

# Turning Data Into Information

AGROBASE Cloud<sup>®</sup> provides Cibus breeders global access to centralized system



James Radtke, Ph.D., Cibus Senior Vice President, Product Development, evaluating canola in the company's greenhouse in San Diego.

## Cibus

San Diego, CA • St. Paul, MN  
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### Key Personnel

- Peter Beetham, Ph.D., President, CEO
- Greg Gocal, Ph.D., Chief Scientific Officer
- James Radtke, Ph.D., Sr. Vice President Product Development

### Company Profile

- Advanced non-GM plant breeding.
- Proprietary Rapid Trait Development System (RTDS™).
- Developing foundational traits for canola, flax, rice, and potato.
- SU Canola™, a non-transgenic canola tolerant to sulfonylurea herbicides, approved for release in Canada in 2017.
- Traits include drought tolerance, herbicide resistances, and improved yield.
- Established 2001.

Cibus is a trait development company with an advanced, proprietary non-transgenic breeding system called RTDS (Rapid Trait Development System). With RTDS, Cibus is able to produce precise, predictable results with beneficial traits indistinguishable from those developed through traditional plant breeding.

“As we were developing the trait with tolerance to sulfonylurea herbicides, we needed to be also developing plants that could bring this technology to market,” says James Radtke, Ph.D., senior vice president, product development. “Although we started as a trait developer, by necessity we developed a small breeding program at our St. Paul and San Diego locations.”

Initially, the Cibus plant breeder was able to manage field data with a Microsoft Excel spreadsheet on a single office computer.

It was not long, however, until the amount of collected data, the number of breeding locations, and the number of breeders accessing the data set became more than one computer could handle.

“We needed a centralized system to analyze our data and provide meaningful information” Radtke says. “We found that we were occasionally omitting bits of data. When your data is incomplete, you can lose an entire year’s worth of work.”

### One System, Multiple Uses

As Radtke and his team began looking for a new, centralized system, the Cibus program had expanded to 20 locations of testing, with 25 or more trials at key locations including evaluation of 700 or more hybrids each year.

“We were looking for a system that could provide global access to one central computer, manage our entire data flow, and also provide the statistical strength to analyze data in the most meaningful ways to ensure we did not miss anything,” he says. “Having a system that would operate in the Cloud seemed like an ideal solution.”

“We evaluated several systems. After several meetings including an online presentation, by **Agronomix Software** President Dieter Muiltze, Winnipeg, MB, we selected **AGROBASE generation II<sup>®</sup>** and **AGROBASE Cloud.**” ([www.agronomix.com/AGROBASE/Cloud](http://www.agronomix.com/AGROBASE/Cloud)).

“I won’t say it is the easiest system to learn, but after we sent Jameson Hall, our AGROBASE guru, and Anna Reibson, our assistant breeder for training in Winnipeg, we are able to provide much more than hybrid means to support our products. AGROBASE can extract more information from our data than any system we investigated.

“With the system functioning in the Cloud, we have global access to some very powerful analytical tools. The system is working well,” Radtke concludes.

*Joe Funk, editor*