

Corn? Yes. Importance of corn in feeding planet

There's a strong case that field corn, used as a grain, is the single most important food crop on the planet. That case is based on what I'll contend is the most underappreciated metric in agriculture.

That metric is — drumroll, please — calories per acre.

Calories matter because every last one of us needs about 1 million of them each year. In the calorie department, corn is king. Corn averages roughly 15 million calories per acre. If you had taken our 2014 corn harvest of 14.2 billion bushels and used it to feed people, it would have met 17 percent of the entire world's caloric needs.

Additionally, “corn has a particular kind of metabolism shared only with 5 percent of flowering plants,” Ricardo Salvador, a prominent voice in the movement for sustainable food and a plant scientist with a specialty in corn, told me. He explained that those plants (called C4, for a four-carbon molecule that's part of the photosynthesis process) have special cells that make them up to three times as productive as the unfortunate 95 percent.

Not only that, but C4 plants use water more efficiently in photosynthesis; C4 developed as a response to dry climates.

Moreover, according to Salvador, “Corn has adapted to just about every climate that humans have adapted to.” Which means there's a huge gene pool to choose from when changing conditions make further adaptation necessary.

Fifteen million calories per acre. Adapted to all kinds of climates. Well-suited to dry conditions. Genetically malleable. Pass the polenta!

The math on crop productivity is persuasive. If you eat a plant that yields twice the number of calories per acre, you halve the amount of land required to feed you. So, yes. Pass the polenta.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [In defense of corn, the world's most important food crop](#)