



## Cibus' White Mold (*Sclerotinia*) Resistance Trait Program Confirms Important Milestone for Next Generation Gene Edits in Canola

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*Cibus has successfully made the edits in Canola associated with the Company's 3<sup>rd</sup> mode of action for its White Mold (*Sclerotinia*) trait*

*These next generation edits are now confirmed in plants and will be evaluated later this year in a controlled environment*

SAN DIEGO, May 30, 2024 (GLOBE NEWSWIRE) -- **Cibus, Inc. (Nasdaq: CBUS)** ("**Cibus**" or the "**Company**"), a leading agricultural technology company that develops and licenses plant traits to seed companies for royalties, today announced it has successfully made the next generation edits in Canola associated with a new third mode of action for White Mold (*Sclerotinia*) resistance. These new edited plants will now undergo disease resistance testing in a controlled environment. If successful, Cibus expects this third mode of action trait, along with Cibus' other two modes of action traits, to provide durable resistance for White Mold in Canola. Today's announcement represents a major development in the Company's progress toward providing durable White Mold resistance.

Cibus is a leader in the development of complex gene edited traits in plants, including disease resistance traits which are complex and require multiple modes of action against diseases like White Mold (*Sclerotinia*). Because plant pathogens can evolve rapidly, it is important to enable different modes of action to provide durable resistance. It is expected that when developed, these disease resistance traits can be applied to multiple crops. For example, while White Mold is the most adverse disease in Canola for reducing yields, it is also the second most impactful disease in Soybean and can also affect a wide range of produce including potatoes and legumes, as well as fruits, vegetables, grains, and nuts.

The intensity of plant pathogens such as White Mold (*Sclerotinia*) can also be enhanced by changing weather patterns with increased importance in the face of climate change. We expect that these new disease traits for major crops like canola will enhance productivity through reducing crop loss due to disease, while also reducing the use of fungicides, thereby lowering input costs

Greg Gocal, PhD, Co-Founder, Executive Vice President and Chief Scientific Officer at Cibus, commented, "We are excited by the speed with which we have been able to edit plants successfully once we have identified the genes associated with a specific trait, and then to develop new traits. It is an important signal and validation of how Cibus' technologies can accelerate the time to develop complex traits. We believe our third mode of action will be a key component of our White Mold disease resistance strategy. In addition, once we have completed our anticipated Soybean platform, we expect to begin editing our White Mold trait into Soybean. We continue to believe that our approach to complex trait development is additive to and faster than conventional breeding."

Peter Beetham, Co-Founder, President and COO of Cibus, added, "We are very encouraged by this third mode of action, and it represents another great step for our progress in developing plant disease traits. We have successfully identified multiple modes of action to generate resistance to White Mold in Canola specifically, and fungal disease in general. These results are consistent with our work in disease traits showing that complex traits comprising multiple modes of action are possible leading to expected durable resistance to fungal disease."

### **About *Sclerotinia***

*Sclerotinia sclerotiorum* is a fungal pathogen, which causes significant disease (stem rot) in oilseed crops. It affects 14-30% of canola/oil seed rape (OSR) fields annually, and potentially up to 90% as estimated by the Canola Council of Canada in 2016. White mold can reduce canola yields by 7-15%, with yield losses per infected plant being as great as 50%. The Canola Council of Canada calls *Sclerotinia* stem rot the most economically significant canola disease in Canada. It is also a significant disease in soybean with a prevalence of sclerotia recovered ranged between 33.3% (2015) and 78.3% (2020) in soybean production regions and 9.1% (2013). It is most prevalent in warm moist environments.

### **About the Cibus Trait Machine™ process and Rapid Trait Development System™**

A key element of Cibus' technology breakthrough is its high-throughput breeding process (referred to as the "Trait Machine™" process). 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 process: 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 customer's elite germplasm and grow that edited cell into a plant with the Cibus edits. Cibus has a Trait Machine process developed for canola and rice and has already begun transferring their elite germplasm with Cibus edits back to customers.

The traits from Cibus' RTDS-based high-throughput breeding system are indistinguishable from traits developed using conventional breeding or from nature. RTDS does not integrate any foreign DNA or transgenes. Under the European Commission's current proposals, it is expected that products from Cibus' RTDS gene editing platform such as its Pod Shatter Reduction trait and *Sclerotinia* resistance traits for Canola and 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." In 2024, the Trait Machine process was cited by Fast Company Magazine as one of the most innovative products in 2024.

Because the Trait Machine process is intended to be integrated into seed companies' breeding operations, the customer relationship between Cibus and seed companies with which it engages is a collaborative relationship in which seed companies transfer elite germplasm to have a specific validated trait placed in the seed company's elite germplasm and expectation of delivery back to the seed company of their elite germplasm with the Cibus edit toward commercial development. Accordingly, Cibus refers to seed company "customers" in its disclosure once such a customer relationship has been initiated.

### **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 farmers for the major global row crops with large acreage such as canola, corn, rice, soybean, and wheat. Cibus is a 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. Cibus has developed a pipeline of five productivity traits including important traits for Pod Shatter Reduction, Sclerotinia (disease) resistance, and weed management. Its initial traits for Pod Shatter Reduction and weed management are in commercial development with leading seed companies such as Nuseed Americas Inc. in Canola as well as Nutrien Ltd. and Interoc S.A. in Rice in the United States and Latin America. Its other pipeline traits including Sclerotinia resistance are in advanced greenhouse and field trials stages.

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