

# Organic Farms Yield 20% Fewer Crops than Conventional Farms



By Alex Berezow — August 25, 2016



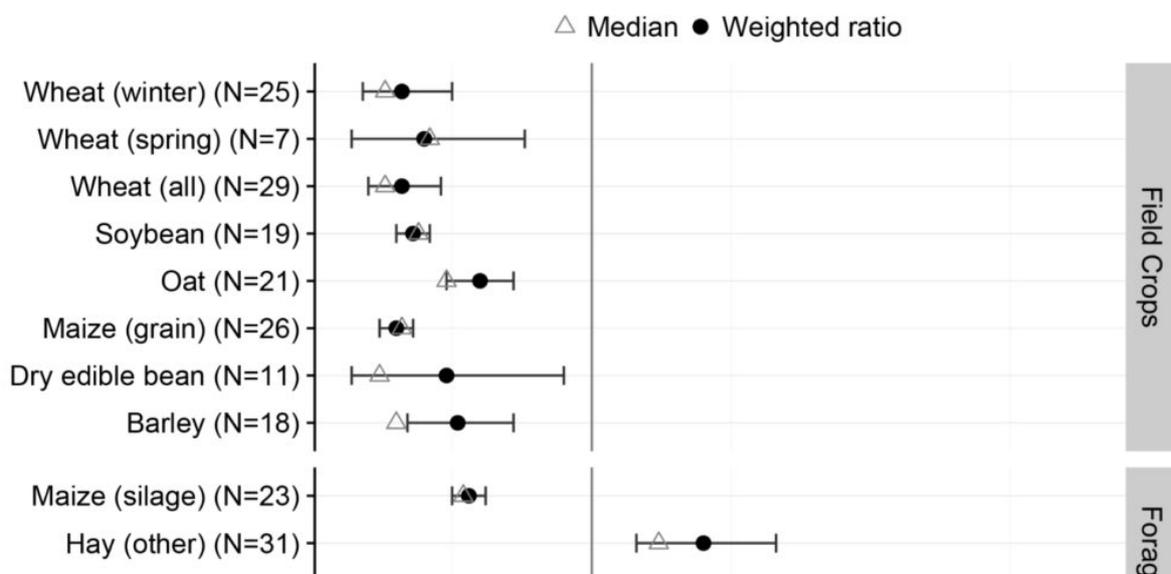
[1] Credit: Shutterstock

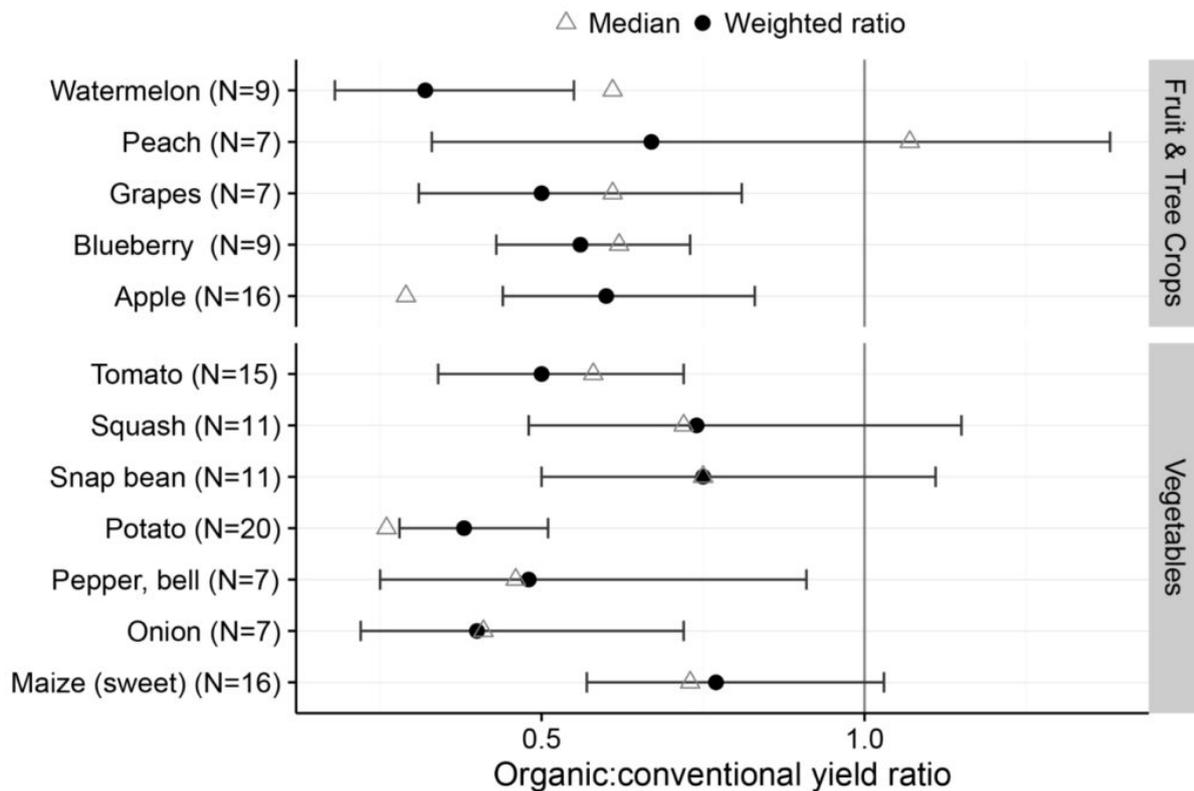
People buy organic food for many different reasons, most of which are factually incorrect. Quite possibly the [biggest myth about organic food](#) [2] is that it is grown without pesticides. That is simply untrue. Others have been led to believe that organic food is [healthier](#) [3] and tastier\* than conventionally grown food. Those myths have also been busted.

