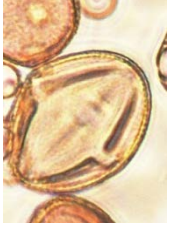


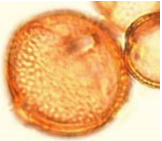


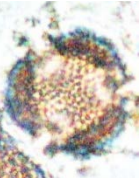
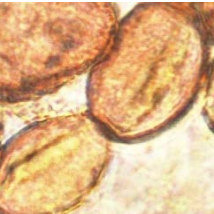
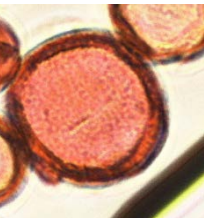

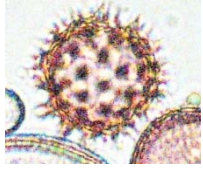
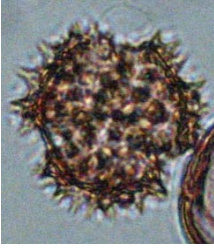




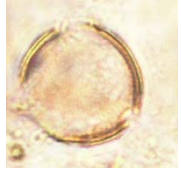


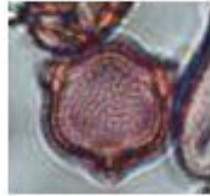



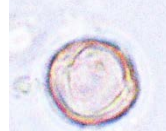


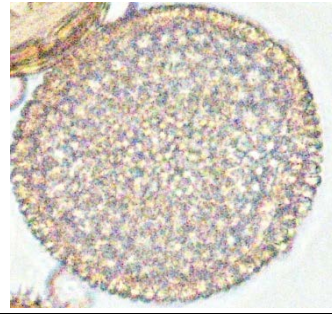


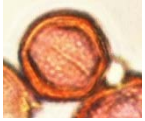













Accompanying Material I. Pollen taxa identified


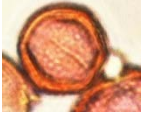

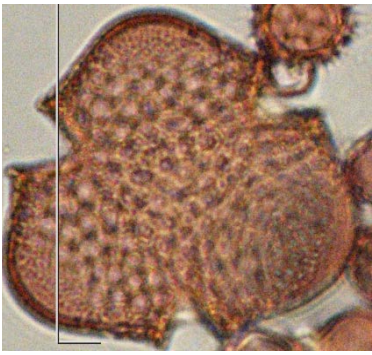





	Structure	Surface Pattern	Size (µm)	Notes	Suggested taxa			Belize Common Name	Images (Own)
					Family	Genus	Species		
Anacardiaceae 1 (S65)	Tricolporate	Striate	20*25	Large pores	Anacardiaceae 1				
Anacardiaceae 2 (S12)	Tricolporate	Striate	20*40	Large pores	Anacardiaceae 2				
Anacardiaceae 3 (S81)	Tricolporate	Reticulate	15*20	Large pores	Anacardiaceae			 	
Anacardiaceae 4 (S24)	Tricolporate	Striate	20*25	Large pores	Anacardiaceae			 	
Aquifoliaceae 1 (S42)	Tricolporate	Clavate	17*17	Oblate-Spheroidal. Very clear clavate, monad, circular pori	Aquifoliaceae	<i>Ilex</i>			
Araceae 1 (S100)	Monocolpate	Reticulate	15*20	Elipsoid	Araceae				
Araceae 2 (S99)	Monocolpate	Reticulate	20*02	Sphere	Araceae				

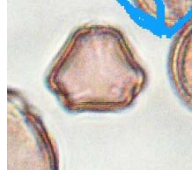

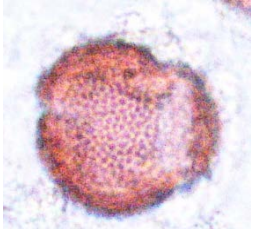
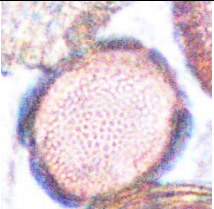

