GMOs Improve SOIL HEALTH

Healthy soil is fundamental for **CROP GROWTH & FOOD PRODUCTION.**[1]

Over the last **25 YEARS,** GMOs **HAVE:**

↓7.2% REDUCED PESTICIDE APPLICATIONS[2]

&

↑22% INCREASED CROP YIELDS[3]

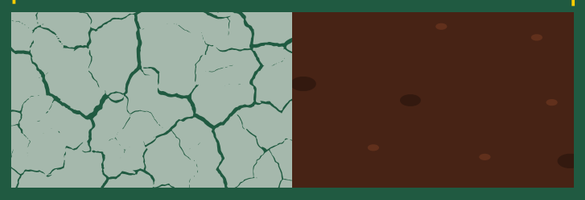
Herbicide-tolerant GM crops enable farmers to till – or turn over and break up the soil – less often. This has **increased nutrient-rich organic matter up to 1,800 pounds per acre per year.**[4]

LESS TILLING[5] =

- ↑ **Soil Moisture**
- ↓ Greenhouse Gas Emissions
- ↓ Soil Erosion

In the last 150 years, half of the planet's topsoil has been lost, largely as the result of erosion. Erosion clogs streams and rivers, hurting fish and other species, and can worsen flooding.[6]

GMOs are part of sustainable farming that preserves topsoil, preventing erosion and desertification.[7]



LESS EROSION AND HEALTHIER SOIL, THANKS TO GMOs.

1 Unlock the Secrets in the Soil: Soil Health. Retrieved from http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/

2 Brookes, G., (2022). GM crops: global socio-economic and environmental impacts 1996-2020. Retrieved from https://pgeconomics.co.uk/pdf/Globalimpactbiotechcropsfinalreportoctober2022.pdf

3 Klumper, W. and Qaim, M. A Meta-Analysis of the Impacts of Genetically Modified Crops (2014). Retrieved from http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0111629

4 Conservation Technology Information Center: Facilitating Conservation Farming Practices and Enhancing Environment Sustainability with Agricultural Biotechnology (2010). Retrieved from http://www.ctic.purdue.edu/media/pdf/BioTechFINAL%20COPY%20SEND%20TO%20PRINTER.pdf

5 Genetic Literacy Project: No-Till Agriculture Offers Vast Sustainability Benefits. So Why Do Many Organic Farmers Reject It? (2016). Retrieved from https://www.geneticliteracyproject.org/2016/06/02/no-till-agriculture-offers-vast-sustainability-benefits-so-why-do-organic-farmers-reject-it/

6 World Wildlife Fund: Soil Erosion and Degradation. Retrieved from http://www.worldwildlife.org/threats/soil-erosion-and-degradation

7 Conservation Technology Information Center: Facilitating Conservation Farming Practices and Enhancing Environment Sustainability with Agricultural Biotechnology (2010). Retrieved from http://www.ctic.purdue.edu/media/pdf/BioTechFINAL%20COPY%20SEND%20TO%20PRINTER.pdf

gmo answers