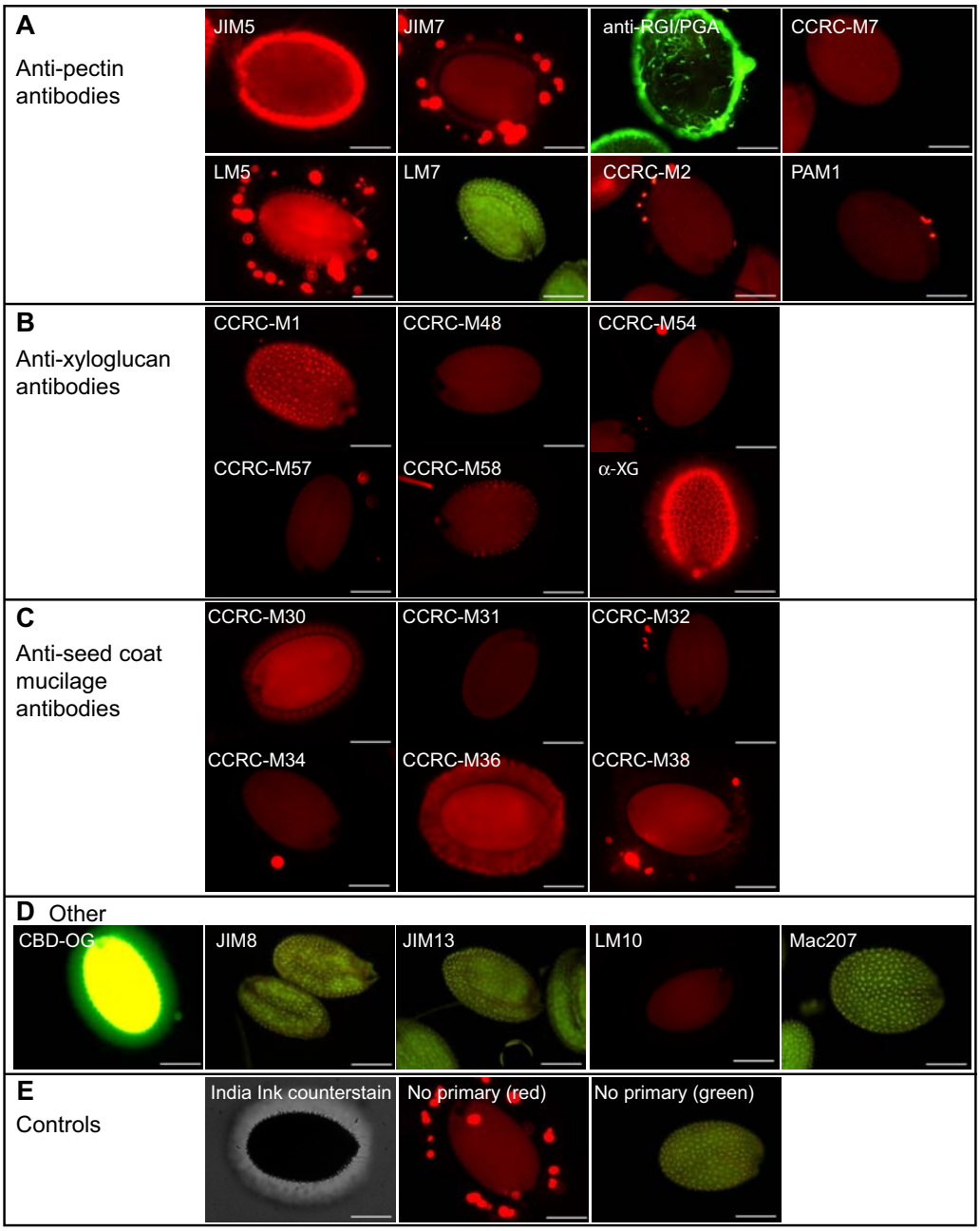
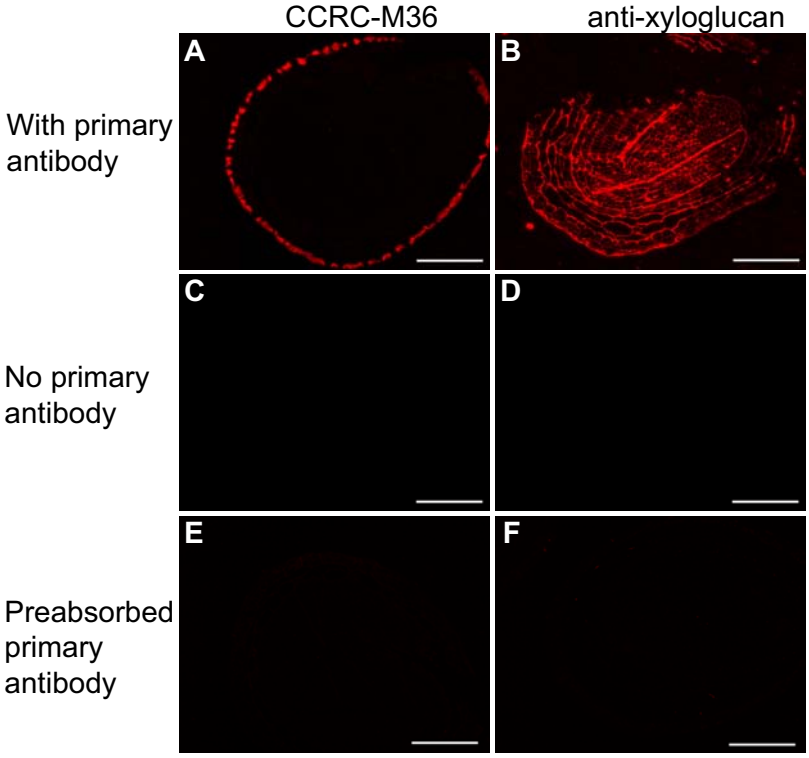


SUPPLEMENTAL FIGURE 1: Antibody screen of mucilage from hydrated mature seeds. (A) Antibody screen using known anti-pectins. Though JIM5, JIM7 and anti-RGI/PGA all showed reactivity to extruded mucilage, none of these showed any reactivity to unextruded mucilage in cryofixed, sectioned material (not shown). (B) Anti-xyluglucan antibody screen. Of these, only anti-XG (α-XG) showed reactivity to mucilage. (C) Antibody screen using antibodies raised against extracted seed coat mucilage (T. Bootten, Z. Popper, C. Deng, R. Jia, W.S., York, m.a. O'Neill, M.G. Hahn, in preparation). Though CCRC-M30, CCRC-M36 and CCRC-M38 showed reactivity to extruded mucilage, only CCRC-M36 labeled unextruded mucilage in cryofixed, sectioned material. (D) Other cell wall markers were also examined, including Cellulose Binding Domain conjugated to Oregon Green (CBD-OG), the arabinogalactan markers, JIM8, JIM13 and MAC207, and an antibody specific to xylans, LM10. (E) Controls. India ink counterstaining was used to examine how large the mucilage halo was, in comparison to the fluorescent labeling. Typical controls without primary antibody for Alexafluor 594 (red) and Alexafluor 488 (green) are also shown. Note that bright spots visible in some Alexafluor 594 labeling are non-specific (e.g. LM5), and considered to be an artifact. Scale bars are 100 μm.



SUPPLEMENTAL FIGURE 2: Fluorescent labeling antibody controls. (A-B) Thick sections of wild-type, 7 days post-anthesis (DPA) seeds labeled with the anti-mucilage, CCRC-M36 (A) or anti-xyloglucan(α-XG) (B). (C-D) When the primary antibody is omitted, non-specific reactivity of the secondary antibody is not observed. (E-F) When the primary antibody is preabsorbed with mucilage (E) or tamarind xyloglucan (F), non-specific reactivity is not observed. Scale bars represent 100 μm.