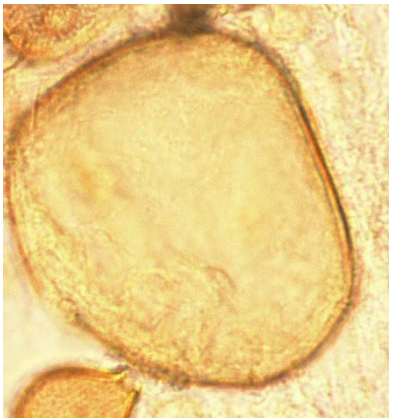

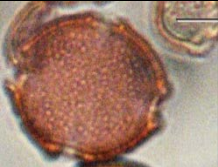
Arecaceae 1 (11)	Monocolpate	Reticulate	25*45	Thick reticulum, often folded, varies in size	Arecaceae	<i>Attalea</i>		Cuhune Palm	
Asteraceae 1 (S5)	Tricolporate	Echinate	25*25	Smaller asteraceae type, narrow colpi	Asteraceae				
Asteraceae 2 (S5)	Tricolporate	Echinate	30*30	Large asteraceae type, wide colpi	Asteraceae				
Asteraceae 3 (S7)	Tricolporate	Echinate	15*15	Smaller asteraceae type, narrow colpi, shorter spines	Asteraceae				
Asteraceae 4 (S78)	Tricolporate	Echinate	10*10	Short spines, small body					
Asteraceae 5 (S52)	Tricolporate	Echinate	23*23	Medium sized, long spines					
Bigornaceae 1 (S98)	Tricolporate	Scabrate	20*20	Sphere					
Brassicaceae 1 (S93)	Tricolporate	Reticulate	7*7	Sphere					
Brassicaceae 2 (S38)	Tricolporate	Reticulate	10*10	Sphere					

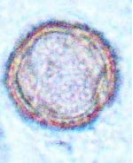

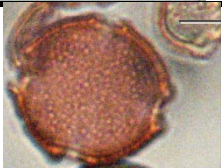


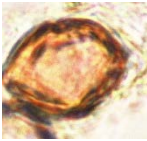
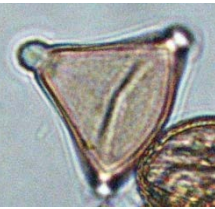
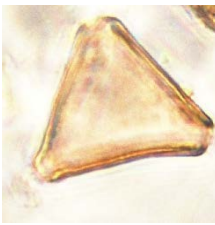
Brassicaceae 3 (61)	Tricolporate	Echinate	5*5	Sphere					
Burseraceae 1 (S10)	Tri-tetraporate	Retiuculate	25*25	Reticulate, often with striate appearance, spherical, with vestibulum	Burseraceae	<i>Bursera</i>	<i>simaruba</i>	Gumbolimbo	
Burseraceae 2 (S41)	Tricolporate	Psilate	25*20	Long/Extended, band across centre	Burseraceae	<i>Tetragastris</i>	<i>panamensis</i>		
Capparaceae 1 (S72)	Tricolporate	Reticulate	22*10	Long, thick walled					
Celast.../Rutac... 1 (S56)	Tricolporate	Finely reticulate	15*10	Diamond shaped, pores open outwards, square shapped. Subspheroidal grain.	Anacardiaceae / Rutaceae	<i>Schinus/ Casearia</i>		Pepper tree - no evidence this species in Belize	
Clethraceae 1 (S70)	Tricolporate	Psilate	10*10	Closed pores, Sphere					
Cucurbitaceae (S60)	Triporate	Echinate/scabrate	25*25	Very short echinate or scabrate. Widely spaced apart					
Cunnoniaceae 1 (S13)	Tricolporate	Reticulate	15*5	Elongated, densely columellate. Colpi as long a grain, thin and straight	Cunnoniaceae	<i>Weinmannia</i>			


