

Davis technology company raises funding round for ag, vaccine products



Botanical Solution Inc. CEO Gaston Salinas
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Davis-based Botanical Solution Inc. has raised \$3.3 million to rapidly expand its technology into pharmaceutical compound development.

The company was founded in Santiago, Chile, in 2013 to develop beneficial compounds from plants for use in agriculture. Botanical Solution is now adding pharmaceutical efforts to its business plan, CEO [Gaston Salinas](#) told the Business Journal.

“We designed this as a bridge round of financing,” Salinas said, adding that Botanical Solution will be seeking an additional \$6 million this spring to build out a lab operation in the Davis area. The company’s ag research labs and its 20 employees are in Santiago.

Investors in the financing round included the International Development Bank and Chilean funds Inmobiliaria e Inversiones el Coigue, El Viento, Sociedad de Inversiones Celta, Ganeshalab Business Accelerator, Sembrador Capital and others.

Most of the money came from Chile, but Salinas anticipates getting U.S. investors in the round this spring.

In addition to finding novel uses for isolated plant compounds, the company has also developed proprietary techniques to propagate young plant growth in the lab so it doesn't actually have to harvest sometimes rare and protected species in the wild.

By creating extracts in the lab, the company is using biotech to get products without exploitation of natural resources, to get past shortages and to get consistent quality of compounds, Salinas said.

"We are building a pipeline of plant materials, many (of which) are in short supply," he said.

Botanical Solution's first product is a biofungicide from a Chilean soap bark tree extract that combats grey mold (*botrytis cinerea*), which is a problem for grapes, hops, almonds, hemp, strawberries, pears and other high-value crops.

Coincidentally, the same compounds derived from the soap bark tree are currently in demand as human immune system activators for Covid-19 vaccines.

"Those compounds are currently available from natural resources for 20 million doses per year, but now we need to vaccinate billions of people," Salinas said.

Last year, Salinas officially moved Botanical Solution's headquarters office to Davis to benefit from the research and development talent there and to expand into the U.S. market.

"We are here by design, not by accident," he said, adding that Davis is home to so many companies in the biological sciences that have successfully taken products from the lab to the marketplace.

[Marcus Meadows-Smith](#), the CEO of Davis-based biologics company BioConsortia Inc., is on the board of directors of Botanical Solution, and [Pam Marrone](#), founder of Marrone Bio Innovations Inc. (Nasdaq: MBII) in Davis, has been a mentor, Salinas said.

Botanical Solution is working on many other plant extracts, including extracts from rare antarctic plants, which the company has been successful at propagating in the laboratory, he said.

Since 2019, Botanical Solution has been selling its crop protection biofungicide BotriStop in Chile with partner Swiss-based crop protection company Syngenta. Botanical Solution is currently seeking registration for its crop protection products in the U.S. and California.

Largely because of the talent at the University of California Davis, the Sacramento region is [a worldwide hub of research and development of biologics](#) technology and seed technology for agriculture, with labs for companies including Bayer Crop Science, Arcadia Biosciences Inc. (Nasdaq: RKDA), Syngenta, Limagrain, Marrone Bio Innovations, Novozymes and BioConsortia.