

Supplementary Materials: The Pollen Coat Proteome: At the Cutting Edge of Plant Reproduction

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Table S1. Species discussed in Table 1 and type of stigma. Note that most of the species studied possess a dry-type stigma.

Species	Type of Stigma
<i>Arabidopsis thaliana</i>	Dry
<i>Brassica carinata</i>	Dry
<i>Brassica napus</i>	Dry
<i>Brassica oleracea</i>	Dry
<i>Brassica rapa</i>	Dry
<i>Crytomeria japonica</i>	NA
<i>Cupressus arizonica</i>	NA
<i>Cupressus sempervirens</i>	NA
<i>Cynodon dactylon</i>	Dry
<i>Helianthus annuus</i>	Wet
<i>Olea europaea</i>	Wet
<i>Nicotiana tabacum</i>	Wet
<i>Oryza sativa</i>	Dry
<i>Phleum pretense</i>	Dry
<i>Sorghum halepense</i>	Dry
<i>xTriticosecale</i>	Dry
<i>Vicia faba</i>	Dry
<i>Zea Mays</i>	Dry

NA, not applicable.

Table S2. Subcellular localization of proteins reviewed in Table 1 on the basis of the enzyme and immunocytochemical data.

Protein Name	Species (Method ¹)	Subcellular Location ²	References
AChE			
Acetylcholinesterase	<i>Olea europaea</i> (EC)	Ap/Cy/PC/PTC/PTW	[1]
Cholinesterase	<i>Vicia faba</i> (EC)	Ap/PC/PTC/PTW	[2]
AGP-JIM13	<i>O. europaea</i> (CM/TEM)	Ap/Cy/GCW/PC/PTC/PTW	[3]
Beta-expansins			
Phl p 1 allergen	<i>Phleum pretense</i> (TEM)	Cy/Ex/Nu/PC	[4]
Zea m 1 allergen	<i>Zea mays</i> (TEM)	Cy/Ex/PC	[5]
Caleosin	<i>O. europaea</i> (CM/TEM)	Ex/LB/PC/PTC/PTM/PTV/TER/TLB	[6,7]
Calmodulin-like			
Bra r 1	<i>Brassica rapa</i> (LM/TEM)	Cy/PC/PS/TC	[8]
Cys proteases			
CEP1	<i>Arabidopsis thaliana</i> (TEM)	TCW/Ex/PC/TC/TV	[9]
Cysteine protease	<i>Zea Mays</i> (CM)	PS/TV	[10]
Ole e 1	<i>Olea europaea</i> (FM/TEM)	Ap/ER/Ex/PC/PTC/TER	[11,12]
Pectate lyases			
Cry j 1	<i>Cryptomeria japonica</i> (TEM)	GCW/Ex/Go/PC/TR	[13]
Cup a 1	<i>Cupressus arizonica</i> (TEM)	Cy/Ex/Go/In/LB/Nu/Or/PC/V	[14]
Cry j 1-like	<i>C. sempervirens</i> (TEM)	Cy/Ex/Go/In/LB/Nu/Or/PC/V	[14]
Phl p 4	<i>Phleum pretense</i> (TEM)	PC/Cy	[15]
Polygalaturonase	<i>Brassica napus</i> (LM)	PS/PTC	[16]

SP11/SCR	<i>Brassica rapa</i> (SEM/TEM)	Cy/Ex/PC/TC	[17,18]
Profilins			
Ole e 2	<i>Olea europaea</i> (TEM)	Cy/Ex/PC	[19]
T-oleosins			
BnOlnB;4	<i>Arabidopsis thaliana</i> (TEM)	PC/Ta/TER/TLB	[20]
BnOlnB;4	<i>Brassica carinata</i> (TEM)	PC/Ta	[21]
BnOlnB;3–4	<i>Brassica napus</i> (TEM)	PC/TLB	[22]
BnOlnB;3–4	<i>Brassica napus</i> (CM)	PS/Ta/TER/TLB	[23]

¹ CM, confocal microscopy; EC, enzyme cytochemistry; FM, fluorescence microscopy; LM, light microscopy; SEM, scanning electron microscopy; TEM, transmission electron microscopy; ² AP, pollen aperture; Cy, pollen vegetative cell cytoplasm; ER, pollen endoplasmic reticulum; Ex, pollen exine; GCW, pollen generative cell wall; Go, pollen Golgi apparatus; In, pollen intine; LB, pollen lipid body; Nu, vegetative cell nucleus; Or, pollen orbicule; PC, pollen coat; PS, pollen surface; PTC, pollen tube cytoplasm; PTM, pollen tube plasma membrane; PTV, pollen tube vacuole; PTW, pollen tube wall; Ta, tapetosome; TC, tapetum cytoplasm; TCW, tetrad callose wall; TER, tapetum ER; TLB, tapetum lipid body; TR, thecal remnants; TV, tapetum vacuole; V, vegetative cell vacuole.

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