Euphorbiaceae 1 (S1)	Inapertuate	Clavate/Gemmate	40*40	Clavate arranged in circles of 5-7	Euphorbiaceae	<i>Croton</i>			
Euphorbiaceae 2 (S19)	Tricolporate	Scabrate	25*25	Wide colpi	Euphorbiaceae	<i>Alchornea</i>			
Euphorbiaceae 3 (S87)	Tricolporate	Reticulate	20*20	Wide circular pores	Euphorbiaceae				
Euphorbiaceae 4 (94)	Tricolporate	Reticulate	5*5	Fine, reticulate					
Euphorbiaceae 5 (S20)	Tricolporate	Scabrate	20*12	Pores square, colpi widens from centre	Euphorbiaceae	<i>Alchornea</i>			
Euphorbiaceae 6 (S17)	Tricolporate	Reticulate	30x40	Elongated pore. Does not touch next pore	Euphorbiaceae	<i>Dalechampia</i>			
Euphorbiaceae 7 (51)	Tricolporate	Unclear	14*14	Wide pores					
Euphorbiaceae 8 (S8)	Tricolporate	Reticulate	10*15	Rounded triangular amb. deep colpi	Euphorbiaceae	<i>Chamaesyce</i>			




Euphorbiaceae 9 (S66)	Inapertuate	Clavate/Gemmate	45*45	Clavate not aranged in circles					
Fabaceae 1 (S82)	Polyad	Psilate	50*50	12 lobes Individual cell sub-globose, in periphery and square in centre, polyads not in the form of pollinia	Fabaceae	<i>Mimosa</i>			
Fabaceae 2 (S2)	Polyad	Psilate	15*20	12 Lobes	Fabaceae	<i>Mimosa</i>			
Fabaceae 3 (S16)	Polyad	Psilate	15*10	12 Lobes	Fabaceae	<i>Mimosa</i>			
Fabaceae 4 (S73)	Polyad	Psilate	15*10	6 Lobes	Fabaceae	<i>Mimosa</i>			
Fabaceae 5 (S95)	Tricolporate	Psilate	30*25	12 Lobes	Fabaceae	<i>Mimosa</i>			
Fabaceae 6 (S31)	Tricolporate	Psilate	10*10	Pores open/spills out.	Fabaceae				

Gentianaceae 1 (S26)	Tetrad	Baculate or reticulate	40*40	4 lobes. 3 pores per lobe. No colpi	Gentianaceae	<i>Coutoubea</i>	<i>spicata</i>		
Gunneraceae 1 (S74)	Tricolporate	Reticulate	15*15	Very fine reticulate	Gunneraceae				
Loranthaceae 1 (S22)	Tricolporate	Psilate	20*20*20	Triangular, closed pores, clearly defined colpi.	Loranthaceae	<i>Loranthaceae</i>	<i>Struthanthus</i>		
Malvaceae 1 (S27)	Triporate	Reticulate	50*50*50	Very large, distinct reticulum, thick wall	Malvaceae	<i>Pseudobombax</i>			
Meliaceae 1 (S97)	Tricolporate	Psilate	5*5	Colpi widens further from centre	Meliaceae				
Meliaceae 2 (S71)	Tricolporate	Psilate	20*20	Long retagular pore. Wide Colpi	Meliaceae				
Moraceae 1 (S67)	4/5 Pores	Psilate	10*10	4/5 Pores. Very round	Moraceae				
Moraceae 2 (S33)	Tricolporate or Tricolpate	Psilate	5*5	Pores closed, quite short	Moraceae				
Moraceae 3 (S57)	Inapertuate	Psilate	20*5	Elongated	Moraceae				
Myrtaceae 1 (S85)	Tricolporate	Psilate	10*10	Convex wall, indented/dipped pores	Myrtaceae				

Myrtaceae 2 (S32)	Tricolporate	Psilate	10*10	Pores closed	Myrtaceae				
Myrtaceae 3 (S23)	Tricolporate	Psilate	10*10	Pores closed. Walls not as convex	Myrtaceae				
Oleaceae 1 (S69)	Tricolporate	Reticulate	25*25	Thick reticulum	Oleaceae				
Papilionoideae 1 (S25)	Triporate	Reticulate	30*30	Thick reticulum, wide colpi	Papilionoideae				
Phyllantaceae 1 (S77)	Tricolporate	Reticulate	17*10	Round pore, straight colpi	Phyllantaceae				
Poaceae 1 (S84)	Inaperturate	Psilate	80*80	Very large, round	Poaceae				
Polygonaceae 1 (S79)	Tricolporate	Reticulate	30*25	Very large pore and thick colpi	Polygonaceae				
Rutaceae 1 (S30)	4-colporate	Reticulate	25*25	4 colpi, suboblate/oblate spheroidal	Rutaceae	<i>Citrus</i>			

