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Domestication of Australian Grasses as Bioenergy Crops

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Due to geographic isolation and a short agricultural history, plant species from Australia have not been subject to domestication in the same way as species from other parts of the world. Over 1000 species or around 10% of the world’s grasses are found in Australia.

Variation in *Microlaena stipoides*

*Microlaena stipoides*, a distant relative of rice, is currently a key target for domestication. The rice genome sequences and genomics data for other *Oryza* are key genomics resources for this species. Natural variation and targeted mutagenesis are being explored as options for identifying desirable genotypes for domestication.

Endonucleolytic mutation analysis by internal labelling (EMAIL)* and large scale SNP analyses are being developed for application to this system. This model of accelerated domestication has the potential to be utilised across a broad range of useful wild species.