

COPT2, a plasma membrane located copper transporter, is involved in the uptake of Au in *Arabidopsis*

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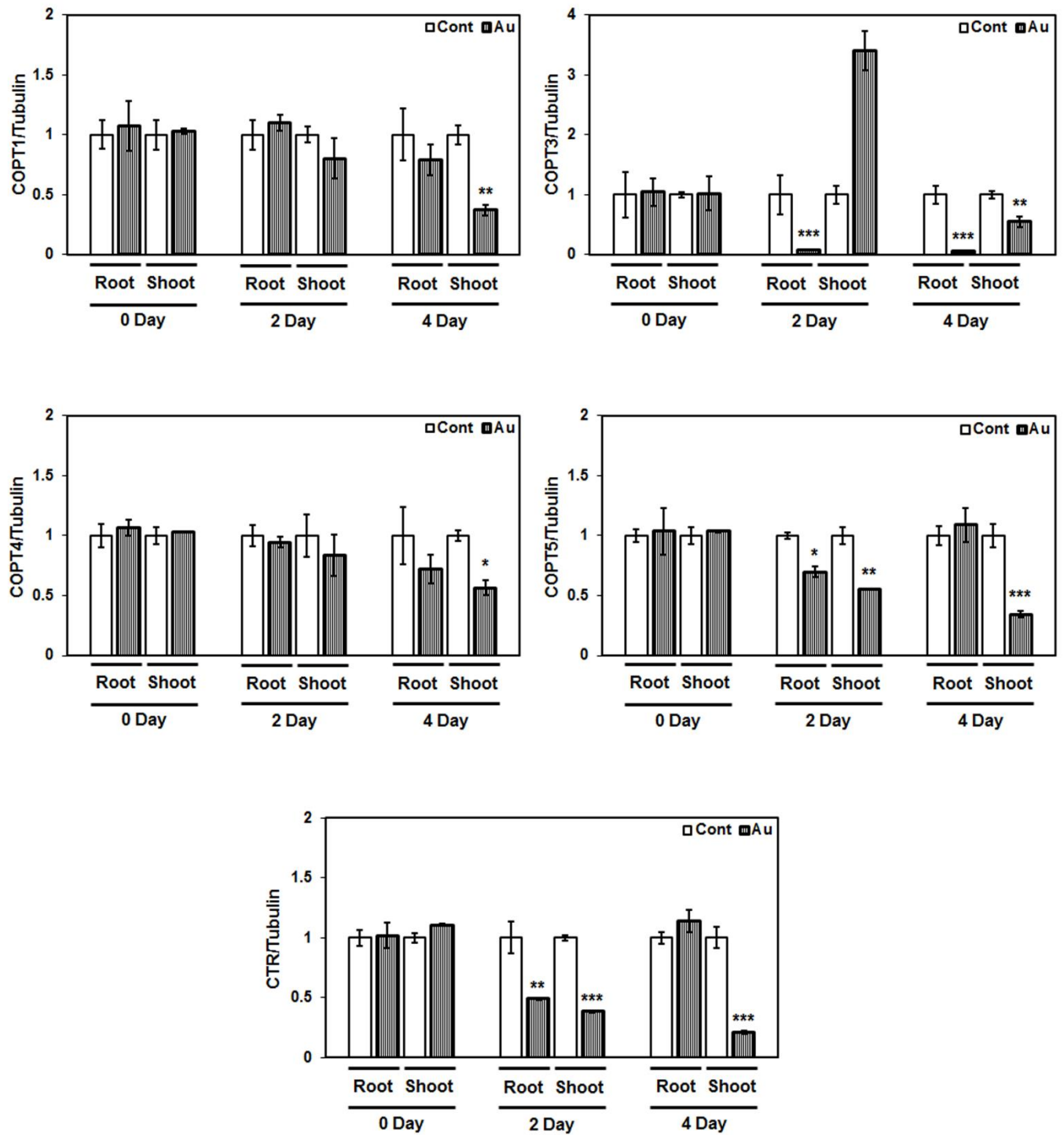
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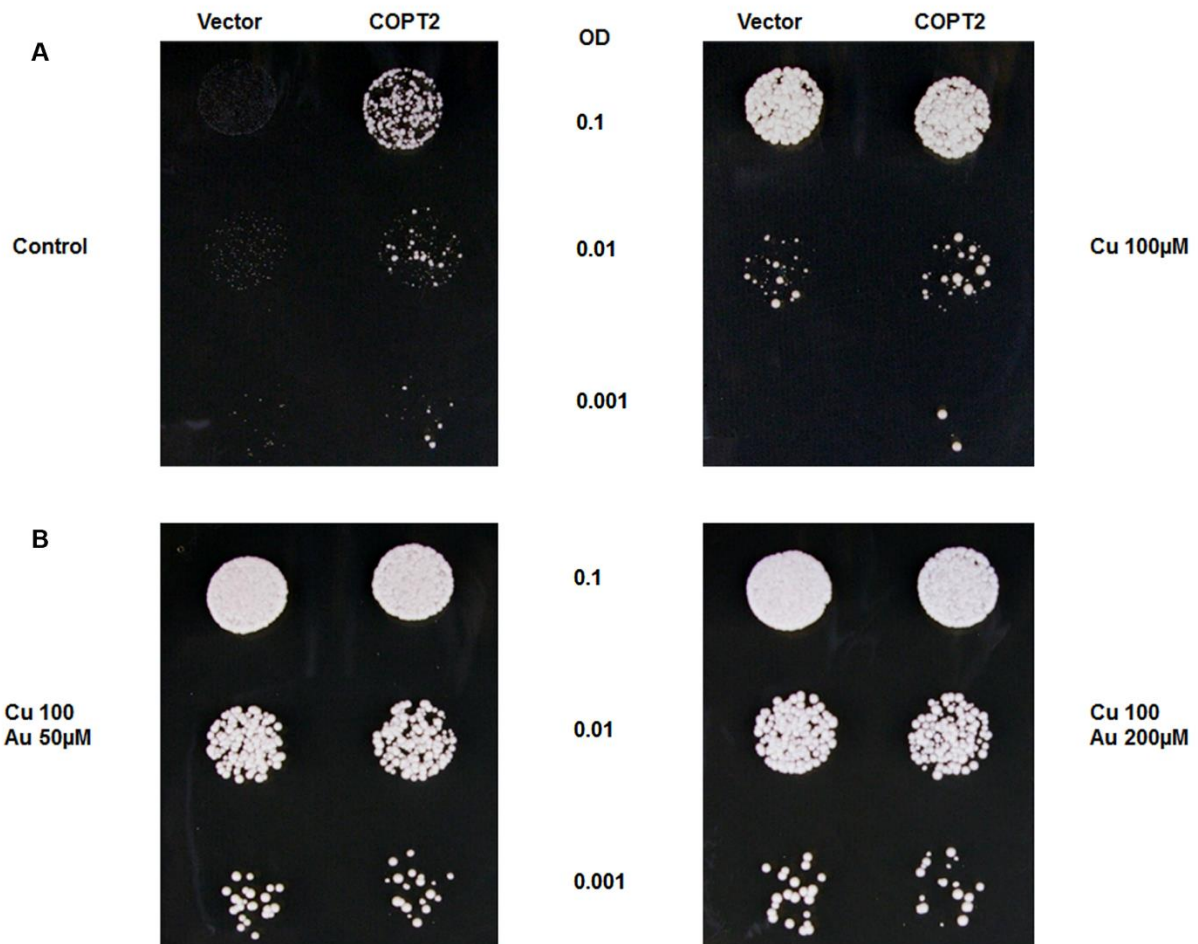
