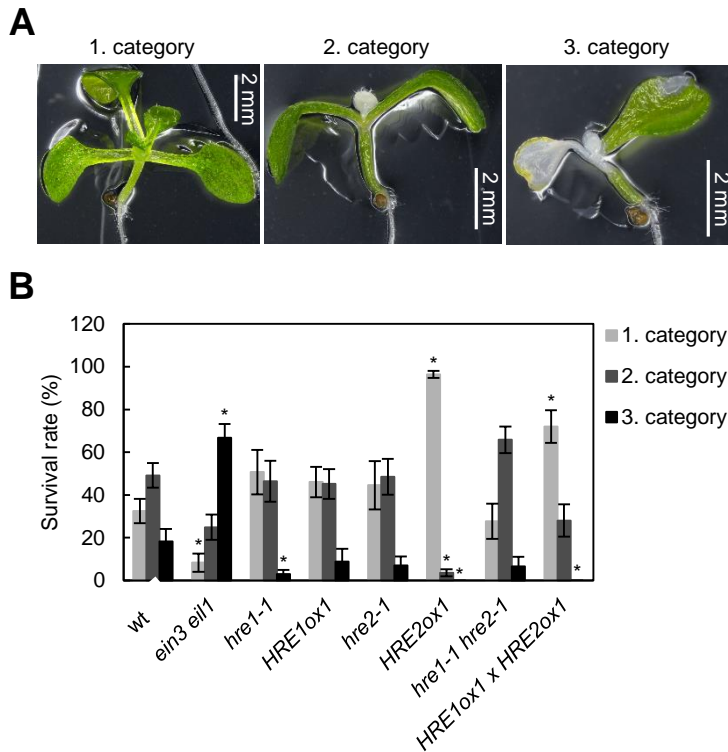


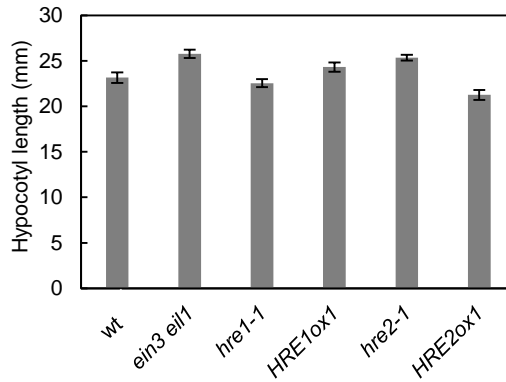
Supplementary Figures



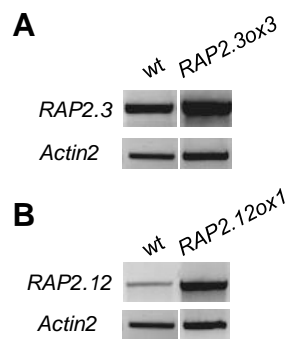
Supplementary Figure S1. HRE2 improves and EIN3/EIL1 signaling impairs anoxia survival.

(A) 7-d-old seedlings were exposed to 3 d of 0% O₂ in the dark then transferred to normoxia in the light for a 7 d recovery phase. Seedlings were categorized as being alive (category 1), damaged with bleached true leaves (category 2) or dead (category 3).

(B) Survival rates were scored as shown in (A). Values are means (\pm SE) of 3 biological and 2 technical replicates in percent. Asterisks indicate significantly different values within each category compared to wild type (two-sample *t*-test, $n=6$, $P<0.05$).

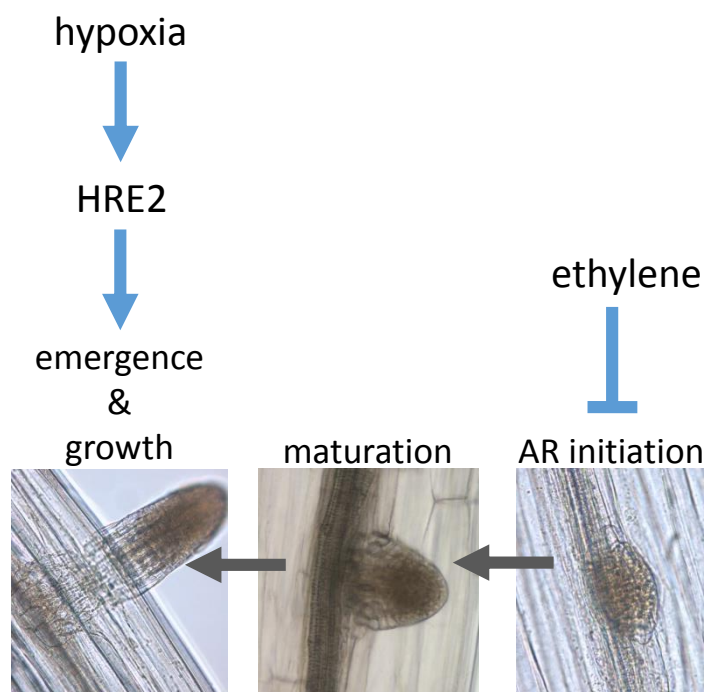


Supplementary Figure S2. Hypocotyl length in *ein3 eil1*, *HRE1* and *HRE2* mutants. Average (\pm SE) hypocotyl length of 11-d-old seedlings of the indicated genotypes as determined in 3 biological replicates (n=17-31).



Supplementary Figure S3. Overexpressing lines of RAP2.3 and RAP2.12.

Verification of expression of *RAP2.3* (A) and *RAP2.12* (B) in overexpressing lines by RT-PCR from leaf tissue. *Actin2* was used as a reference gene for normalization.



Supplementary Figure S4. Model summarizing the activities of HRE2 and ethylene in adventitious root development.

HRE2 is induced at hypoxic conditions and promotes, both, initiation and elongation growth of adventitious roots whereas ethylene inhibits AR formation. Hypoxic wild type seedlings display an intermediary response where neither the promotive effect of HRE2 nor the inhibitory effect of ethylene are saturated.

Supplementary Table

Supplementary Table 1. Primers used for cloning and RT-PCR.

Name of primers	Primers 5'-3' sequence
Actin2F1	CAAAGACCAGCTCTTCCATCG
Actin2R1	CTGTGAACGATTCTGGACCT
Forrap2.12-ox1	TTACGCGTCGACATGTGTGGAGGAGCTATAATATC
Revrap2.12-ox1	AAATTTGATATCTCAGAAGACTCCTCCAATCATG
Forrap2.3-ox1	TTACGCGTCGACATGTGTGGCGGTGCTATTATTC
Revrap2.3-ox1	AAACCGGAATTCCTTACTCATACGACGCAATGAC