

Managing Soil, Water, and Plant Factors to Increase Crop-Nutrient Availability

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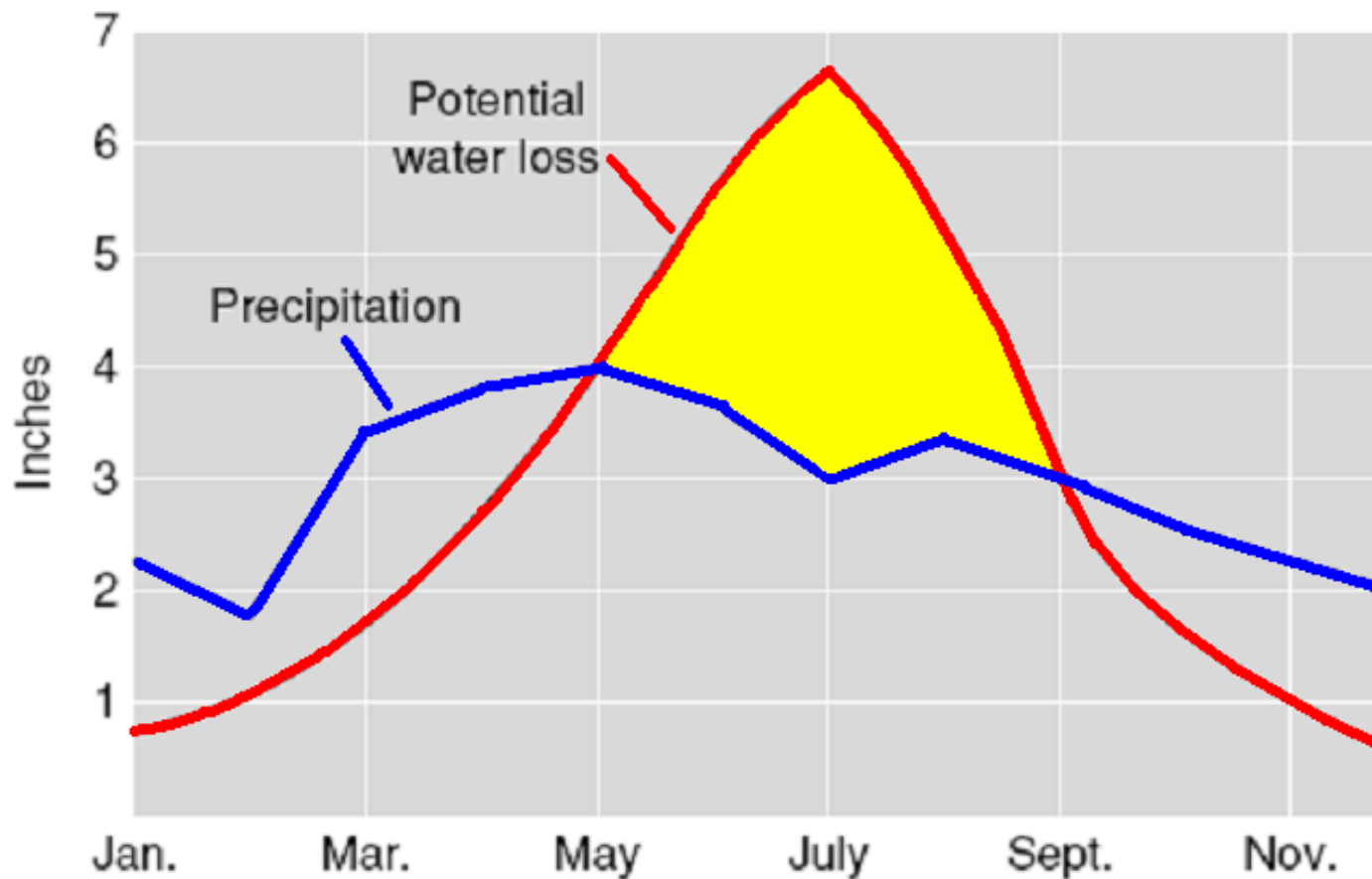
How Nutrients Reach the Root

Approximate amount supplied by

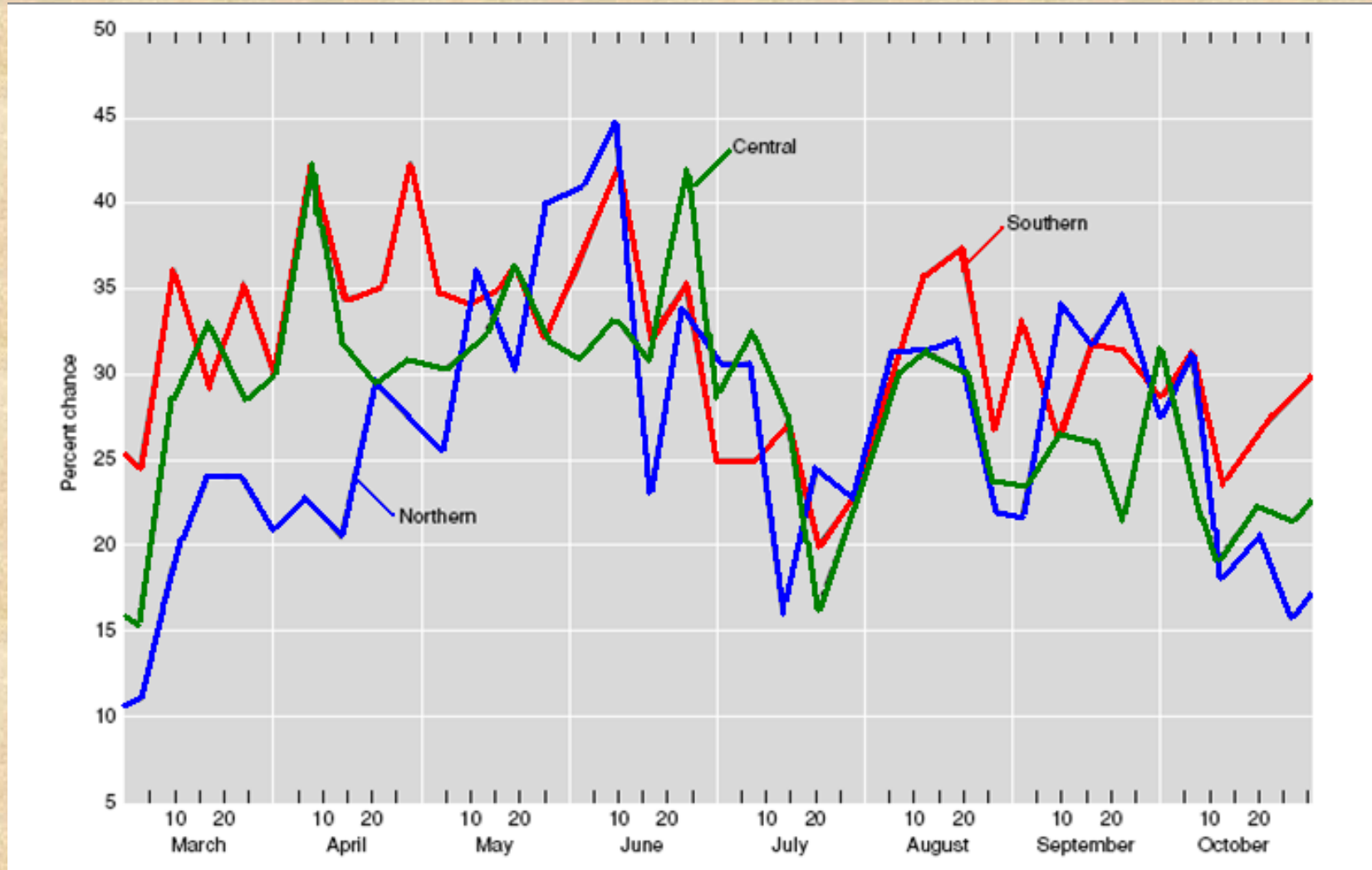
