

CO2 GRO to Boost Global Cannabis Production Capacity



Lara Smith | May 29, 2018

A series of trials are underway aimed at improving the production rate of practically all crops. CO2 GRO Inc. (TSXV: GROW) is on a mission to accelerate the grow cycle for all value plants by replacing atmospheric carbon dioxide supplementation with a spray composed of CO2 dissolved in water. Should the product prove effective, both output rates and production capacity will receive a serious boost, making it a clear choice for the world's burgeoning cannabis industry.

To be specific, the current Canadian policy restricts the number of growers, leading to a market populated by only 100 larger companies with industrial capacity. Considering that Canada intends to export its marijuana products, this is a supply-restricted market with healthy demand, and positive output and capacity changes will influence the supply curve dramatically, ultimately bringing down prices for end-users and improving consumption rates.

This seems like a surefire logical step for any agricultural production. According to the company website, CO2 GRO will study the effects of the spray on food, non-food and cannabis crops, but expect clear increases to the rate and volume of plant matter growth

as a consequence of concentrating CO₂ around the plant itself rather than pumping it into the environment as a diffuse gas.

There is another benefit to boosting the growth cycle: lower production costs. Increasing the crop yield and grow time both increase factory efficiency, lessening the number of KWh per plant consumed by expensive lighting. Additionally, replacing gas containment and pumping systems with a liquid spray folds CO₂ supplementation into irrigation, lowering equipment and maintenance costs.

In short, while the agricultural industry has traditionally been wary of adopting new technologies, a clear benefit will usually win out. For the most part, people make decisions based on what's best for either them or everyone (although many would claim these to be the same thing), and the ability to provide a better product at lower cost is a crystal-clear competitive advantage and undeniably good for the wider market, not to mention the workers who no longer have to breathe large quantities of carbon dioxide throughout the work day.

The technology works by transferring CO₂ gas into water and foliar spraying for use across the entire plant leaf surface area. The dissolved concentrated CO₂ then penetrates the semi-permeable membrane naturally, just like concentrated nicotine dissolves through human skin into the bloodstream from a nicotine patch.

The method has been used for over 60 years by millions of indoor and outdoor plant growers, but outdoor growers could face major opposition to gassing plants in the open air. While the outdoor gassing method has been used for the full 60 years, over half of the CO₂ is usually lost to the air contributing to the greenhouse effect. Factoring in that this is a green technology, and we have yet another clear advantage.

The global retail food market is at \$8 trillion per year, non-food products are an estimated \$1 trillion per year and the retail cannabis market may hit \$50 billion per year by 2022. GROW's CO₂ technologies are commercially proven, highly scalable and easily inserted into existing irrigation systems. Based on preliminary results, GROW's model should be a compelling choice for both growers and investors since this young industry is guaranteed to be thirsty for progress. Company stock is trading on the TSX at only CAD\$0.18 per share with a market cap of CAD\$7.41 million and only 41.17 million shares issued.