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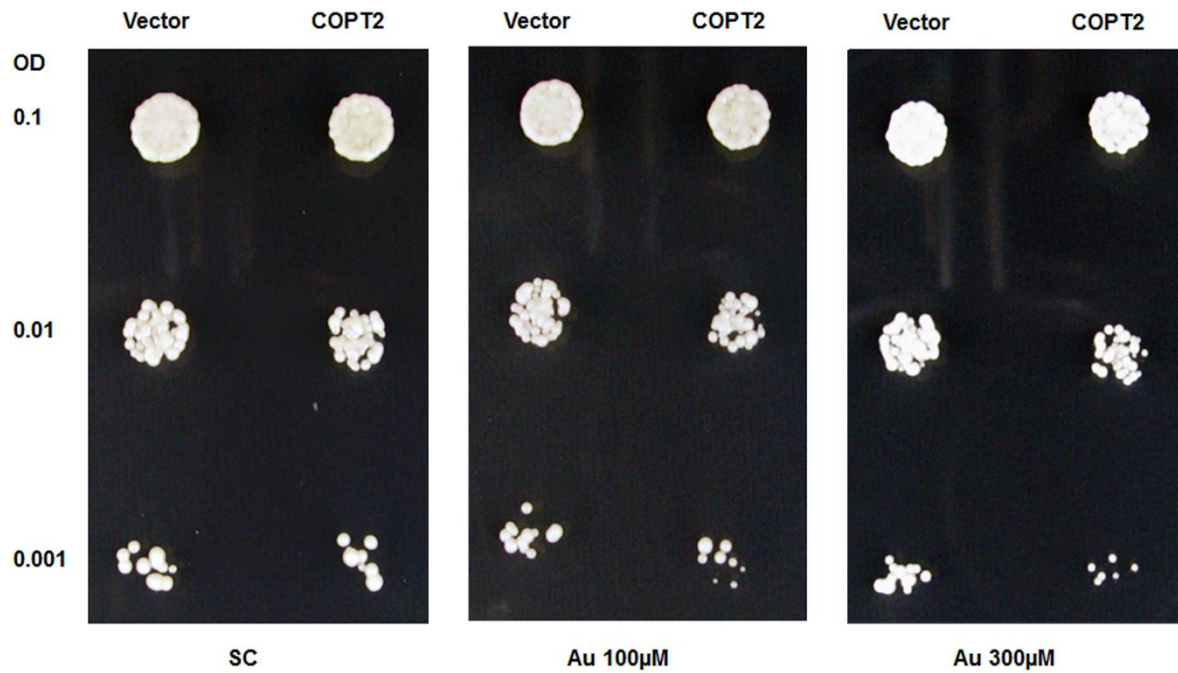
Supplementary Figure 1: Time dependent qRT-PCR analysis of *COPTs* in root and shoot of *Arabidopsis*. The bars and error bars show mean of three replicate and presented as \pm SEM. Asterisks *, ** and *** placed on the top of the column denoting $P > 0.01$, $P > 0.001$ and $P > 0.0001$.



