

# Root cortical aerenchyma in corn hybrids in Pennsylvania and interaction with mycorrhiza and soil-borne pathogens

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Tables and figures are presented in the order in which they are referred in the text.

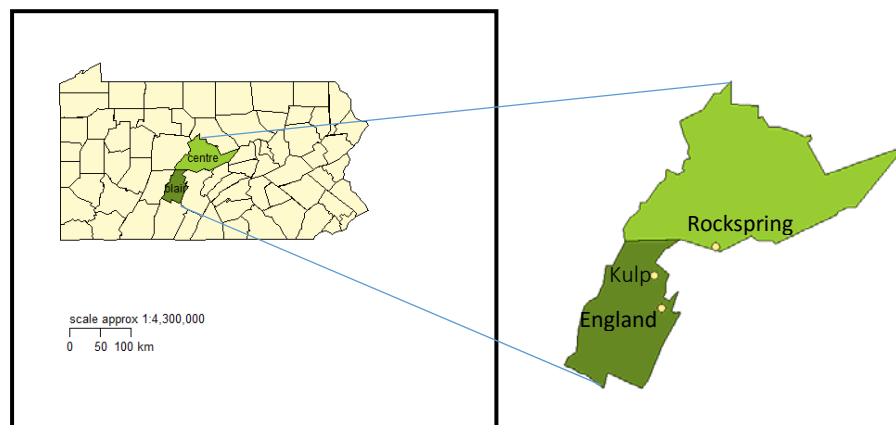


Figure 1. Location of farms used for the root sampling in the state of Pennsylvania.



Figure 2. Maize root crown (top left). Detail of root segment collection on a maize crown seen from below, showing the oldest whorls that were excised (top right). RR scale used in roots collected (bottom).

Seed company	Number of lines evaluated
Channel	2
Chemgro-Seeds	2
Doebler.s-PA-Hybrids	3
DuPont-Pioneer	3
FS-InVISION	2
Healthy-Herd	1
Hubner-Seed	3
King.s-AgriSeeds	3
Monsanto-Corp	3
Mycogen	2
Syngenta	2
T.A.-Seeds	4

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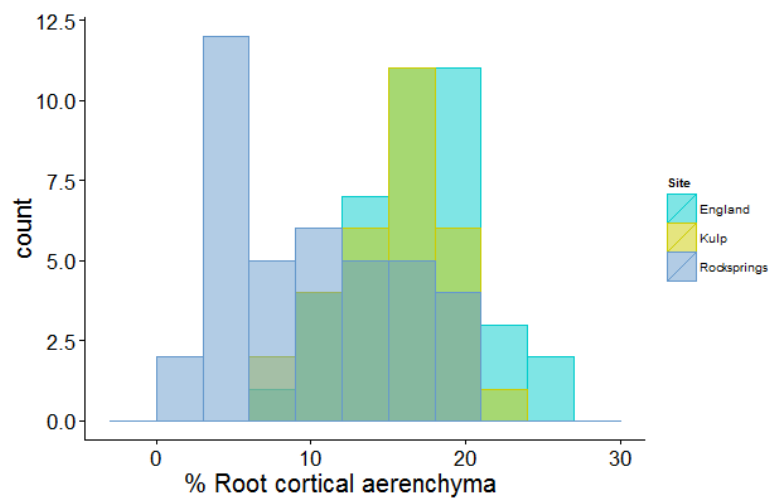


Figure 3. Root cortical variation in 30 hybrid lines at three sites across Pennsylvania. Values are averages of three replicates per entry at each site.

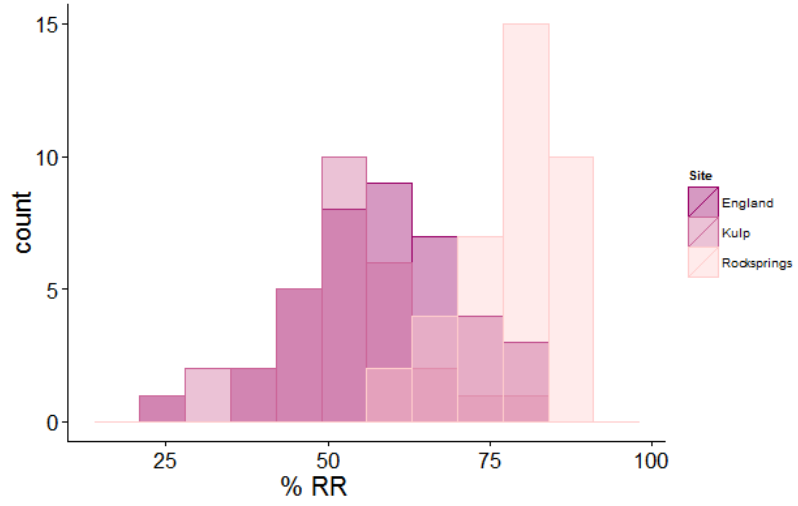


Figure 4. Histogram of RR in three farms. Values are averages of three replicates per entry at each site.

