

## Supporting Information

### **Cerium Oxide Nanoparticles Decrease Drought Induced Oxidative Damage in Sorghum Leading to Higher Photosynthesis and Grain Yield**

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**Figure S1.** Improvement of pollen germination by foliar spray of nanoceria under drought. (a) irrigated and water sprayed, (b) irrigated and nanoceria sprayed, (c) drought and water sprayed and (d) drought and nanoceria sprayed. The growing pollen tube was shown as arrow. (a, b) There is no variation in pollen germination by water or nanoceria sprayed plants under irrigated condition. (c) Drought stress decreased pollen germination. (d) Foliar spray of nanoceria improved pollen germination under drought stress.

**Figure S2.** No effect of drought and/or foliar spray treatments on mesophyll and vascular bundle cell anatomy. (a, b) irrigated and water sprayed, (c, d) irrigated and nanoceria sprayed, (e, f) drought and water sprayed and (g, h) drought and nanoceria sprayed.  $\theta$  represent the cuticle layer,  $\Delta$  indicates the mesophyll cell morphology and number, \* shows xylem morphology and anatomy and # represent phloem morphology and anatomy.

Figure S1

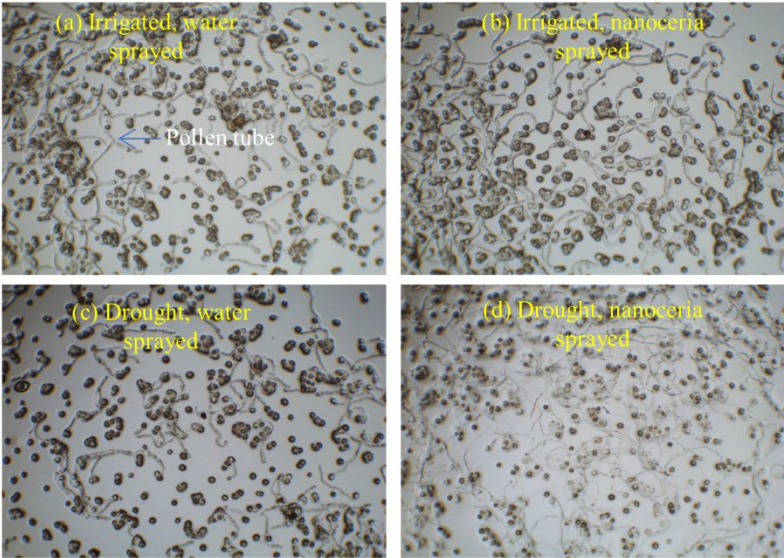
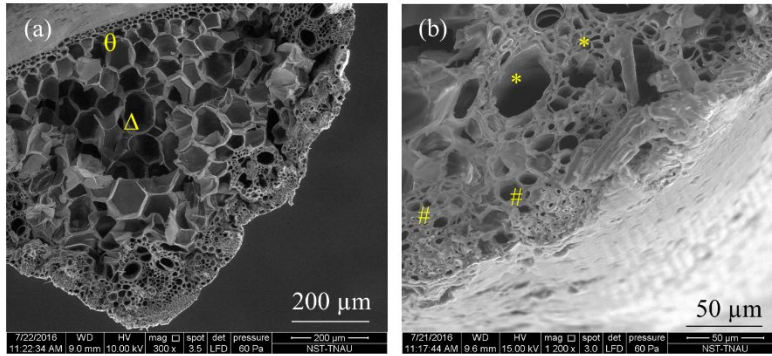
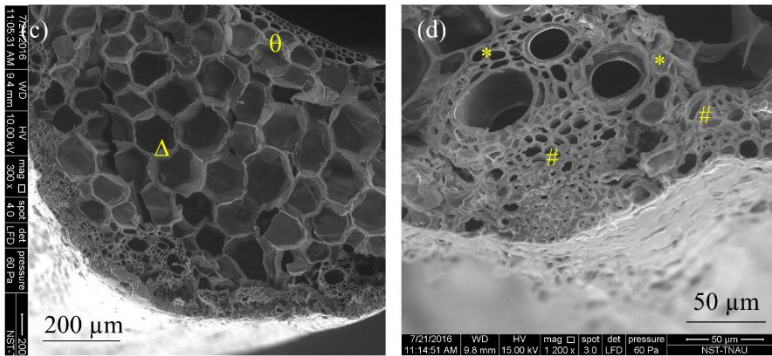


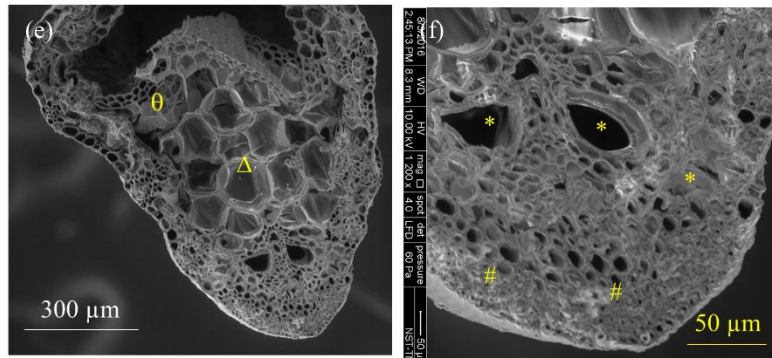
Figure S2



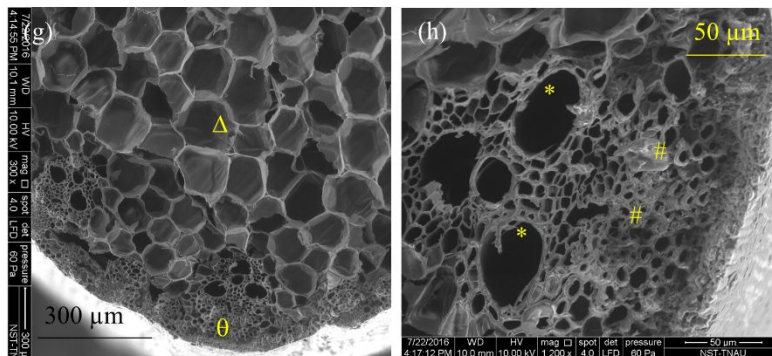
(a, b) Irrigated and water sprayed



(c, d) Irrigated and nanoceria sprayed



(e, f) Drought and water sprayed



(g, h) Drought and nanoceria sprayed