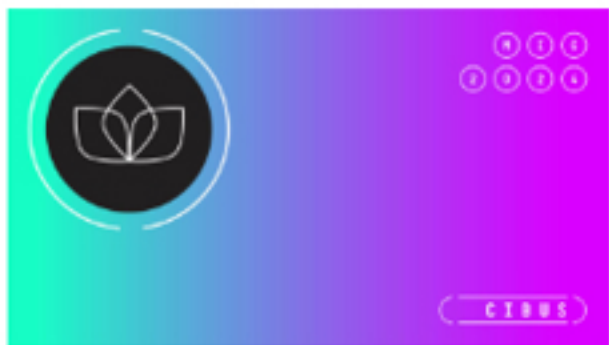


This platform, dubbed the Trait Machine, reduces the gene-editing process from 15 years to 5

Why Cibus is one of Fast Company's Most Innovative Companies in the agriculture category.



BY CLINT RAINEY 5 MINUTE READ

Agriculture is on the cusp of having its “analog to digital” moment thanks to precision gene-edited crops.

Cibus, a San Diego-based biotech startup, released a breakthrough platform in July 2023 dubbed the Trait Machine that allows it to hardwire traits desired by clients into crops. Ordinary genetic engineering takes 15 years on average to produce results, at a cost of \$115 million. Cibus says the Trait Machine can rapidly grow a plant from a single cell, making exacting edits to the biology along the way to yield a new and improved plant. In as little as three years, genetic traits can be developed through this platform that are reproducible and predictable, not to mention far cheaper and exponentially greater in possibility.

The machine is currently operational on rice, soybeans, and rapeseed, and it should go online with wheat and corn by 2025, expanding its reach to more than 500 million acres.

Cibus clients include Bayer, Nutrien, and Procter & Gamble.

ABOUT THE AUTHOR

Clint Raine is a Fast Company contributor based in New York who reports on business, often food brands. He has covered the [anti-PSO movement](#), rumors of a [Big Meat pricing against plant-based proteins](#), Chick-fil-A's quest to walk the narrow path to growth, as well as [Doritos's pivot from a progressive brand into one that's far more Chinese](#). Previously, he worked for *New York Magazine*, where he was part of teams that won National Magazine and James Beard awards. [More](#)