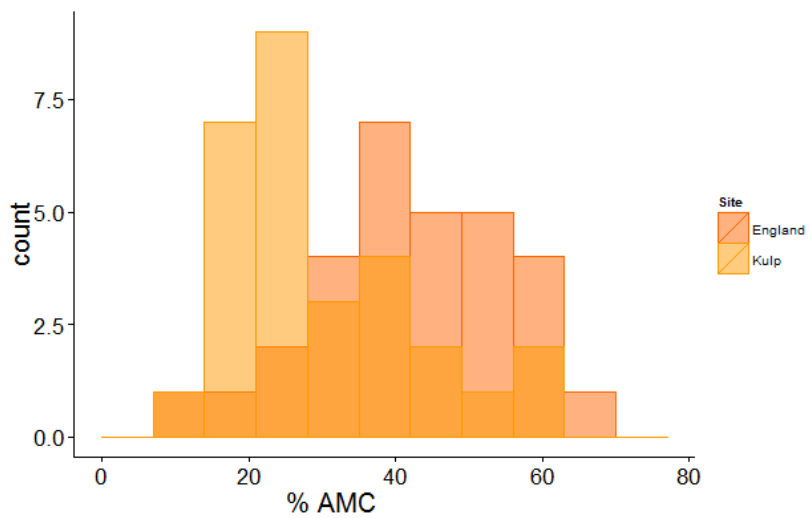


Figure 5. Histogram of AMC in two farms. Values are averages of two plants per plot. 30 plots were evaluated, covering 10 genotypes with contrasting levels of RCA.

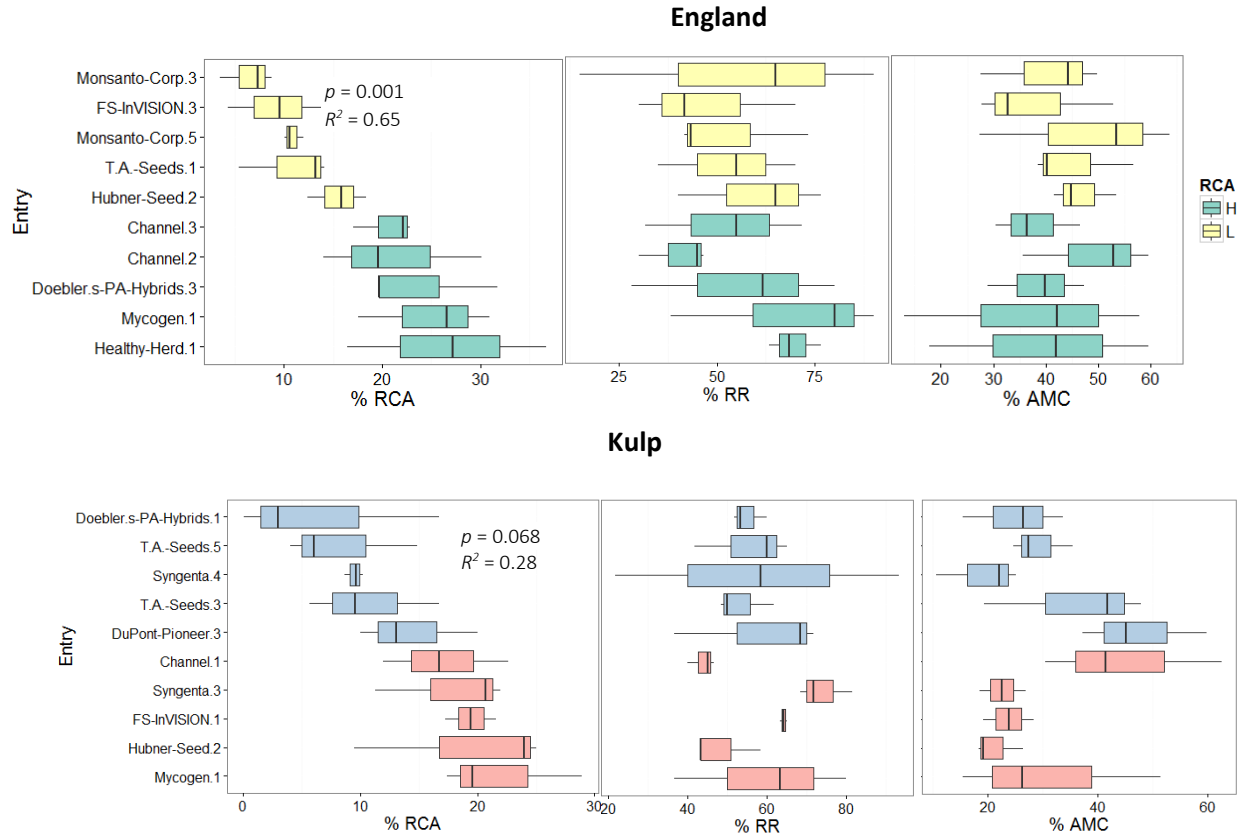


Figure 6. RCA, RR and AMC in field trials. Boxplots of three replicates per site and entry for selected genotypes with contrasting levels of RCA. No significant effect of RCA was found on RR or AMC in either of the two sites.

