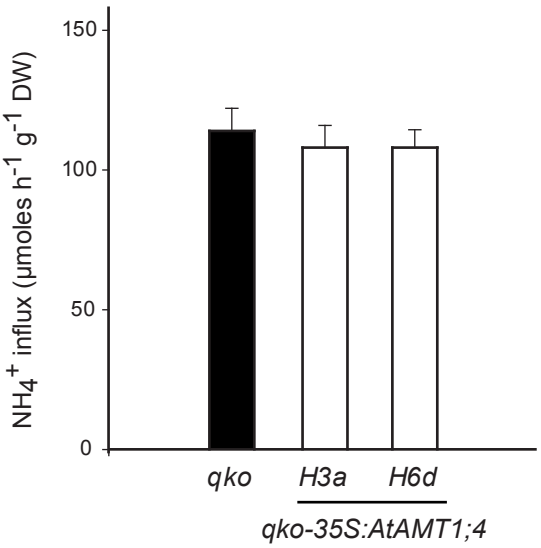
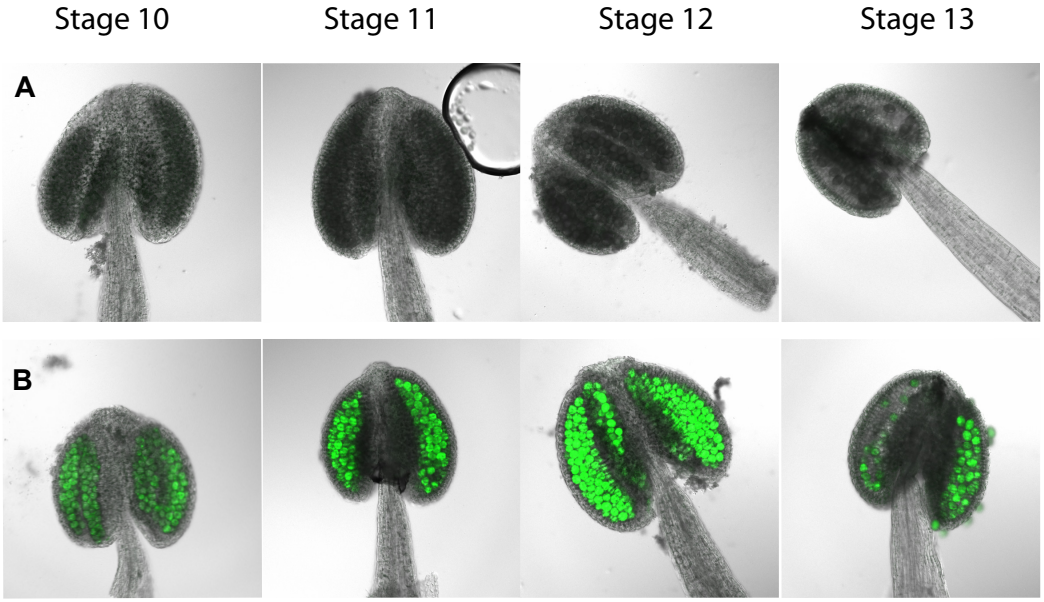
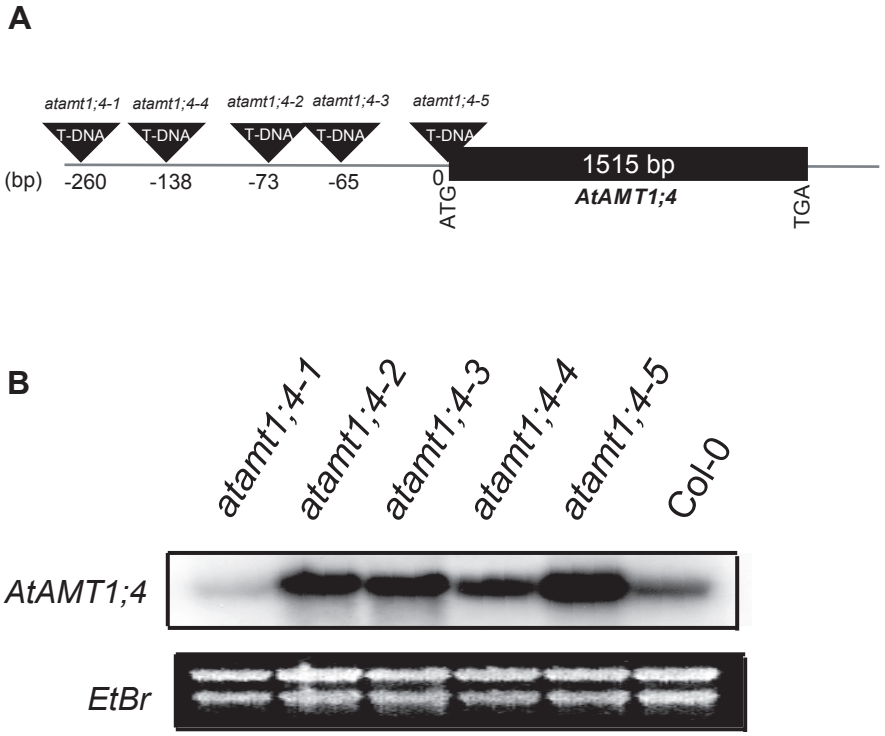


Supplementary Fig. S1. Overexpression of AtAMT1;4 does not increase the low-affinity ammonium uptake capacity in plants. Influx of ^{15}N-labeled ammonium into roots of *qko* and transgenic *qko-35S:AtAMT1;4* lines (*H3a* and *H6d*). ^{15}N-labeled ammonium was supplied at 5 mM. Bars indicate means±SD, n=8-10 plants, and no significant differences between lines were observed at $p<0.01$. The plants were cultured hydroponically under continuous supply of 2 mM ammonium nitrate for six weeks.



Supplementary Fig. S2. Expression of *AtAMT1;4* in pollen at different developmental stages of the flower. Analysis of GFP-dependent fluorescence in stamens from wild type (A), and transgenic lines 3c expressing a *AtAMT1;4-Promoter:ORF:GFP* construct (B). The plants were grown in soil for six weeks, and the stamen from the developmental stages of flower 10 to 13 as describe by Smyth et al. (1990).



Supplementary Fig. S3. Characterization of the T -DNA insertion lines *atamt1;4-1* to *atamt1;4-5*. (A) Positions of the T-DNA insertions in *atamt1;4-1* to *atamt1;4-5* located upstream of the coding region of *AtAMT1;4*. (B) RNA gel blot analysis of RNA from flowers of wild type (Col-0), and T-DNA insertion lines *atamt1;4-1* to *atamt1;4-5* plants using the ORF of *AtAMT1;4* as a probe. Ethidium bromide-stained *rRNA* served as loading control. The plants were grown in soil for six weeks.