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Naidu releases CD on rice genome

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Researchers at the University of Hyderabad led by Prof AR Reddy have identified 15,000 sequences of the genome that controls the drought tolerance in the rice variety, Nagina 22.

The team has generated the expression sequence tags (ESTs) of over a third of these sequences. They have deposited 3,000 annotated ESTs to the public GenBank and have sent another 3100 ESTs recently for adding to this list last month.

A compact disc (CD) incorporating rice genome sequence was released by Andhra Pradesh chief minister N Chandrababu Naidu in May. With this, Hyderabad has joined the map of global biotech research centers. The researchers have used the functional genomics approach to discover the genes that control drought tolerance in Nagina 22. They have also constructed a cDNA library from the stressed leaves of this rice variety.

Reddy's team have annotated the 3000 ESTs, determined the putative functions and aligned them on to bacterial artificial chromosomes and to chromosomes. A number of these ESTs have been converted to PCR-based markers and mapped them using Double Haploid Lines. In addition, new polymorphic markers have been used to develop and update the existing maps. The team is now mapping the quantitative trait loci which have been genetically proved to contribute to drought tolerance.