Expanded View Figures

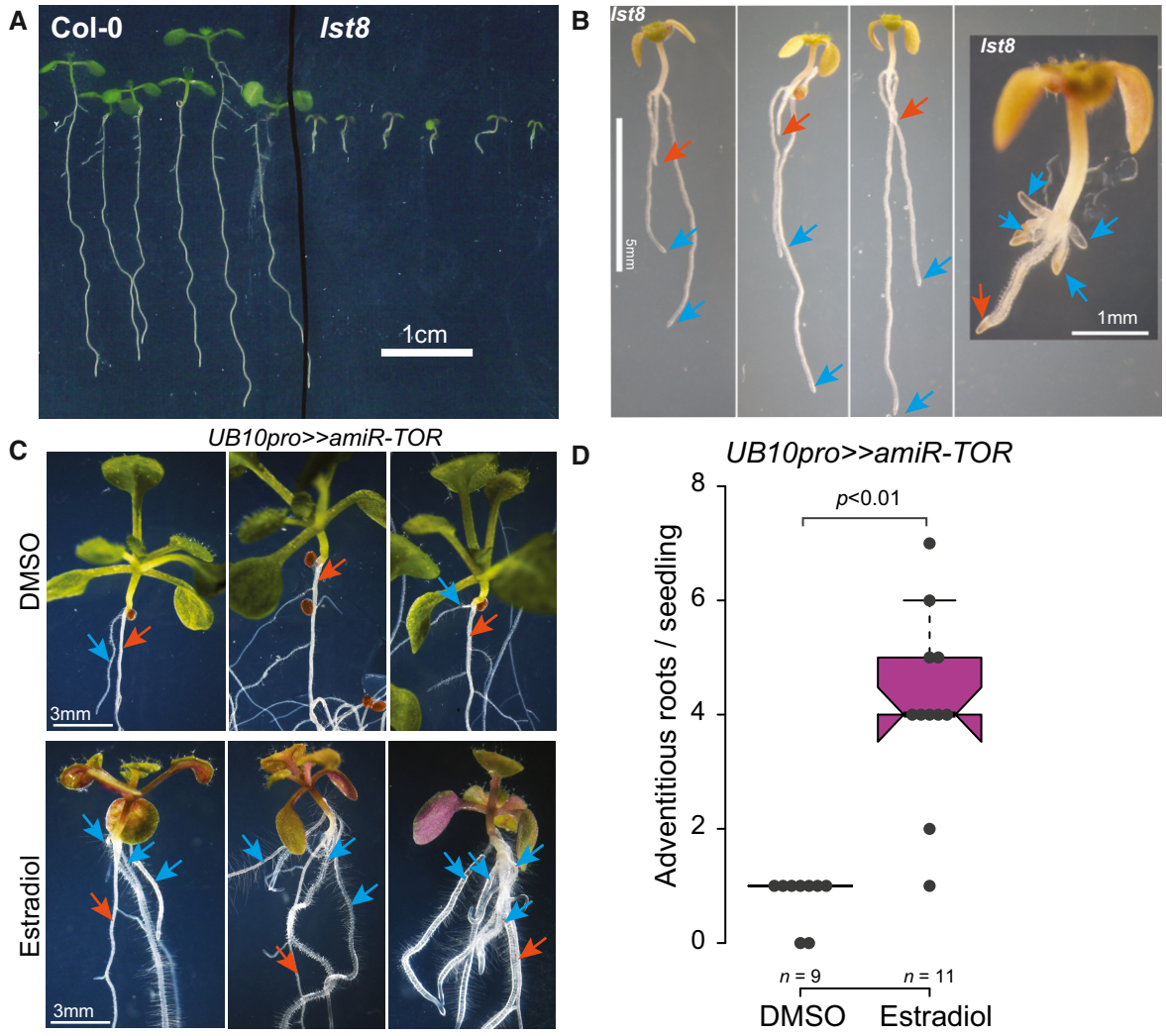

Figure EV1. Impairment of the TOR machinery causes the increased formation of adventitious roots.

A Primary root growth in 14-day-old *lst8* seedlings is reduced compared to Col-0.

