

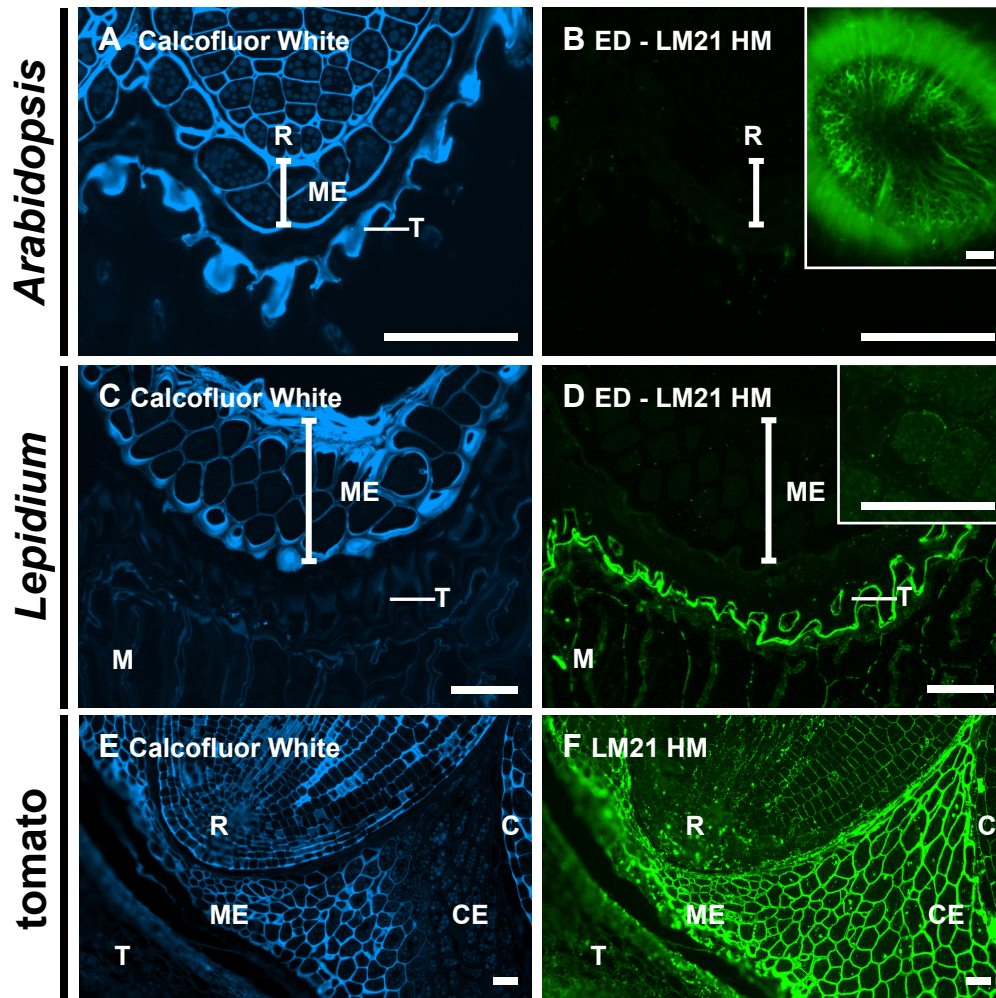
Probe	CW Polysaccharide Class	ARABIDOPSIS					LEPIDIUM					TOBACCO			
		ME	PE/CE	Em	T	M	ME	PE/CE	Em	T	M	ME	PE/CE	Em	T
CBM3a	Cellulose	++	++	+++	+++	++	++	++	+++	+++	++	+	[+++]	+++	-
LM15	Non-cellulosic polysaccharides	-	-	+++	++	-	++	++	+++	++	-	+	-	+++	-
LM25		++	++	+++	++	-	++	++	+++	++	-	++	[+]	+++	-
CCRCM1		-	-	+++	++	-	++	++	+++	++	-	+	-	+++	-
LM21		-	-	-	-	+++	-	-	[+]	-	+++	++++	++++	+	-
CBM27		-	-	-	-	+++	-	-	[+]	-	+++	++++	++++	+	-
LM18	HG	++	++	+	++	+	++	++	++	++	++	-	-	-	++
LM19		+++	+++	++	++	+	+++	+++	++	+++	+++	+	[+]	+	++
LM20		-	-	-	++	-	-	-	-	++	++	-	-	-	-
LM8	XGA	-	-	-	-	-	+++	+++	-	+++	-	-	-	-	-
LM5	RG-I associated	+	+	+	+	-	+	+	++ ^b	-	-	-	+++	-	-
LM6		+++	+++	++	+	-	+++	+++	+	+	-	+++	++	++	-
LM13		++	++	+	-	-	+++	+++	+	-	-	-	-	+	-
LM16		+	+	-	+	-	+	+	-	++	-	-	-	-	-
LM1	Extensin	+++	+++	- ^a	++	-	+++	+++	- ^a	-	-	++	-	-	-
JIM12		+++	+++	- ^a	++	-	-	-	- ^a	-	-	-	-	-	-
JIM20		-	-	-	-	-	+++	+++	-	-	-	+++	-	-	-

Supplemental Figure 1: Summary of cell wall epitope detection in *Arabidopsis*, *Lepidium* and tobacco seeds

(ME) = micropylar endosperm, (LE/CE) = peripheral and chalazal endosperm, (Em) = embryo, (T) = testa, (M) = muclilage.

(-) = probe did not bind, (+), (++) and (+++) = relative amount of probe binding for each tissue where (+) denotes weak binding and (+++) denotes intense binding.

(^a) = restricted to embryo surface / inner face of endosperm. (^b) = abundant in cotyledons. [+] and [+++] = detectable upon enzyme deconstruction of the wall.



Supplemental Figure 2: Immunodetection of heteromannans in enzymatic deconstructed sections of *Arabidopsis* and *Lepidium* seeds and in untreated section of tomato seeds

A, and B, LM21 heteromannan (HM) is not detectable in *Arabidopsis* enzyme deconstructed (ED) 3 h-imbibed seed sections but is weakly detectable in embryo cell walls of 3 h-imbibed *Lepidium* seeds (D, inset image). B, LM21 HM is detectable in the mucilage of intact *Arabidopsis* seeds (inset image). C, and D, LM21 heteromannan is abundant and the mucilage (M) and at the testa surface (T) of *Lepidium* seeds. E, Calcofluor White labelling of 3 h-imbibed tomato seed sections revealed tissue level asymmetry deliniating micropylar (ME) and chalazal endosperm (CE) regions of the endosperm. F, LM21 labelling indicated abundant heteromannan in endosperm and embryo cell walls. Vertical bars indicate extent of ME in *Arabidopsis* and *Lepidium* sections. (R) = radicle apex, (C) = cotyledons. Scale bars = 50 μ m.