



Cibus announces major breakthrough in Wheat Regeneration from single cells

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Cibus, Inc., a leading agricultural technology company that develops and licenses plant traits to seed companies, announced that the Company has successfully regenerated plants from single cells in a wheat cultivar. This is a major breakthrough for Cibus as well as for the industry.

This is the third crop toward Cibus's goal to develop single cell models for the five major crops (canola, rice, wheat, soybean and corn) for the benefit of seed companies and farmers. Cibus already has High Throughput Breeding systems in two crops (canola and rice) and a five-trait pipeline across these two crops.

Given this breakthrough, Cibus intends to develop a family of traits to address the most significant challenges faced by farmers globally for wheat, focusing initially on disease resistance and nitrogen use efficiency. Nitrogen use efficiency is a need in many crops, but particularly for wheat with its enormous, cultivated acreage. A nitrogen use efficiency trait would have the potential to materially reduce the carbon footprint of the crop while offering better yield with similar fertilization. Fungal diseases cause a significant economic impact in wheat production with cereals representing the largest fungicide market. Development of disease resistance traits in wheat offer the promise of protecting yield potential while reducing fungicide use. We are encouraged that we will be able to address the major diseases in wheat. Finally, this platform enables the development of improved wheat quality traits, potentially reducing or eliminating allergens such as gluten and even further improvement of the Company's high fiber wheat.

Wheat is one of the world's most cultivated crops, and one of the major crops grown in North and South America. It is a staple in many diets and is responsible for a fifth of people's caloric intake, making it one of the world's most important crops.

Initially sequenced a mere five years ago, wheat genomes are some of the largest of all crops, having more than 16 billion letters (compared to rice with about one billion letters that was sequenced in 2002 and five times larger than the human genome). They are also very complex with durum wheat comprising the fusion of two genomes and bread wheat from the fusion of three.

“I am so impressed with our entire team, which was able to achieve this important milestone a year ahead of schedule, opening up the potential to accelerate trait development in one of the world’s most cultivated crops,” added Noel Sauer, Senior Vice President, Research and Development. “Further, by working with seed company customers, this achievement will enable prototyping productivity and quality traits to address this crop’s key challenges potentially providing farmers with new tools to manage their farm and improve their profitability.”

“This breakthrough represents a significant milestone for our business. Our long-term goal is to develop a scalable high-speed breeding production system that can develop and produce traits for any seed company servicing any of the five major crops (canola, rice, wheat, soybean, and corn),” said Rory Riggs, Co-Founder, Chairman, and CEO of Cibus.