

## Open-source gene expression platform could yield more efficient food, biofuel crops

An open-source [RNA analysis platform](#) has been successfully used on plant cells for the first time — a breakthrough that could herald a new era of fundamental research and bolster efforts to engineer more efficient food and biofuel crop plants.

The technology, called Drop-seq, is a method for measuring the RNA present in individual cells, allowing scientists to see what genes are being expressed and how this relates to the specific functions of different cell types .... [T]he freely shared protocol had previously only been used in animal cells.

“This is really important in understanding plant biology,” said lead researcher Diane Dickel, a scientist at the Department of Energy’s Lawrence Berkeley National Lab .... “[L]earning about plants on a cellular level is a little bit harder because, unlike animals, plants have cell walls, which make it hard to open the cells up for genetic study.”

For many of the genes in plants, we have little to no understanding of what they actually do, Dickel explained. “But by knowing exactly what cell type or developmental stage a specific gene is expressed in, we can start getting a toehold into its function ....

**Read full, original article:** [Breakthrough technique for studying gene expression takes root in plants](#)