Rutaceae 2 (S53)	4-colporate	Reticulate	20*20	Round in shape, 4 pores and colpi, clear reticulum	Rutaceae	<i>Citrus</i>			
Rutaceae 3 (S34)	4-colporate	Reticulate	25*20	Round in shape, 4 pores and colpi, clear reticulum	Rutaceae	<i>Citrus</i>			
Rutaceae 4 (S29)	4-colporate	Reticulate	35*35	Round in shape, 4 pores and colpi, clear reticulum	Rutaceae	<i>Citrus</i>			
Salicaceae 1 (S15)	Tricolporate	Reticulate (Micro)	15*5	Eye shaped pore, with clear annulus and defined colpi	Salicaceae	<i>Laetia</i>			
Sapindaceae 1 (S90)	4- Colpi	Psilate	5*5	Round pores, very round grain	Sapindaceae				
Sapindaceae 2 (S63)	Tricolporate	Psilate	15*10	Big pores, equatorial plane. Diamond shape	Sapindaceae				
Sapindaceae 3 (S9)	Tricolporate	Psilate	25*25*25	Concave triangular, concave colpi	Sapindaceae				
Sapindaceae 5 (S58)	Tricolpate or Tricolporate	Psilate	17*17*17	Wide pores	Sapindaceae				

Sapotaceae 1 (S62)	Tricolporate	Psilate	20*15	Retangular pore, Analus	Sapotaceae				
Sapotaceae 2 (S68)	4 pores, and colpi	Psilate	25*20	Analus around pore	Sapotaceae				
Scrophulariaceae 1 (S91)	Tricolpate or Tricolporate	Reticulate	20*20	Wide Colpi Colpi gets wider with increased distance from centre Roundish grain/slightly elongated Wide Colpi Colpi gets wider with increased distance from centre	Schrophulariaceae				
Scrophulariaceae 2 (S18)	Tricolporate	Reticulate	20*20	Thich reticulum, rounded, wide colpi, inceases in width from centre	Schrophulariaceae				
Solanaceae 1 (S96)	Tricolporate	Psilate	3*3		Solanaceae				
Solonaceae 2 (S83)	Tricolporate	Psilate	20*20	Thin/narrow long pores	Solonaceae				
Typhaceae 1 (S80)	Monoporate	Reticulate	15*15	Bean shaped	Typhaceae				
Unknown 1 (S64)	Tricolporate	Supra reticulum	35*20	Square like pore Very thick wall Very uniform	Unknown				
Unknown 2 (S105)	NA	NA	10*10	NA	Unknown				NA
Unknown 3 (S43)	NA	NA	25*25	Thick wall, very round. One pore in centre?	Unknown				NA

Urticaceae 1 (S35)	Tricolporate	Unclear, Psilate?	4*2	Very small, pores on either side	Urticaceae	<i>Cecropia</i>			
Urticaceae 2 (S36)	Tricolporate	Unclear, Psilate?	3*3	Larger the previous Urticaceae	Urticaceae				
Verbenaceae 1 (S75)	Tricolporate	Scabrate	20*15	Rough surface pattern, diamond shape	Verbenaceae				
Verbenaceae 2 (S103)	Inaperturate	Baculate or echinate	25*25	Round	Verbenaceae				
Vitaceae 3 (S76)	Tricolporate	Reticulate	25*10	Thick wall Round pore with annulus Bow like colpi	Vitaceae				
Vitaceae 1 (S3)	Tricolporate	Micro reticulate	25*10	Colpi thicker at centre ends, synaps or bow shaped like colpi	Vitaceae				
Vitaceae 2 (S4)	Tricolporate	Scabrate	20*10	Diamond, pointed. Wide pores	Vitaceae				