

**Supplemental Figure S1.** HPLC chromatograms of chlorophylls and derivatives in WT and *nan* fruits at the ripe stage (248 DPA). Standard peaks were: 1, chlorophyllide a; 2 pheophorbide a; 3, 13<sup>2</sup>-OH chlorophyll b; 4 chlorophyll b; 5, 13<sup>2</sup> OH chlorophyll a; 6, chlorophyll a; 7, pheophytin a.

**Supplemental Figure S2.** Overlay images from 2-D DIGE analysis. Each gel contained equal amounts (50 µg) of flavedo proteins from WT (Cy3, green) and the *nan* mutant (Cy5, red). Three developmental stages were compared: (A) Mature green (180 DPA), (B) Breaker (224 DPA) and (C) Ripe (248 DPA). Those that appear green or red indicate predominance of one Cy dye derived from one sample, while those that appear yellow indicate the presence of comigrating proteins derived from both samples. Differentially expressed spots, defined as those with a volume ratio above or below the 2 S.D. threshold, are indicated with an arrow and numbered. Four independent extracts were made from each sample, resulting in 4 replicate gels for each developmental stage including a dye-swap. Representative gels of each stage are shown.