Another justification for organic food is that it is more sustainable and environmentally friendly. Those myths, too, [already have been exposed](#) [4], but a new paper in *PLoS ONE* puts another nail into the coffin.

The authors obtained data from crop yield surveys conducted by the USDA in 2014. To control for the influence of geography, they paired the data so that crop yields could only be compared for farmers who lived in the same state. (For example, organic grape growers in Washington State could only be compared with conventional grape growers who also farmed in Washington.) What did they find?

As suspected, organic farms are not as productive as conventional ones. In fact, the overall average is that organic farming produces 20% fewer crops. (See figures below.)





[5] Credit: Kniss AR et al., PLoS ONE, 2016. doi: 10.1371/journal.pone.0161673

As shown above, with the exception of hay and possibly peaches, organic crops were produced at substantially lower yields than their conventional counterparts. Organic farms produced roughly 1/3 less wheat and soybean, both important staple crops. Potato production on organic farms was a whopping 62% lower.

This violates the very notion of sustainability. An inefficient food production system that cannot feed everybody is, by definition, not sustainable. The authors also underscore this point by noting that "if all US wheat production were grown organically, an additional 12.4 million hectares (30.6 million acres) would be needed to match 2014 production levels." That's hardly environmentally friendly. Extrapolate those numbers out to the rest of the globe, and one can easily see how organic farming is unsuitable.

Dr. Steve Savage, purveyor of the blog [Applied Mythology](#) [6] and co-author of the paper, said in an email to ACSH that it would be a "bad idea to expand organic to any great extent" because of the gap in crop yield.

Despite the mountain of evidence showing that organic food is basically a gigantic consumer fraud, what explains its increasing popularity? From a farmer's perspective, he or she can sell the same crop for a higher price. And from the consumer's perspective, the most likely explanation is the [placebo effect](#) [7]. Rich people feel good when they eat organic placebos. Organic food, in other words, is a luxury. And it's a luxury poor people in the developing world simply cannot afford.

**Source** [5]: Kniss AR, Savage SD, Jabbour R. "Commercial Crop Yields Reveal Strengths and Weaknesses for Organic Agriculture in the United States." *PLoS ONE* 11(8): e0161673. Published: 23-Aug-2016. doi: 10.1371/ journal.pone.0161673

*\*Don't believe it? Watch this video of people praising the taste and quality of "organic" food that was actually just items purchased from McDonald's.*

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**Links**

[1] <http://www.shutterstock.com/pic-305483093/stock-photo-organic-food-background-farmers-vegetable-market.html>

[2] [http://www.realclearscience.com/blog/2014/06/the\\_biggest\\_myth\\_about\\_organic\\_farming.html](http://www.realclearscience.com/blog/2014/06/the_biggest_myth_about_organic_farming.html)

[3] <https://www.sciencebasedmedicine.org/no-health-benefits-from-organic-food/>

[4]

[http://www.realclearscience.com/articles/2012/09/05/science\\_debunks\\_the\\_organic\\_fantasy\\_garden\\_106363.html](http://www.realclearscience.com/articles/2012/09/05/science_debunks_the_organic_fantasy_garden_106363.html)

[5] <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0161673>

[6] <http://appliedmythology.blogspot.com/>

[7] <http://www.the-scientist.com/?articles.view/articleNo/15970/title/The-Organic-Food-Placebo/>