Nutrient	Root		
	interception	Mass flow	Diffusion
	-----%		
Nitrogen	1	79	20
Phosphorus	3	5	93
Potassium	2	18	80
Calcium	150	375	0
Magnesium	33	222	0
Sulfur	5	295	0

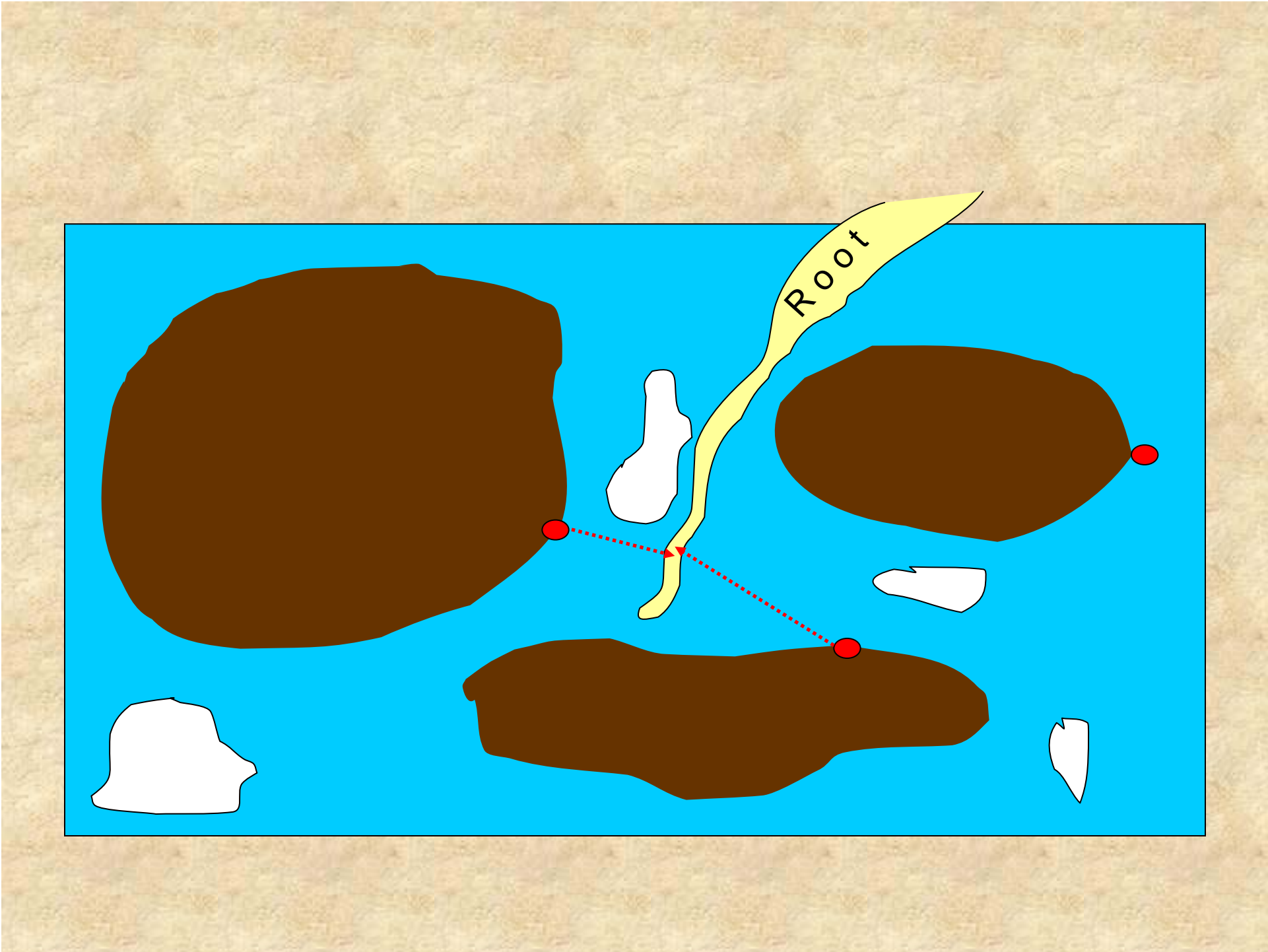
Source: Barber

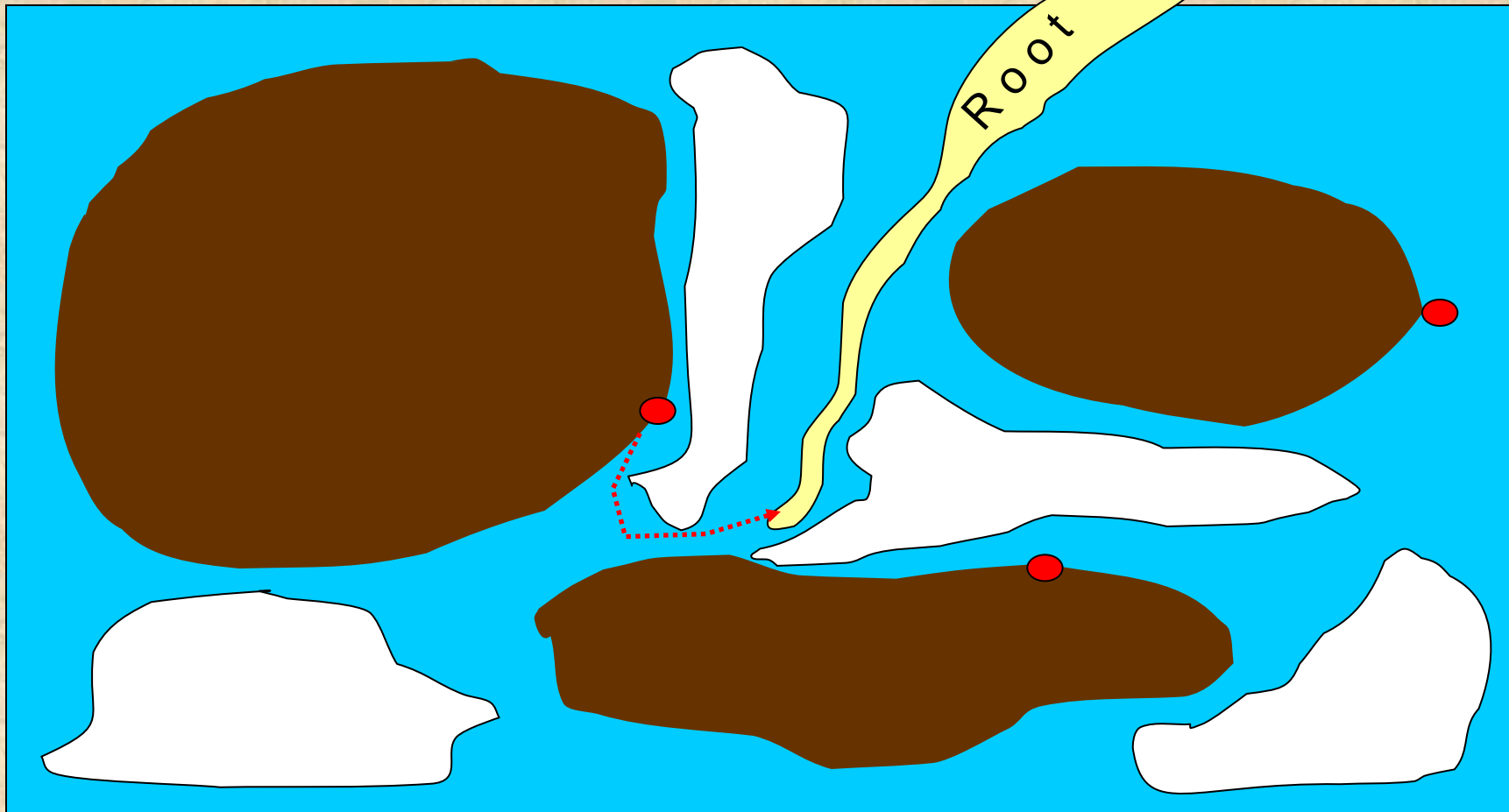
