FIGURE S1 Design model of static magnetic field (SMF). The model includes permanent magnets of opposite polarity (S, N) facing one other across a gap (5cm), a shaped steel poles, and a yoke that forms the flux return path. The direction of the magnetic field is perpendicular to the poles (B_0). The intensity of SMF created was 50 (± 2) mT.

Figure S2. Levels of cytoplasmic free Ca^{2+} ($[Ca^{2+}]_{cyt}$) and reactive oxygen species (ROS) in poplar roots under salt stress and static magnetic field (SMF) treatment (N=4~6). After SMF treatment, poplar seedlings were treated with short-term NaCl (100mM NaCl for 24 h) or NaCl shock (100mM or 400mM NaCl for 10 min). (a) Root samples were impregnated with Ca^{2+}-specific fluorescent probe Rhod-2 AM and incubated for 30 min, after which laser confocal microscopy was used to quantify red fluorescence in apical zone cells. (b) Root samples were impregnated with ROS-specific fluorescent probe H2DCF-DA and incubated for 5 min., after which laser confocal microscopy was used to quantify green fluorescence in apical zone cells.

FIGURE S3 Effects of static magnetic field (SMF) treatment on transient flux kinetics of K^+, H^+ and Ca^{2+} in poplar seedling roots (N=4). Control and SMF roots were treated with instantaneous 100 mM NaCl. (a) K^+, (b) H^+ and (c) Ca^{2+} kinetics were recorded at the root apex, ~500 μm from the root tip, after 1000 mM NaCl was added to the measuring chamber. Before the salt shock, steady fluxes of K^+, H^+ and Ca^{2+} were monitored for 5 min.

TABLE S1 Primers used in this study.