





Supplemental Figure 6. Cytological and molecular hallmarks of PCD in ZmHb-suppressing embryos. (A) Nuclear fragmentation in cells targeted by PCD in immature (day 7, P medium) embryos. (B) Caspase 3- like activity in immature (day 7, P medium) embryos. \*Statistically significant difference ( $p \le 0.05$ ) from WT set at 100%. (C) Expression levels of metacaspase II-3 in the transgenic lines. Values are means  $\pm$  SE of three biological replicates and are normalized to the WT value set at 1. \* Statistically significant difference ( $p \le 0.05$ ) from WT. Localization of metacaspase II-3 in the WT, ZmHb1(A), and ZmHb2(A) lines. Arrows indicate the apical domain of the embryos. Note that the metacapase-expressing domains coincide with those suppressing Hbs (Figure1C) and accumulating NO and Zn<sup>2+</sup> (Figure 1E). Scale bars = 30  $\mu$ m. Metacaspase expression and localization studies were conducted in immature (day 7, P medium) embryos.