Average Monthly Precipitation and Potential Water Loss from a Growing Crop in Central Illinois



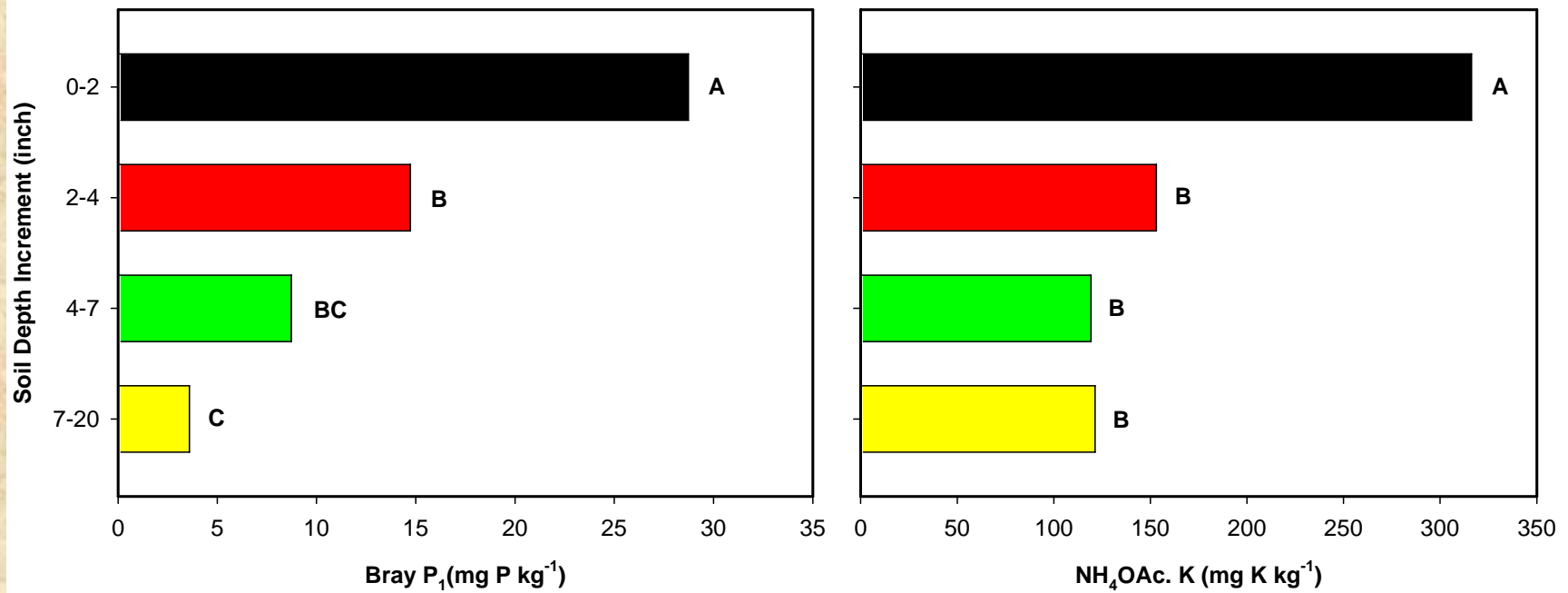
