

Case Study: CO2 Foliar Spray Effects on Cannabis Growth (Hybrid Strain)

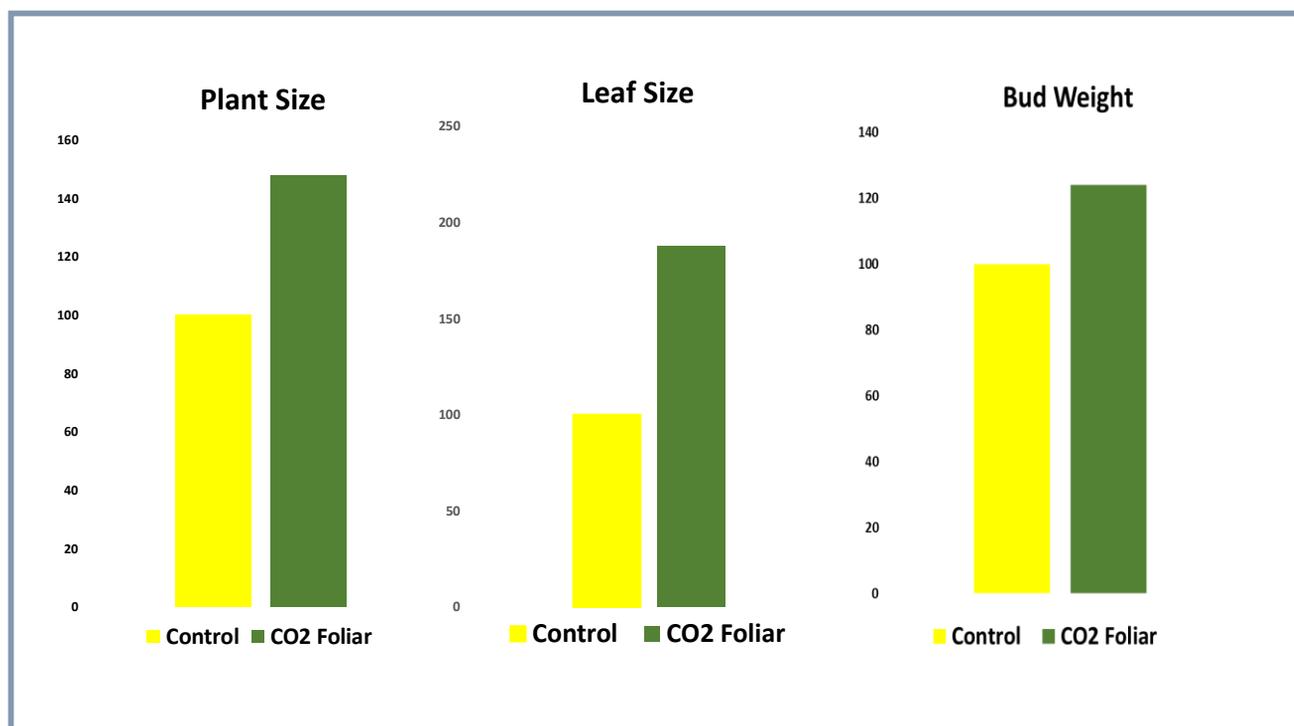
Indoor use of CO2 gassing has enhanced plant yields for over 60 years. However, over 50% of the CO2 gas is typically lost through ventilation. Current greenhouse CO2 gassing levels of up to 1500 PPM are also not ideal for worker health and safety. GRO's safer dissolved CO2 foliar spray can be used by indoor and outdoor plant growers with minimal CO2 gas lost and greater plant bioavailability resulting in higher yields as shown in this case study.

Benefits:

- 25% increase in bud weight
- 51% increase in plant size
- 22% decrease in vegetative time
- 16% increase in CBD levels
- 19% increase in THC levels
- No additional equipment needed to achieve increases of this magnitude

Hybrid Strain Results:

Trials were performed on a hybrid strain referred to as Great White Shark. Due to the vegetative growth phase lasting 60% of the full cannabis growth cycle, there was a net 20% increase in plant growth rate. This points to the potential to grow an additional cannabis crop every year. Currently, indoor growers are only able to produce 5.5 crops per year. The hybrid's THC and CBD levels were also analyzed and showed an increase of 19% in THC and an increase of 16% in CBD.





ACMPR
5 week
Cannabis Trial

Hybrid Strain Trail

The hybrid strain growth trials were performed in the Toronto area. 120 plants were sprayed with water semi-saturated with dissolved CO₂ and applied with a hand spray device. After comparing to trials done on the Indica and Sativa cannabis strains, the hybrid had the highest average increase in both bud weight and plant size.

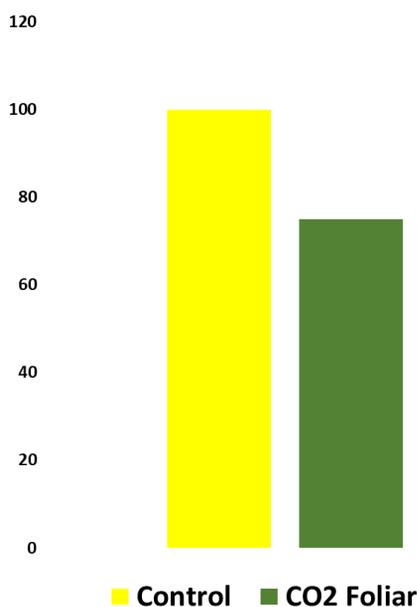
Additionally, other aspects such as leaf size, THC levels, and CBD levels all saw a large increase just as all other strands treated with CO₂ foliar spray.

About CO2 GRO

GRO's mission is to accelerate all indoor and outdoor value plant growth naturally, safely, and economically using its patented advanced CO₂ foliar technologies. GRO's global target plant markets are retail food at \$8 trillion per year (Plunkett Mar 2017), retail non-food plants at an estimated \$1 trillion per year and legal retail cannabis that may reach \$50 billion per year by 2022 (Bay St Analyst estimates).

The CO₂ technologies work by transferring CO₂ gas into water and foliar spraying across the entire plant leaf surface area, which is a semi permeable membrane. The dissolved concentrated CO₂ then penetrates a leaf's surface area naturally like nicotine naturally dissolves through human skin from a nicotine patch.

Vegetation Time



Bud THC Content

