Effect of soybean processing on cell wall porosity and protein digestibility

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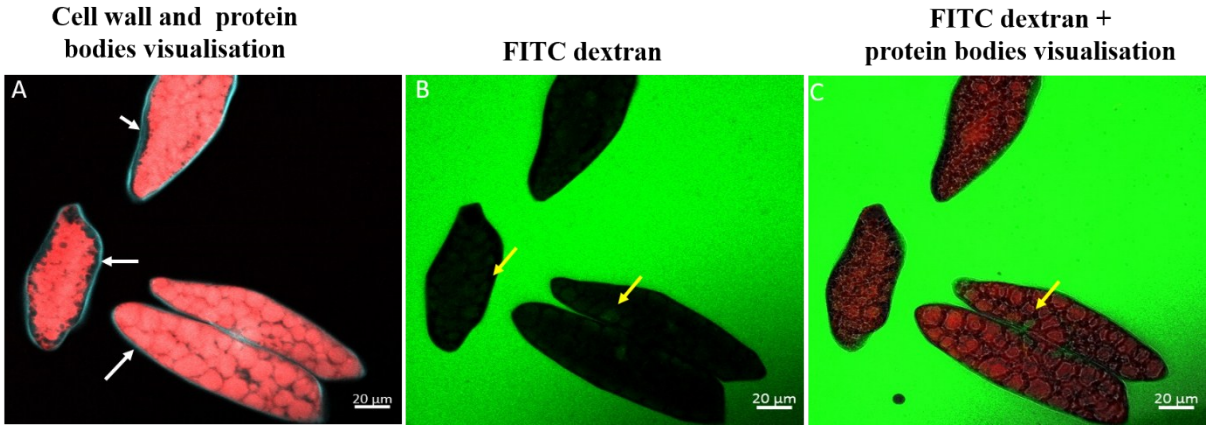
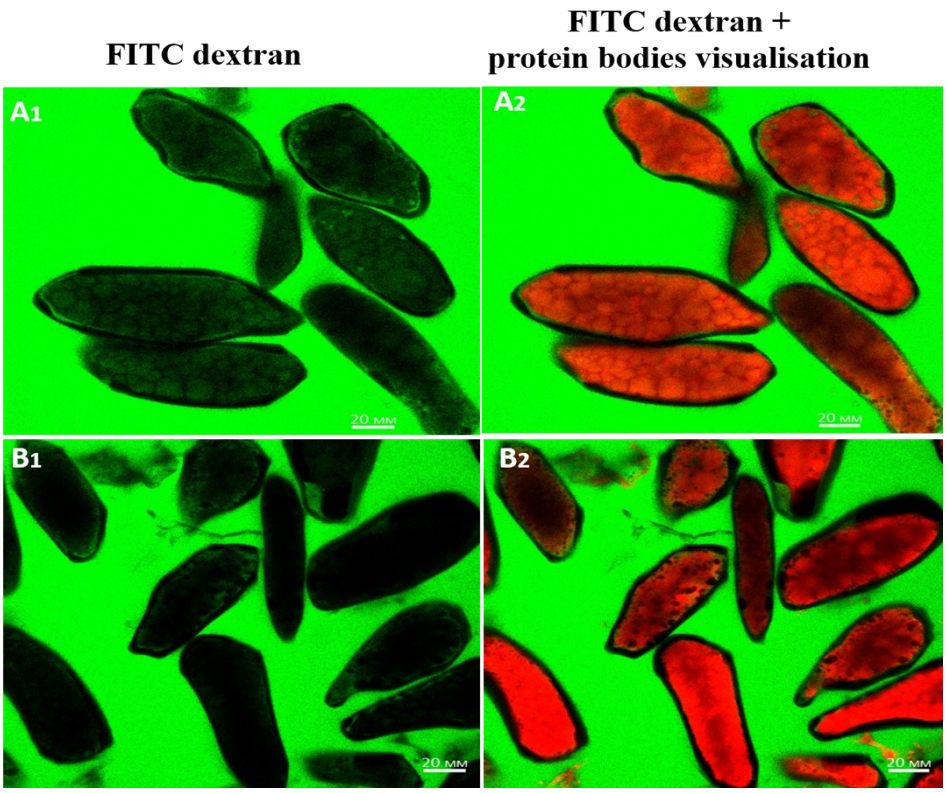
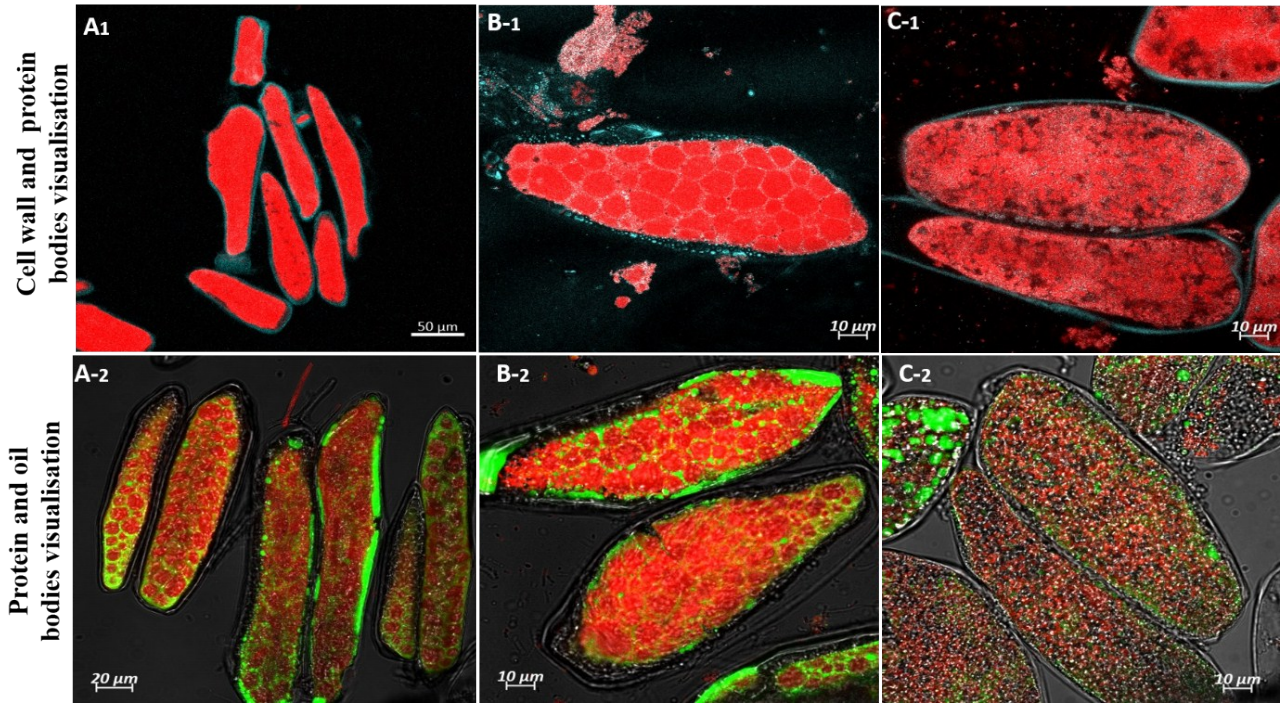
Supplementary Material



SM -Fig. 1. Confocal micrographs of FITC-dextran 70 kDa (visualized in green) permeation into isolated cells obtained from soaked cotyledons boiled in water for 3.5 h and then treated with pectinase. Cell wall was stained with Calcofluor white and visible in blue only in (A); Protein bodies were stained with Rhodamine B and visible in red. The intact cells in panel A are indicated by the white arrows whereas the weak fluorescence of FITC-dextran 70 kDa within intact cells is indicated by the yellow arrows.



SM -Fig. 2. Confocal micrographs of FITC-dextran 20 and 70 kDa (green colour) permeation into isolated cells of cotyledons boiled for 3.5 h after 24 h exposure to the probe. FITC-dextran molecular weight 20 kDa is shown in top panels A_1, and A_2 whereas 70 kDa is shown in bottom panels B_1, and B_2.



SM -Fig. 3. Confocal laser scanning micrographs of isolated cells; A = cells isolated from boiled cotyledons (BC), B = fermented cells of boiled cotyledons (BCF) and C = cells isolated from boiled cotyledons previously subjected to germination (GBC). Cell wall, protein bodies and oil bodies were stained with Calcofluor white (blue), Rhodamine B (red) and Bodipy 505/515 (green) respectively.