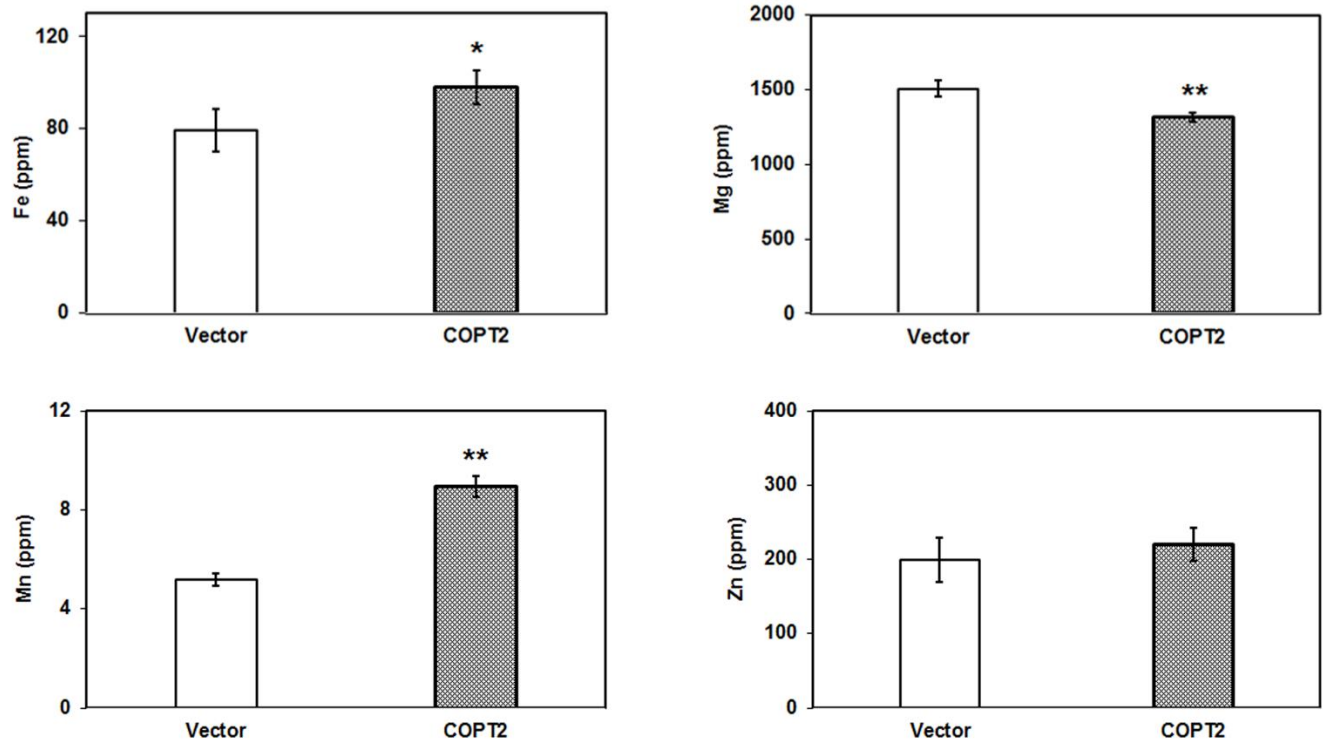
Supplementary Figure 2: Yeast spot assay carried out on YPEG media. Growth of *ctr1Δctr3Δ* on YPEG plate containing indicated amount of Cu (A) and Au (B). Each plate shows two independent yeast clones containing empty vector and COPT2 (left to right). The overnight grown culture used as preculture after maintaining the uniform growth (O.D. 1.0), and 10 μ l aliquot of each serial dilutions plated down the plate (top to bottom).



