



Researchers Reveal Genetic Code of Papaya

Researchers recently published the full DNA sequence of the "SunUp" papaya, discovering genes that cause the tree evolve and also help it smell and taste good.

Maqsudul Alam of the University of Hawaii and colleagues wrote the report, which was published in the journal Nature.

They said they think they have discovered the genetic cause for the evolution of tree-like plants, and also noted that papayas appear to have extra genes that code for aromas and storing starch, which causes their attraction for animals and people to spread its seeds.

Also, the papaya had less genes than the previously coded Arabdopsis, but its DNA sequence is longer.

"This also foreshadows what we might expect to discover in the genomes of other fragrant-fruited trees, as well as plants with striking fragrance of leaves (herbs), flowers or other organs," Maqsudul Alam of the University of Hawaii and researchers from 22 institutions wrote

"Papaya is an exceptionally promising system for the exploration of tropical-tree genomes and fruit-tree genomics," they added.

"Arguably, the sequencing of the genome of SunUp papaya makes it the best-characterized commercial transgenic crop."

Global trade of papaya reached about \$113 million between 1998-2003.

"Papaya is ranked first on nutritional scores among 38 common fruits, based on the percentage of the United States Recommended Daily Allowance for vitamin A, vitamin C, potassium, folate, niacin, thiamine, riboflavin, iron and calcium, plus fiber," they wrote.

"Consumption of its fruit is recommended for preventing vitamin A deficiency, a cause of childhood blindness in tropical and subtropical developing countries."

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