B Close-ups of 14-day-old *lst8* seedlings with numerous adventitious roots (blue arrows) on the hypocotyl; the primary root is indicated with a red arrow.

C TOR knockdown induces the formation of adventitious roots. 14-day-old *UB10pro>>amiR-TOR* seedlings transferred at 8 DAG to Est develop more adventitious roots from the hypocotyl (blue arrows) than DMSO-treated seedlings. The red arrows indicate the primary root.

D Distribution of the number of hypocotyl-borne adventitious roots produced in 14-day-old *UB10pro>>amiR-TOR* seedlings transferred at 8 DAG to Est or DMSO. The number of biological replicates is indicated. Unpaired *t*-test.

Source data are available online for this figure.

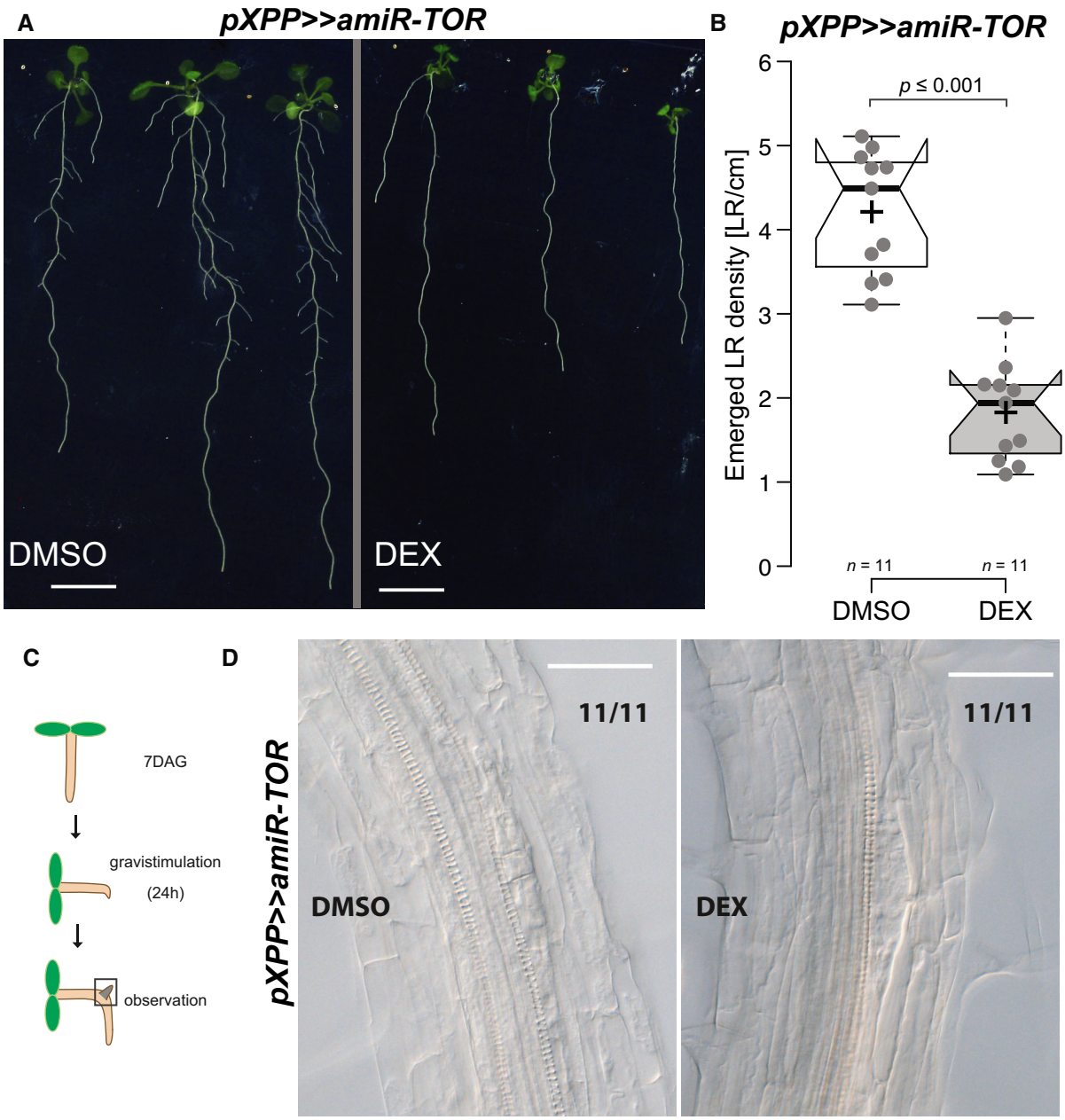

Figure EV2. Xylem-pole-pericycle specific knockdown of TOR expression impairs the emergence of LR primordia.

