

Tired, Disproven Argument on “Benefits” of CO₂ Resurfaces in WSJ

Carbon dioxide concentrations are approaching 400 parts per million, [higher than any](#) found in at least 800,000 years. To commemorate the occasion, a *Wall Street Journal* [op-ed](#) has revived an [old, repeatedly debunked](#) argument about the benefits of CO₂. The authors take the fact that plants need CO₂ to grow, and argue that more is better, ignoring both common sense and overwhelming scientific evidence. Common sense says that it’s possible to have too much of a necessary thing; for example, vitamin D is necessary for our health, but too much can cause permanent heart and kidney damage. And science tells us that the negative impacts of global warming far outweigh any isolated benefits.

The facts:

In reality, the negative effects of excess carbon dioxide are devastating, with more than enough impacts to wipe out any growth benefit crops might experience. The warming effects of CO₂ have been verified by independent [scientific studies](#), [professional organizations](#), and [government investigations](#) all over the world. This warming will present [serious problems](#) for agriculture.

Here are a few reasons why we won’t see an agricultural benefit from increased CO₂:

- Extreme weather can [devastate](#) crop yields, and is [linked](#) to human-caused global warming despite Schmitt and Happer’s unsourced assertions to the contrary. Both droughts and storms take their toll. The recent U.S. drought caused maize yields to drop by [45 million tons](#), and is consistent with [projections](#) that extreme droughts will be more frequent in a warmer world.
- Carbon dioxide and warmth can spur the activity of weeds and pests as well as agricultural crops. Studies have shown that beetles eat more crops in a high-carbon environment (both through [modern experiments](#) and studying [prehistoric warming events](#)). Weed-killing herbicides have also been found to [lose effectiveness](#) at high CO₂ levels.
- Plants need water, sunlight, nitrogen, and other nutrients to grow, in addition to carbon dioxide. Many studies have found nitrogen to be a [limiting factor](#) in plant growth, negating the temporary growth boost caused by increased CO₂. Other studies show that [high nighttime temperatures](#) cause plants to use up energy reserves faster, reducing corn yields. Water availability concerns are also projected to increase in a warmer future.

Plants exhibit a growth boost under increased CO₂ conditions only when all other factors have been controlled for, and the real world is nothing like these greenhouse conditions. We are effectively conducting a “real-world” experiment on our whole planet today, and have found [food prices rising](#) in response to higher temperatures and more extreme events. Adverse effects of global warming are so numerous that this kind of simplistic and repeatedly disproven argument has no place in our national debate.

The claim:

The authors argue that plants use carbon dioxide to grow, and more carbon dioxide will make them grow faster. This will be good for agricultural yields. Also, in the distant past, there was even more carbon dioxide in the atmosphere, and “life flourished on land” during those times. They rely on this generalized anecdote to claim that there are no negative side effects of excess carbon dioxide.