Rice Genomics: ‘Editor’s Pick’ on the Springer Nature Grand Challenges

News
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Rice Genomics
Harnessing the genetic variation in wild and cultivated rice populations will be key to developing Green Super Rice varieties with high yield and low environmental costs.

Rice is a staple crop for half the world’s population, which is expected to grow by three billion over the next 30 years. It is also a key model for studying the genomics of agroecosystems. This dual role places rice at the centre of an enormous challenge facing agriculture: how to leverage genomics to produce enough food to feed an expanding global population. Scientists worldwide are investigating the genetic variation among domesticated rice species and their wild relatives with the aim of identifying loci that can be exploited to breed a new generation of sustainable crops known as Green Super Rice. In their Nature Reviews Genetics article, “The Rice Genome Revolution: from an Ancient Grain to Green Super Rice” authors Rod A. Wing, Michael D. Purugganan and Qifa Zhang review how comparative and functional genomic studies of domesticated and wild rice germplasm collections can be used to inform breeding programmes, with an emphasis on how they are contributing to the development of Green Super Rice varieties.

By Nature Reviews Genetics

Sources:
https://grandchallenges.springernature ... posts/34168-rice-genomics
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