climate
Family Lycopodiaceae *Foveosporites* *Camarozonosporites* *Licopodiosporites*	Tropical to temperate climate
Family Selaginaceae *Equinatisporites*	Tropical to temperate climate
Family Adianthaceae *Punctatisporites*	Tropical to temperate climate
Pteridophya *incerta sedis* *Verrucosisporites*	Tropical to temperate climate
GYMNOSPERMAE	Gymnosperms
Family Pinaceae *Pinuspollenites* spp.	Temperate climate and high elevations
Family Abietaceae *Abies* sp.	Temparate climate
Family Podocarpaceae *Podocarpus* sp.	Cloud forest
Order Cycadopsida *Monosulcites*.	Tropical
Family Ephedraceae *Ephedra* (*Ephedripites*)	Xeric environment
Family Taxodiaceae *Taxodium* (*Inaperturopollenites*)	Riparian tropical to temperate
LILYOPSIDA	Monocotyledons, 'monocots'
Family Arecaceae *Arecipites* spp.	These palms thrived in tropical/subtropical forests, their palynomorphs are abundant in fluvial sediments
Family Commellinaceae	This cosmopolitan taxon lives in cool to temperate climate; in our sample their pollen grains are scarce
Family Cyperaceae *Cyperus* sp.	Cosmopolitan
Family Gramineae *Graminidites*.	Cosmopolitan
Family Restionaceae aff. *Milfordia*.	Temperate. Southern Hemisphere
Family Alismataceae *Sagittaria*,	This taxon lives in tropical to subtropical climates, its pollen grains are common in swamp
Family Liliaceae cf. *Liliacidites* and cf. *Narcissus*.	

continues

Table S1 (cont.). Palynoflora of the Yolomécatl Formation, Late Eocene of northwestern Oaxaca.

Taxa	**Remarks**
MAGNOLIOPSIDA (Dicotyledoneae)	Dicotyledones, 'dicots'
Family Anacardiaceae	These taxa live in tropical climate
Ailanthipites berryi	
Rhoipites	
cf. *Rhus* sp.	
Family Asteraceae	Cosmopolitan
Tubuliflorites sp.	
Family Aceraceae	Temperate climate
Acer sp. (*Striatricolpites*) sp.	
Family Aquifoliaceae	Temperate to tropical climate
Ilex.	
Family Betulaceae	
Betula claripites	Temperate to subtropical climate
Betula spp. (*Triporopollenites* spp.)	Temperate to subtropical climate
Triporopollenites paleobetuloides-	Temperate to subtropical climate
Casuarinidites granilabratus	Temperate to subtropical climate
Casuarinidites granulatus	Temperate to subtropical climate
Corilus sp. *Carpinus* sp.	Temperate to subtropical climate
Family Bombacaceae	Tropical to subtropical climate
Bombacacidites	
Family Caryophyllaceae:	Temperate climate
Family Fagaceae	
Alnipollenites (4 Taxa)	Riparian forest, temperate climate
Quercus (*Quercodites* spp).	Temperate to subtropical climate
Family Hamamelidaceae	
Liquidambar	Subtropical to temperate climate
Family Juglandaceae	
Carya: Cariapollenites spp.	Temperate to subtropical climate
Platycarya	Temperate to subtropical climate
Pterocarya	Temperate to subtropical climate
Momipites microcoriphaceous	Tropical to subtropical climate
(*Engelhartia*).	Tropical climate
Momipites trilepollenites (*Engelhartia*)	Tropical to temperate climate
Normapolles	Tropical to temperate climate
Family Ranunculaceae	
Thalictum.	Herb of swamps. Temperate
Family Mimosaceae	Both genera indicate tropical climate
Polyadopollenites (*Acacia* and *Mimosa*)	
Family Moraceae	Tropical climate
Ficus.	
Family Oleaceae	Temperate climate
Fraxinoipollenites sp.	Temperate to subtropical
Family Ulmaceae	Temperate to subtropical
Ulmipollenites.	Temperate to subtropical
Family Sapindaceae	Tropical
Family Symplocaceae	Tropical, Asiatic
Symplocos.	
Family Chemopodiaceae.	Cosmopolitan
Family Smilaceae	Temperate to tropical
cf. *Smilax*.	
Family Nyctaginaceae?	Cosmopolitan
Limingtonia.	
Family Viscaceae	Temperate climate
cf. *Arceuthobium*.	