Chance of at Least One Inch of Rain in Illinois in One Week



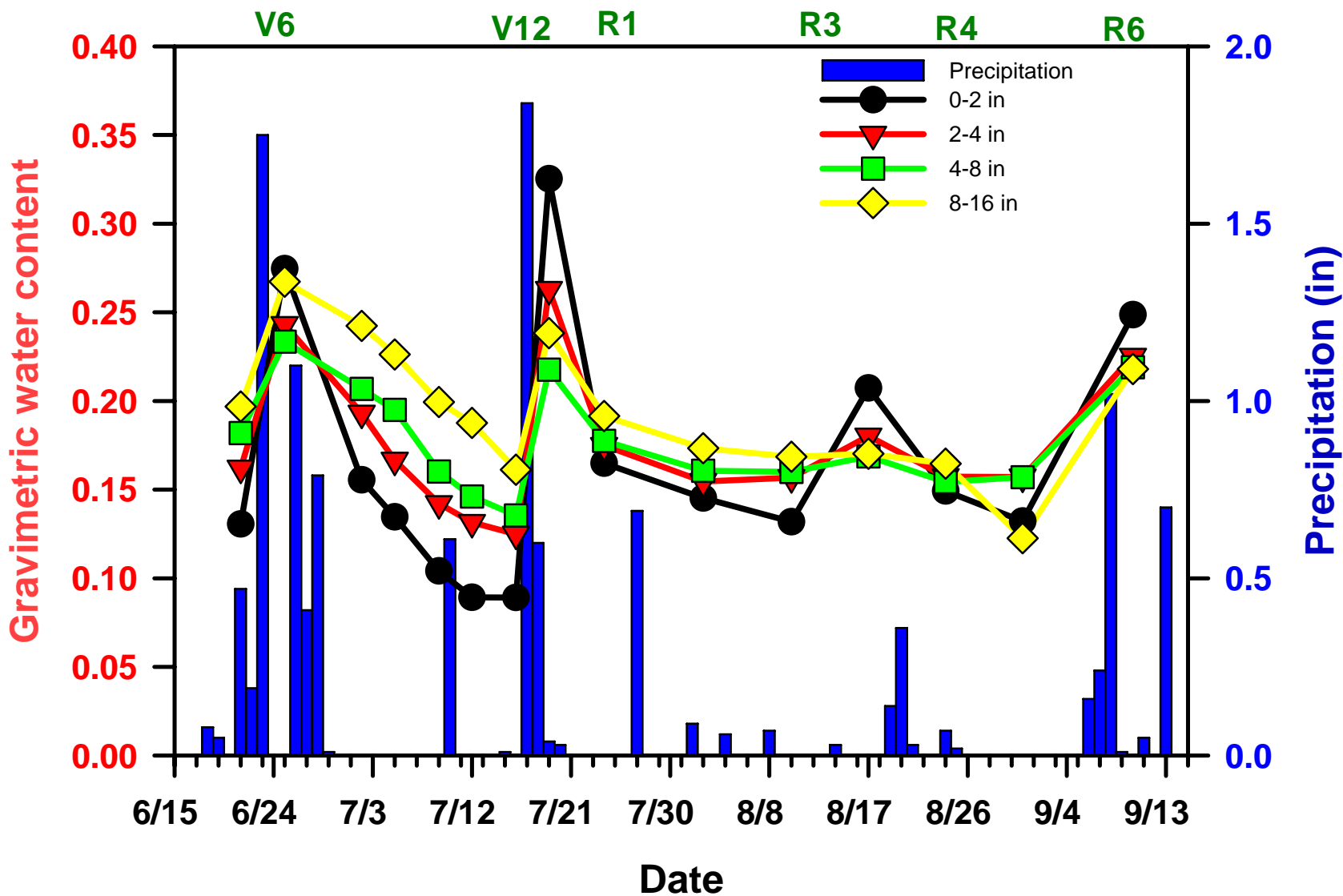




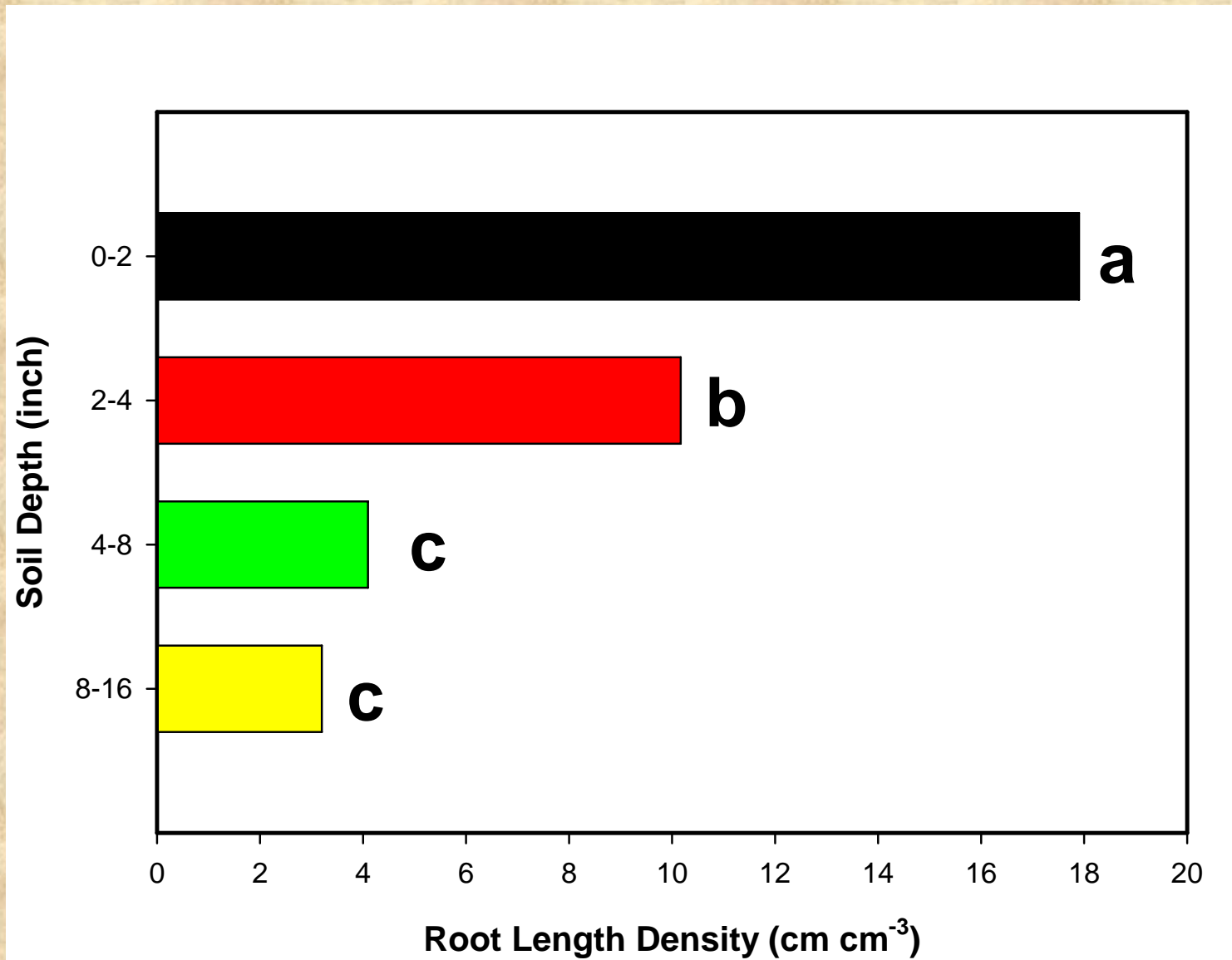
