

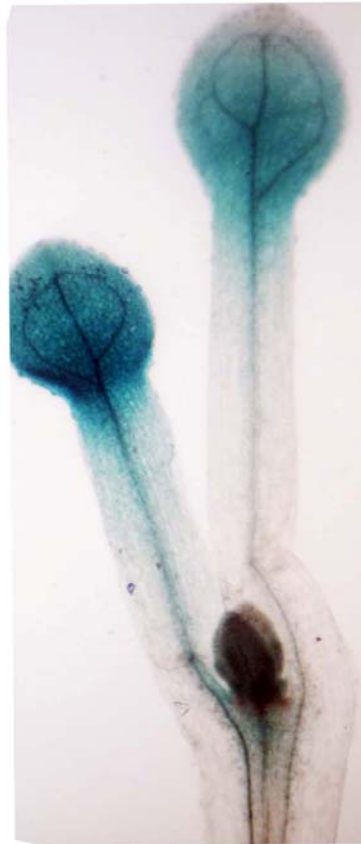
A**B**

Figure S1. Asymmetrical localization of NDL1-GUS in dark- and light-grown cotyledons.

- A.** NDL1-GUS Localization analysis in 3-4 days- old light- grown seedling. Uneven localization of NDL1- GUS staining in cotyledons. Right cotyledons staining darker than the left one.
- B.** Seven-day-old dark grown seedling, it has a dark stained lagging, in terms of expansion (left) and comparatively lightly stained leading cotyledon..

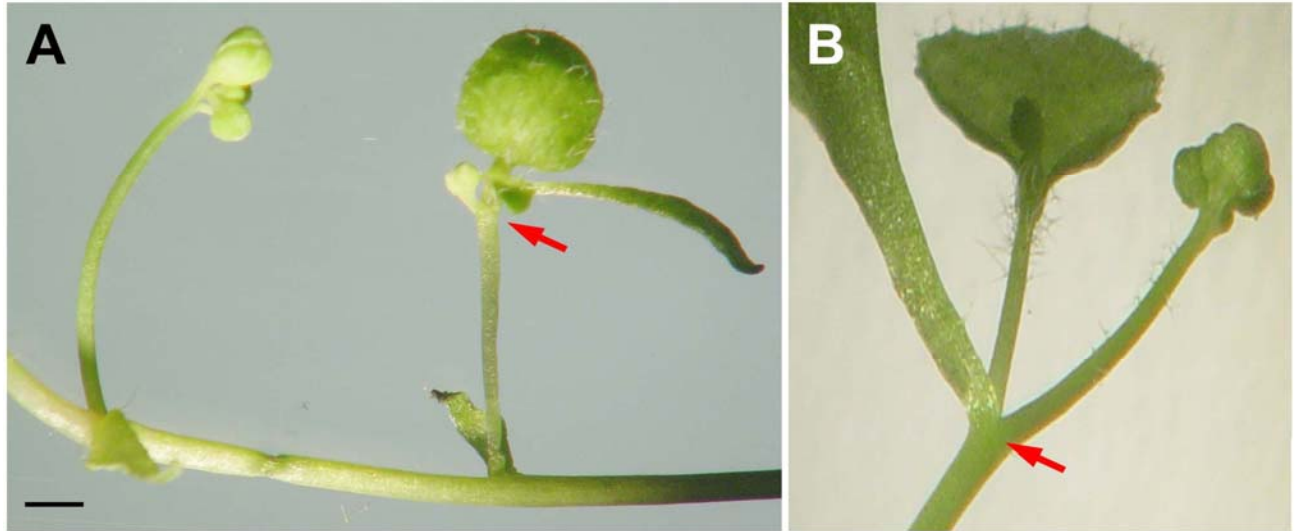


Figure S2. Ectopic over-expression of *NDL1* resulted in abnormal development of vegetative and reproductive whorls.

A-B. A single node bears a leaf, cauline leaf and flowers. Arrow marks the point of origin of these organs.



Figure S3. Ectopic over-expression of *NDL1* resulted in atypical flowers with abnormal number of flower whorls.

- A.** Flower with four pistils and multiple petals pedicel appears fused structure.
- B.** Single pedicel with numerous sepals, petals, pistils and stamens.

