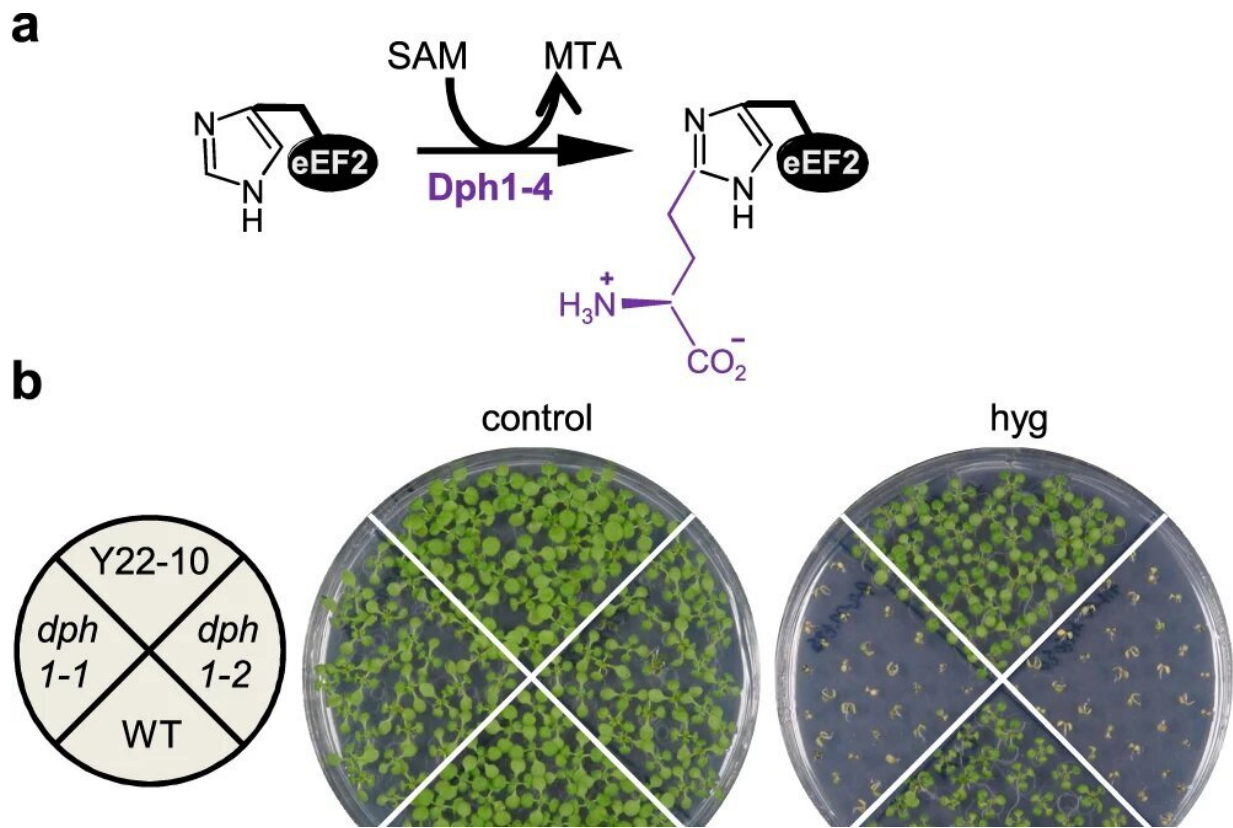


Diphthamide is an Achilles heel shared by both plants and animals

July 15 2022



Identification and phenotypes of *Arabidopsis* *dph1* mutants. **a** Scheme of first step of diphthamide biosynthesis in yeast and human. SAM S-adenosylmethionine, MTA 5'-methylthioadenosine. **b** *Arabidopsis* hygromycin sensitivity. Photograph of 12-day-old seedlings of the wild-type (WT), *dph1-1*, *dph1-2*, and *dph1-1* pDPH1:DPH1-GFP complemented line Y22-10 cultivated without (control) or with 2 μ M hygromycin B (hyg). **c–e** Growth of WT, *dph1*, and complementation lines on 0.5 \times MS medium, shown as photograph (c), fresh biomass (d), and primary root length (e) of 12-day-old seedlings. Scale bar, 10

mm (c). Data are mean \pm s.d., n = 4 pools of between 5 and 6 seedlings, with each pool sampled from an independent petri plate (d, e). Significant differences from WT: *P

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