A Phenotype of *pXPP>>amiR-TOR* seedlings grown on DMSO or 30 μM Dexamethasone (DEX) at 14 DAG. Scale bar: 5 mm.

B Density of emerged LR in *pXPP>>amiR-TOR* upon control or DEX treatment in 14-day-old seedlings.

C Schematic of the experimental setup used for scoring LR initiation by gravistimulation for 24 h, upon control or DEX treatment.

D Representative DIC images of root bends of 7DAG *pXPP>>>>amiR-TOR* seedlings raised on (DMSO) or DEX and subsequent 24 h gravistimulation. Numbers indicate the proportion of root bends with the depicted phenotype. Scale bar: 50 μm.

Source data are available online for this figure.

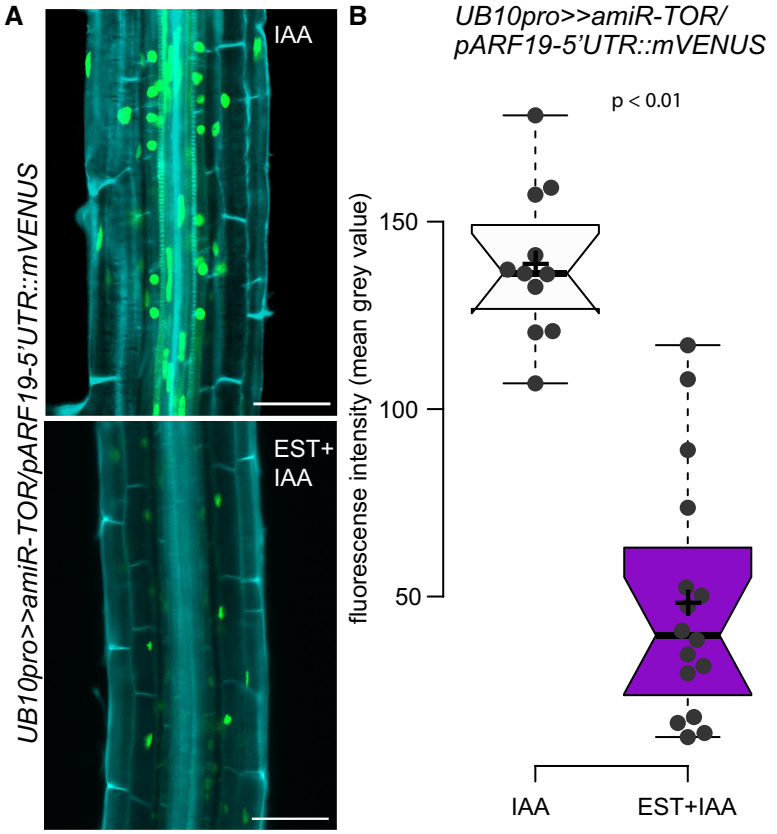

Figure EV3. Silencing TOR-expression reduces ARF19 in TOR-deficient pericycle cells after synchronized LR-induction.

A Representative confocal images of mVenus accumulation in 7 DAG *UB10pro>>amiR-TOR/pARF19-5'UTR::mVENUS* seedlings. Seedlings were pre-treated for 24 h with mock (DMSO) or 10 μM Ô-Estradiol to induce TOR knockdown and then transferred to 10 μM IAA to induce LR formation synchronously. Scale bar: 50 μm, $n \geq 11$ individual roots.

B Quantification of mean gray values in the nuclei of the pericycle cells. Significant differences between mVENUS-signal of 10 μM IAA treated seedlings either DMSO or Est pre-treated roots based on paired *t*-test.

Source data are available online for this figure.