

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

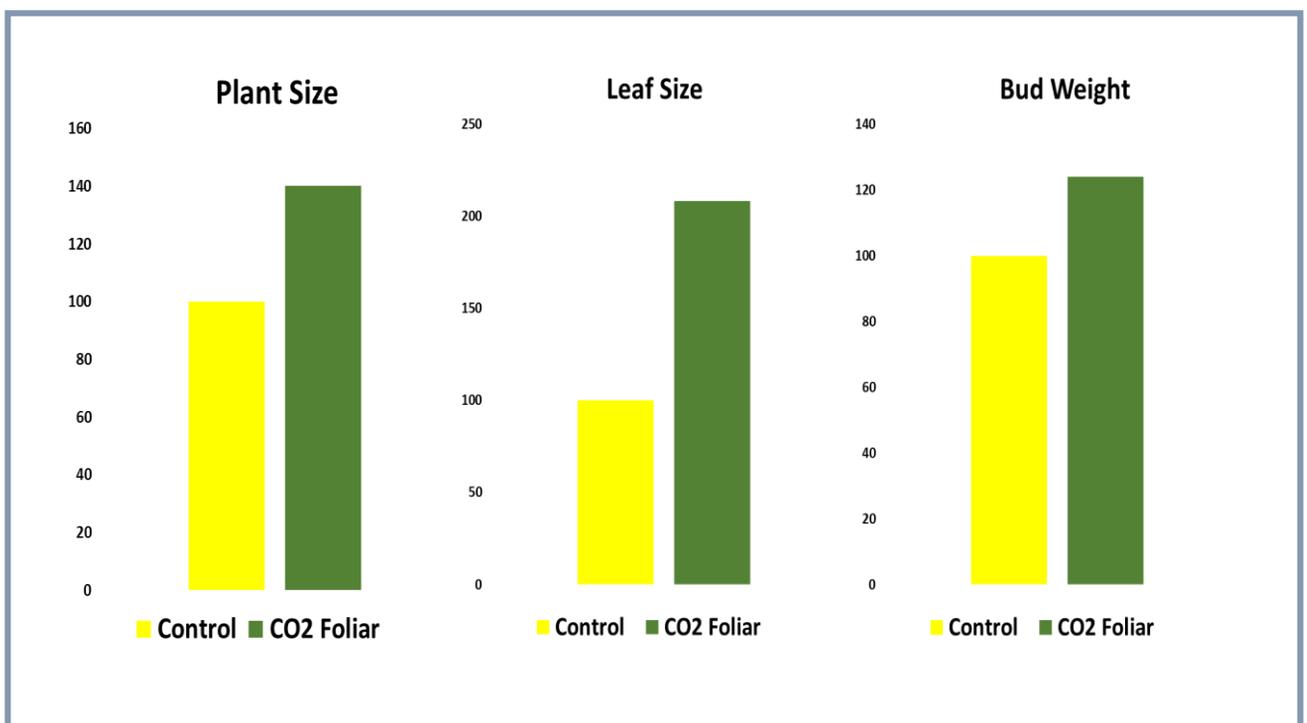
Indoor use of CO2 gassing has enhanced plant yields for over 60 years. However, over 50% of the CO2 gas is typically lost through ventilation. Current greenhouse CO2 gassing levels of up to 1500 PPM are also not ideal for worker health and safety. GRO's safer dissolved CO2 foliar spray can be used by 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:

- 22% increase in bud weight
- 33% increase in growth speed
- 34% increase in CBD levels
- 20% increase in THC levels
- Overall 45% increase in bud value
- No additional equipment needed to achieve increases of this magnitude

Sativa Strain Results:

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 one more additional indoor cannabis crop per year. Currently indoor growers can only produce 5.5 crops per year. Cannabis buds from the Sativa cannabis strain were analyzed and showed an increase of 34% in CBD levels and an increase of 20% in THC levels.





ACMPR
5 week
Cannabis Trial

Sativa Trail

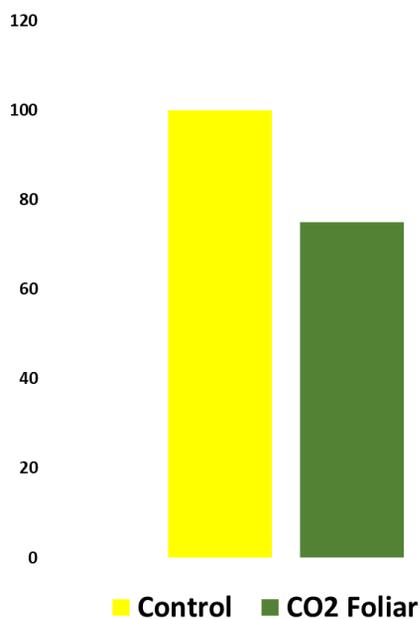
Sativa Cannabis strain growth trials were performed in the Toronto area. 120 plants were sprayed with water semi-saturated with dissolved CO2 and applied with a hand spray device. Leaf size showed the most dramatic size increase, nearly doubling the control group. These results are in agreement with our previous research where plants chlorophyll A levels increased by a multitude of 4.

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