Conservation Tillage and Nutrient Stratification



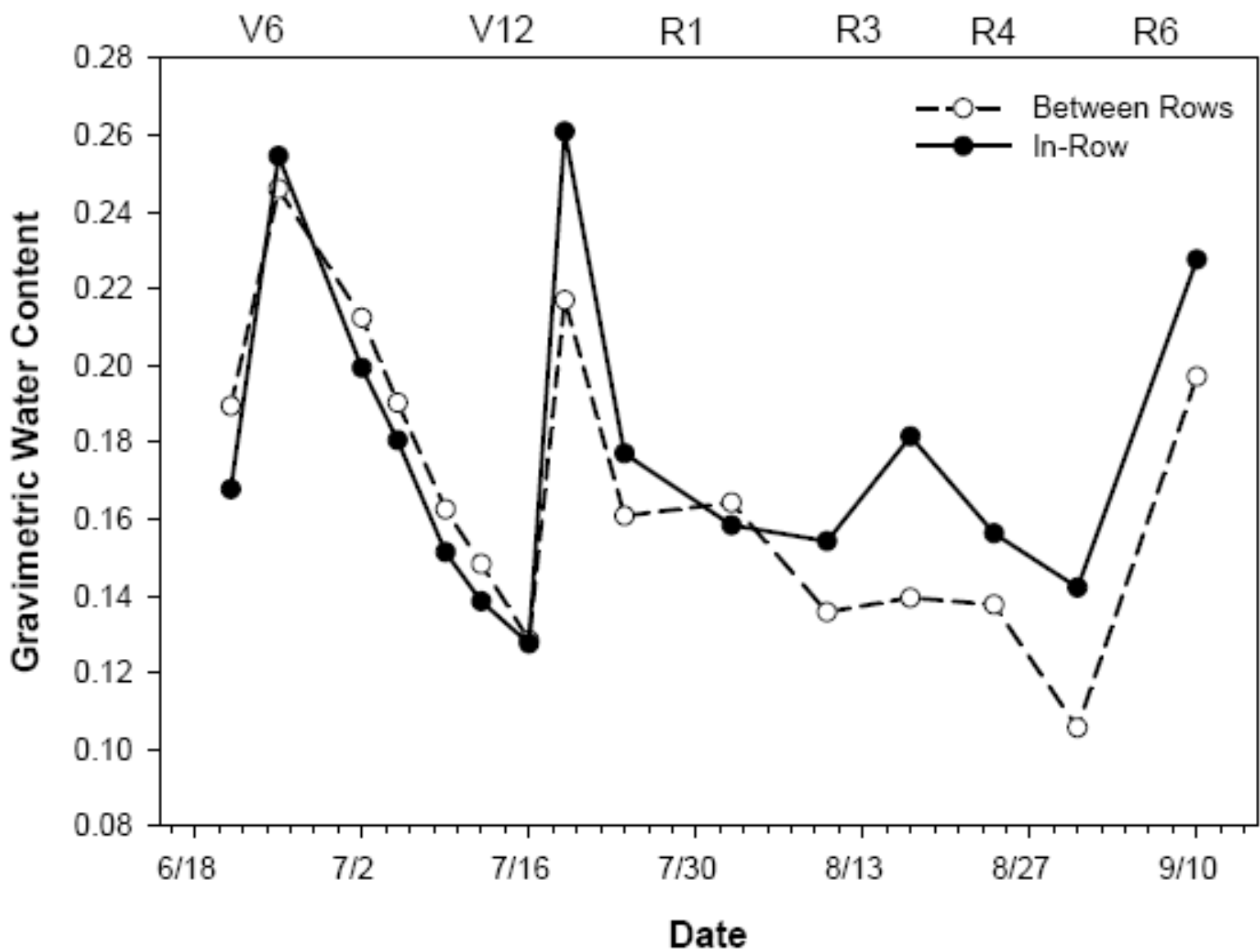
Growth Stage



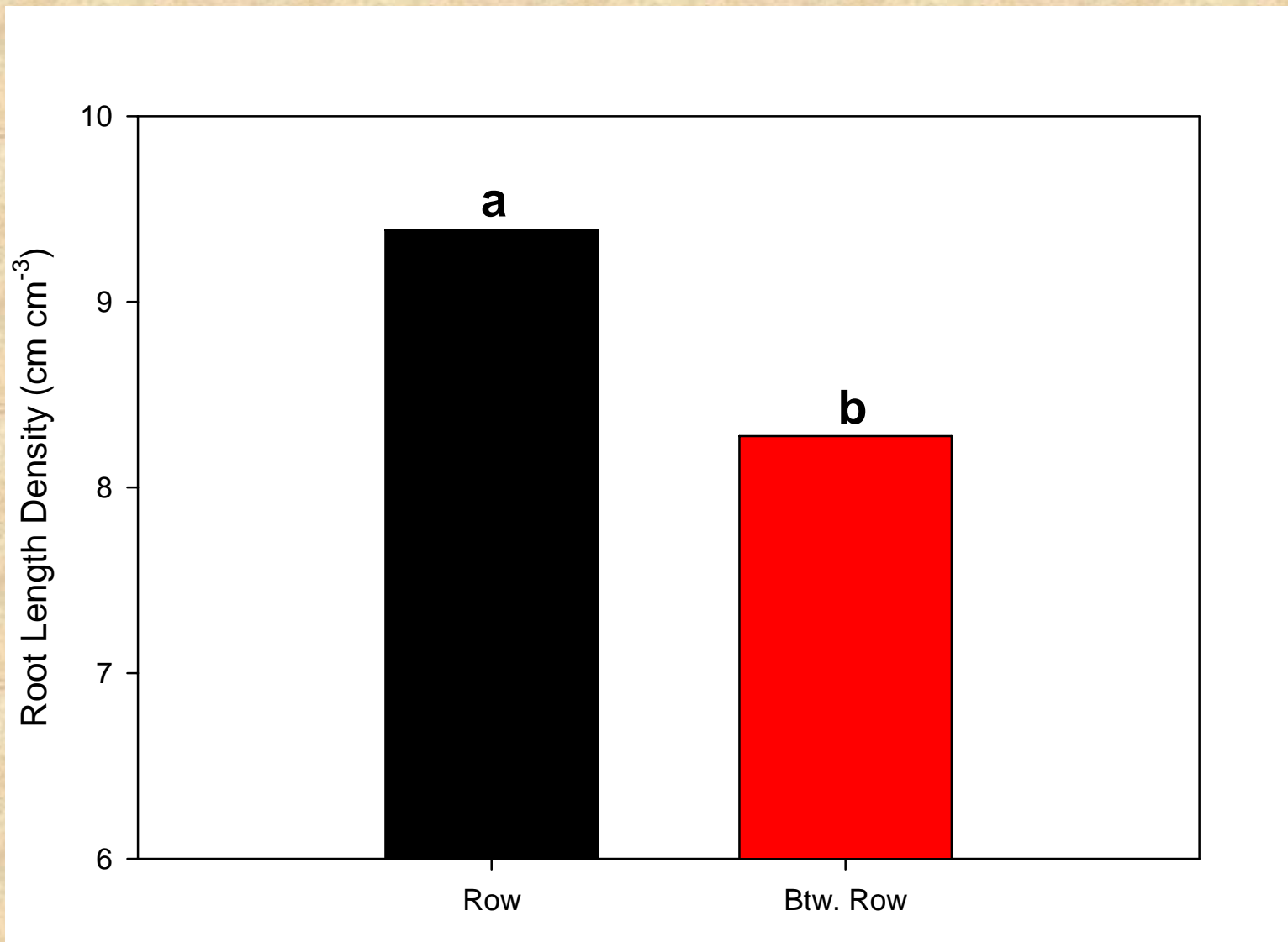
Root Proliferation and Soil Depth



Approximate Growth Stage



Root Distribution in Relation to the Row



Nutrients and Yield