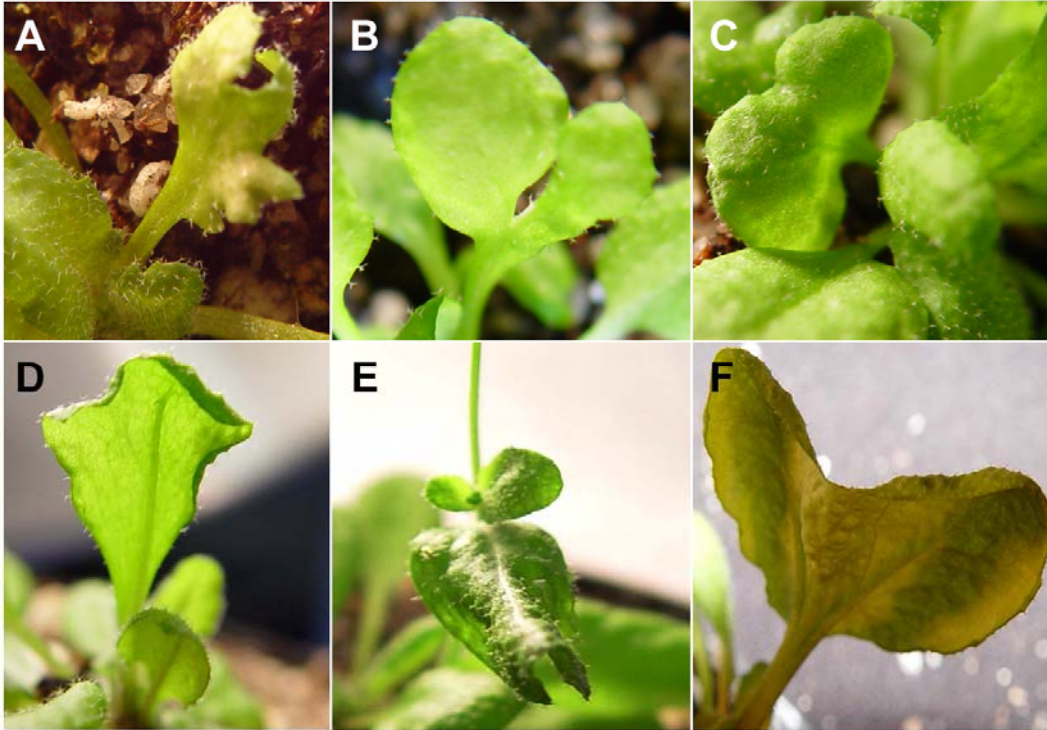


Figure S4. Leaves from various independent *ndIM* knock-down lines showing lamina defects.

- A.** Leaf showing highly serrated margin.
- B.** Bi-lobed leaf.
- C.** Expanded heart shaped leaf.
- D-E.** Expanded and folded leaf.
- F.** Heart shaped leaf showing two independent midveins to two lobes.

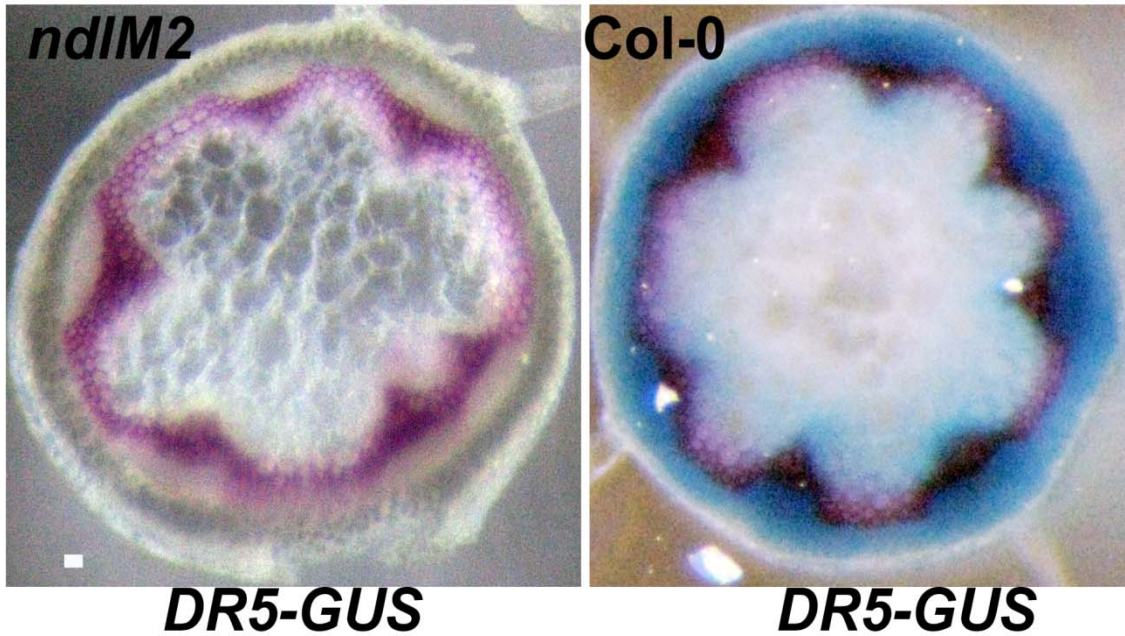


Figure S5. Histology of the stem vasculature of wild-type Col-0 and *ndIM* mutant expressing *DR5-GUS*.

Phloroglucinol staining was used to stain amount of vasculature present. Sections already stained with GUS stain were stained with phloroglucinol stain and responsible for double staining in sections.