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Steffee B102



Diversity to Feed the World: Harnessing Bioinformatics to Improve the Rice Root System

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Rice serves as a staple food for 3 billion people, the majority of whom live in developing countries. To feed the rapidly growing population, farmers must produce more while dealing with unpredictable weather patterns, pests, and diseases. Roots obtain nearly all of the nutrients and water that plants need to grow, and root hairs in particular are highly beneficial for phosphorus acquisition. This presentation will explore how new genomic tools reveal genetic control of root traits across a population of rice that encompasses the global diversity of the species. This knowledge base will allow breeders to cross efficient root traits into highly-productive rice lines and help basic scientists to understand how natural variation impacts the regulation of a developmental system. Please join us to learn about the amazing genetic and phenotypic diversity of rice, the bioinformatic and statistical tools of genomic analysis, and the molecular and genetic tools used to unravel the genotype to phenotype puzzle in rice.

