

PublisherInfo				
PublisherName		BioMed Central		
PublisherLocation		London		
PublisherImprintName		BioMed Central		

Microsatellites in plant genomes

ArticleInfo		
ArticleID	:	4386
ArticleDOI	:	10.1186/gb-spotlight-20020128-01
ArticleCitationID	\Box	spotlight-20020128-01
ArticleSequenceNumber	\Box	52
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	\Box	2
ArticleHistory	:	RegistrationDate : 2002–1–28 OnlineDate : 2002–1–28
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Jonathan B Weitzman

Email: jonathanweitzman@hotmail.com

Microsatellites are simple repetitive DNA sequences scattered throughout eukaryote genomes. In an Advanced Online Publication from Nature Genetics, Morgante *et al.* report their analysis of the density and distribution of microsatellites in several plant genomes (22 January 2002, DOI:10.1038/ng822). They compared the genomes of *Arabidopsis thaliana*, rice (*Oryza sativa*) soybean (*Glycine max*) maize (*Zea mays*) and wheat (*Triticum aestivum*), whose haploid genomes vary 50-fold in size. They found an enrichment of microsatellites in transcribed regions, particularly in untranslated regions. They also found that microsatellite frequency is not a function of overall genome size. Microsatellites were more frequent in single- or low-copy DNA fractions than in repetitive DNA. These results suggest that microsatellites do not originate from repetitive DNA, as was previously proposed.

References

- 1. Microsatellites in different eukaryotic genomes: survey and analysis.
- 2. Nature Genetics, [http://www.nature.com/ng/]