Contents

"Real-World"

Studies

Plant Responses to

Higher CO₂ Levels

Author's

Foreword

24 Things More CO₂

Introduction

Helps Plants

Better

in Tiny Miracles

The Physiology of Doses

CO₂ Enrichment

Sources of Carbon

Dioxide Down in the Weeds

Enhancing Food

Supplies

Conclusion

Sources

Non-Food Crops



Conclusion

Carbon dioxide is truly the gas of life, a miracle molecule that makes all life on Planet Earth possible. As numerous studies have demonstrated, plants thrive best when CO2 levels are high - in the atmosphere or in greenhouses and hothouses. More carbon dioxide means enhanced rates of photosynthesis and biomass production for virtually every kind of plant, and every part of every plant.

Carbon dioxide is a powerful weapon in the global war on poverty. malnutrition, hunger and species extinction. One of the worst things that could happen to our planet and the people, animals and plants inhabiting it would be for carbon dioxide levels to plunge back to levels last seen before the Industrial Revolution: from 400 ppm today to 280 or 290 ppm in 1870.

Decreasing CO2 levels would be especially problematical if Earth cools, in response to the sun entering another "quiet phase," as happened during the Little Ice Age, particularly the Maunder Minimum, a prolonged period of minimal sunspots, from 1645 to 1715, when civilizations all over the world reported bitterly cold winters, short summers and growing seasons, crop failures, malnutrition and starvation.

If Earth cools again, growing seasons would shorten and arable cropland would decrease in the northern temperate zones. We would then need every possible molecule of carbon dioxide - just to keep agricultural production high enough to stave off mass starvation ... and save wildlife habitats from being plowed under to replace cropland lost in higher latitude areas like Canada, northern Europe and Russia.

However, even under current conditions, crops and other plants, animals and people will benefit from more carbon dioxide. The "gas of life" is a miracle plant fertilizer that helps land, lake, river and ocean plants grow and prosper, greening the planet, nourishing wildlife habitats, and feeding Earth's growing populations of people who crave larger bounties of more nutritious food.

The gas of life also reduces the harmful effects of ozone and other pollutants, and of prolonged heat, drought and flooding that would shrivel or even kill plants under less optimal CO2 conditions.

Carbon dioxide performs as many miracles for our planet as antibiotics and immunizations have for mankind. That is an amazing fete for a colorless, odorless, tasteless gas that represents just 0.04 percent of our atmosphere: the equivalent of just 40 cents out of \$1,000 or 1.4 inches on a football field!