

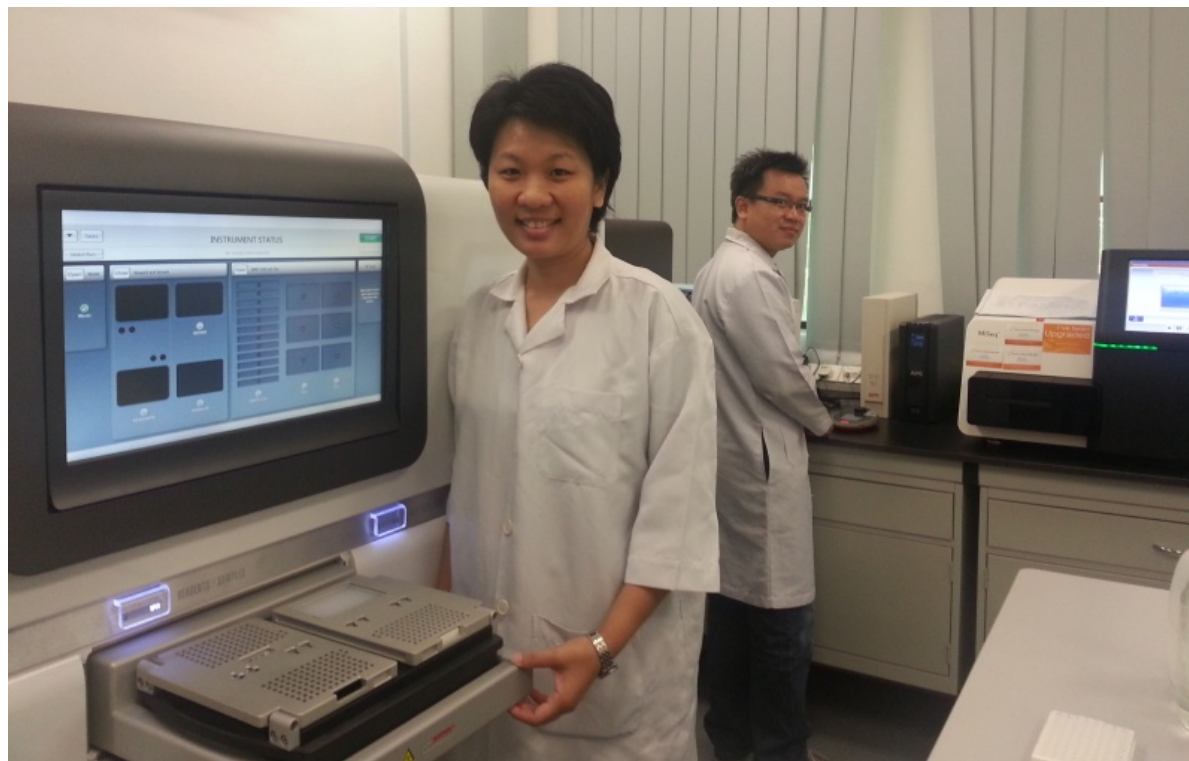
UMS Researchers Decoded Complete Pineapple Genome DNA Sequence

Last Updated: Thursday, 28 July 2016 15:05 | [Print](#) | Hits: 4300

Tweet

Share

G+ Share



TUESDAY, 26 JULY

— Researchers from Biotechnology Research Institute (BRI), Universiti Malaysia Sabah (UMS) have succeeded in cracking the genetic code of both the internationally renowned MD-2 Pineapple and the local Babagon variety.

“The genome is difficult to unravel

due to its high level of duplication and complexity,” said Associate Professor Dr. Vijay Kumar, the lead principal investigator of the project.

The team had spent three years piecing together bit by bit the almost 526 million nucleotides that made up the pineapple DNA.

“With the completion of the genome, it is now possible to further improve the agronomic traits of the crop.

“This puts UMS in the forefront of pineapple genetics and breeding,” said BRI Deputy Director, Dr. Zarina Amin.

Using the completed pineapple genome as a reference, UMS researchers found significant regulation of a protein which was involved in the biosynthesis of ethylene during fruit ripening in pineapples. This finding was significant as it was thought that the hormone did not play a crucial role in the process.

UMS had been working closely with a Malaysian-based bioinformatics company, which was providing training and bioinformatics support for this project. They also developed the novoLRTM package to assist in genome assembly using hybrid technology.

The MD-2 is currently the leading commercial pineapple variety globally due to its superiority in colour, sweetness, flavour and uniformity in size. — *FL*

Source: BRI