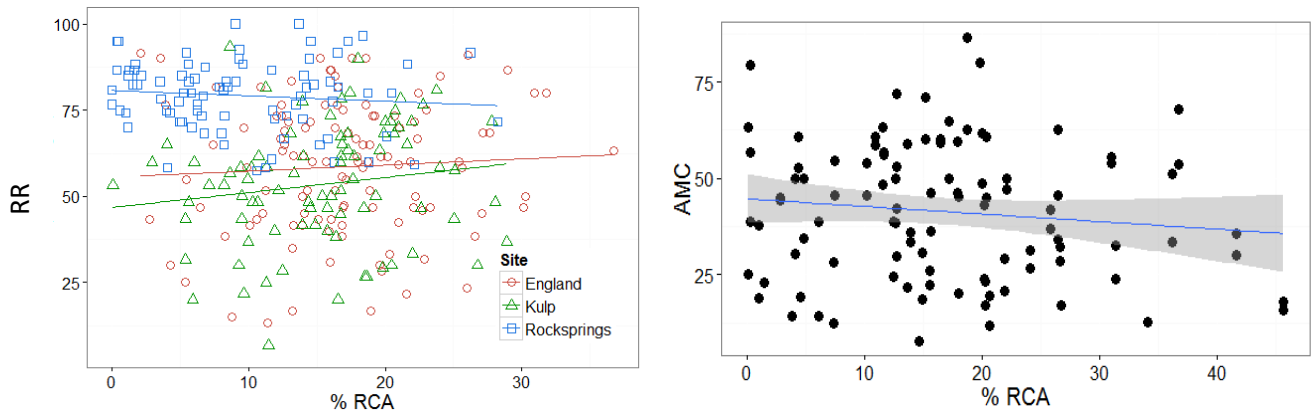


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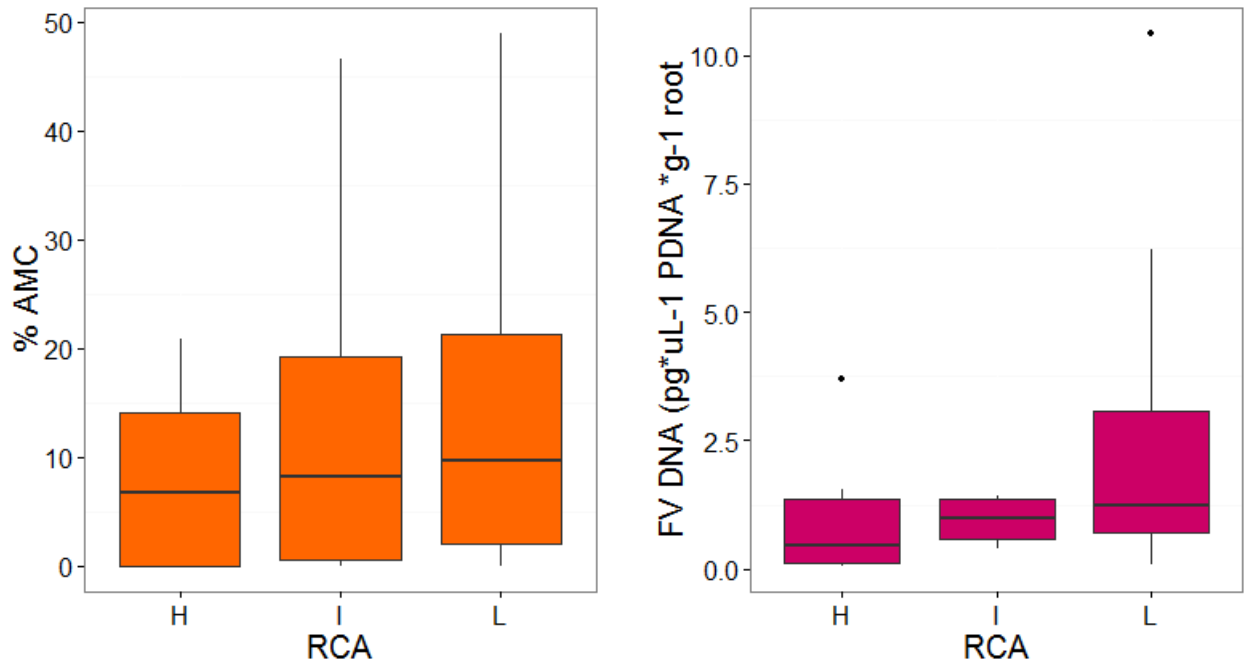


Figure 8. Boxplots of AMC and *F.verticillioides* (FV) root colonization in greenhouse-grown plants with contrasting RCA (H, high; I, intermediate; L, low).