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Diethylstilbestrol is a potent inhibitor of hydroponically growth of *Arabidopsis thaliana*

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The use of plants for assessment of environmental pollutants has been reported.
However, since plant genomes do not seem to encode members of the nuclear receptor superfamily, the physiological effects of endocrine disrupters on plants are poorly understood. In this study we demonstrate that diethylstilbestrol (DES) is a potent inhibitor of hydroponically growth of *Arabidopsis thaliana*. Seeds of *A. thaliana* were immersed in the presence of DES under light. After germination, the growth of them was significantly inhibited. Similar phenotype was observed in *A. thaliana* immersed in darkness but disappeared in other plants, *Pisum, Phaseolus*, *Glycine*, and *Phaseolus*. Furthermore, there were no significant phenotypes in *A. thaliana* cultivated on agar plate or soil containing DES and in *A. thaliana* immersed in the presence of other estrogenic chemicals, 17-beta estradiol and coumestrol. These results suggest plants may be valuable organism for assessment of specific endocrine disrupters based on species and growth condition.