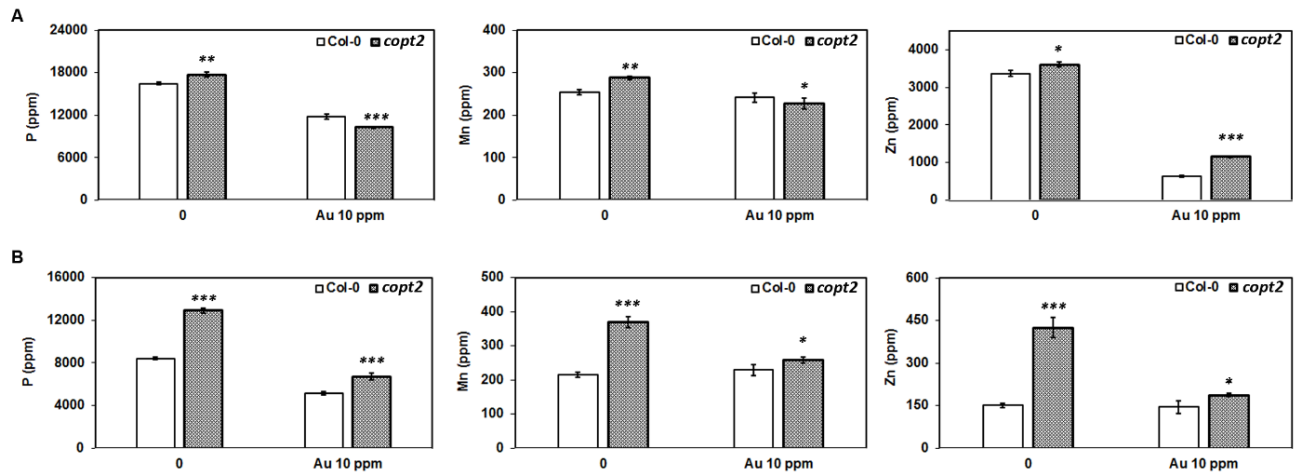
Supplementary Figure 3: Yeast spot assay showing sensitivity of yeast mutant towards Au. Growth of *ctr1Δctr3Δ* on SC-URA plate containing (left) 0, 100 and 300 μ M Au (right). Each plate shows two independent yeast clones containing either an empty vector or COPT2 (left to right). The overnight grown culture used as preculture after maintaining the uniform growth (O.D. 1.0), and 10 μ l aliquot of each serial dilutions plated down the plate (top to bottom).



Supplementary Figure 4: Essential element measurement in yeast mutant. Overnight grown cultures (O.D. 1.5) administered with Au (100 μ M) and allowed to grow for 4 h. Cells were harvested and washed with nanopure water many times. Elemental profiling was performed using ICP-OES. Asterisks * and ** denote significant difference $P > 0.01$ and $P > 0.001$ compared to vector transformed yeast cells.



Supplementary Figure 5: ICP analysis of root and shoot of *Arabidopsis*. A) Elemental profiling carried out under normal and Au (10 ppm) treated conditions in root, and B) shoot. Data are mean of three independent biological replicates and presented as \pm SEM. Asterisks *, ** and *** denote significant difference $P > 0.01$, $P > 0.001$ and $P > 0.0001$ compared to Col-0.



Supplementary Figure 6: Effect of Au on growth of mature plants. **A)** Growth of three week old Col-0 plants under control and Au (10 ppm) treatment at indicated time intervals, and **B)** Growth of three week old *copt2* mutant under control and Au (10 ppm) treatment at indicated time intervals.

