Cibus Announces Major Breakthrough in Wheat Regeneration from Single Cells

January 9, 2024

- *Breakthrough believed to represent the world's first successful regeneration of a wheat plant from single cells – a major breakthrough for Cibus and for the seed industry.*
- *Provides another single cell regeneration system to make Cibus' High Throughput Breeding Process (the "Trait Machine™ System") operational for a key cereal crop integral to food security globally.*
- *Wheat breakthrough demonstrates the Company's continued success in developing scalable high throughput breeding platforms that can operate as extensions of seed company breeding programs.*
- *This is the third crop toward Cibus' 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.*

SAN DIEGO, Jan. 09, 2024 (GLOBE NEWSWIRE) -- Cibus, Inc. (NASDAQ: CBUS), a leading agricultural technology company that develops and licenses plant traits to seed companies, today 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.

"In this tour de force, I am proud of our team's persistence, the result of which is the opening of a scalable gene editing process in wheat, which is a major global crop and an important food staple," said Greg Gocal, Executive Vice President and Chief Scientific Officer of Cibus.

"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."

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. Wheat flour is consumed in breads, pasta, cookies, crackers, confections, among other things.

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.

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.

"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.

About the Cibus *RTDS*®-based High Throughput Breeding System
A key element of Cibus' technology breakthrough is its high Throughput Breeding Process (referred to as the Trait Machine™ System). The Trait Machine process is a crop specific application of Cibus' patented Rapid Trait Development System™ (***RTDS***). The proprietary technologies in ***RTDS*** integrate crop specific cell biology platforms with a series of gene editing technologies to enable a system of end-to-end crop specific precision breeding. It is the core technology platform for Cibus' Trait Machine: the first standardized end-to-end semi-automated crop specific gene editing system that directly edits a seed company's elite germplasm. Each Trait Machine process requires a crop specific cell biology platform that enables Cibus to edit a single cell from a customers' elite germplasm and grow that edited cell into a plant with the Cibus edits. Cibus has Trait Machine platforms developed for canola and rice and has already begun transferring back to customers their elite germplasm with Cibus edits.

The traits from Cibus' ***RTDS***-based High Throughput Breeding System are indistinguishable from traits developed using conventional breeding or from nature. Under the European Commission current proposals, it is expected that products from Cibus' ***RTDS*** gene editing platform such as its pod shatter resistance trait and *Sclerotinia* resistance traits for Winter Oilseed Rape would be considered 'Conventional-like'.

Cibus believes that ***RTDS*** and the Trait Machine process represent the technological breakthrough in plant breeding that is the ultimate promise of plant gene editing: High Throughput Gene Editing Systems operating as an extension of seed company breeding programs.

About Cibus
Cibus is a leader in gene edited productivity traits that address critical productivity and sustainability challenges for farmers such as diseases and pests which the United Nations estimates cost the global economy approximately $300 billion annually. Cibus is not a seed company. It is a technology company that uses gene editing to develop and license traits to seed companies in exchange for royalties on seed sales. Cibus' focus is productivity traits for the major global crops such as canola, rice, soybean, and wheat. Cibus is the technology leader in high throughput gene editing technology that enables Cibus to develop and commercialize plant traits at a fraction of the time and cost of conventional breeding. Using its Trait Machine process, Cibus has developed a pipeline of five productivity traits including important traits for pod shatter reduction, *Sclerotinia* resistance and weed management. Its initial traits for pod shatter reduction and weed management are developed in collaborations with leading seed companies. Its other pipeline traits including *Sclerotinia* resistance are in advanced greenhouse and field trial stages.

Forward-Looking Statements
This press release contains "forward-looking statements" within the meaning of applicable securities laws, including The Private Securities Litigation Reform Act of 1995. All statements, other than statements of present or historical fact included herein, including statements regarding Cibus' operational and financial performance, Cibus' strategy, future operations, prospects and plans, including the anticipated regulatory environment are forward-looking statements. Forward-looking statements may be identified by words such as "anticipate," "believe," "intend", "expect," "plan," "scheduled," "could," "would" and "will," or the negative of these and similar expressions.

These forward-looking statements are based on the current expectations and assumptions of Cibus' management about future events, which are based on currently available information. These forward-looking statements are subject to numerous risks and uncertainties, many of which are difficult to predict and beyond the control of Cibus. Cibus' actual results, level of activity, performance, or achievements could be materially different than those expressed, implied, or anticipated by forward-looking statements due to a variety of factors, including, but not limited to: changes in expected or existing competition; challenges to Cibus' intellectual property protection and unexpected costs associated with defending intellectual property rights; increased or unanticipated time and resources required for Cibus' platform or trait product development efforts; Cibus' reliance on third parties in connection with its development activities; challenges associated with Cibus' ability to effectively license its productivity traits and sustainable ingredient products; the risk that farmers do not recognize the value in germplasm containing Cibus' traits or that farmers and processors fail to work effectively with crops containing Cibus' traits; challenges that arise in respect of Cibus' production of high-quality plants and seeds cost effectively on a large scale; Cibus' need for additional funding to finance its activities and challenges in obtaining additional capital on acceptable terms, or at all; Cibus' dependence on distributions from Cibus Global, LLC to pay taxes and cover its corporate and overhead expenses; regulatory developments that disfavor or impose significant burdens on gene-editing processes or products; Cibus' ability to achieve commercial success; commodity prices and other market risks facing the agricultural sector; technological developments that could render Cibus' technologies obsolete; changes in macroeconomic and market conditions, including inflation, supply chain constraints, and rising interest rates; dislocations in the capital markets and challenges in accessing liquidity and the impact of such liquidity challenges on Cibus' ability to execute on its business plan; the Company's assessment of the period of time through which its financial resources will be adequate to support operations; and other important factors discussed in "Risk Factors of Cibus, Inc." filed as Exhibit 99.3 with Cibus' Current Report on Form 8-K, which was filed with the Securities and Exchange Commission (the "SEC") on June 1, 2023, as updated by the supplemental risk factors included in the Company's Current Reports on Form 8-K filed on October 18, 2023 and December 12, 2023, each as may be updated by any additional "Risk Factors" identified in Cibus' subsequent reports on Forms 10-Q and 8-K filed with the SEC. Should one or more of these risks or uncertainties occur, or should underlying assumptions prove incorrect, actual results and plans could differ materially from those expressed in any forward-looking statements. Cibus' assessment of the period of time through which its financial resources will be adequate to support its operations is a forward-looking statement and involves such risks and uncertainties. Accordingly, the Company could use its available capital resources sooner than it currently expects.

In addition, the forward-looking statements included in this press release represent Cibus' views as of the date hereof. Cibus specifically disclaims any obligation to update such forward-looking statements in the future, except as required under applicable law. These forward-looking statements should not be relied upon as representing Cibus' views as of any date subsequent to the date hereof.

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Source: Cibus US LLC