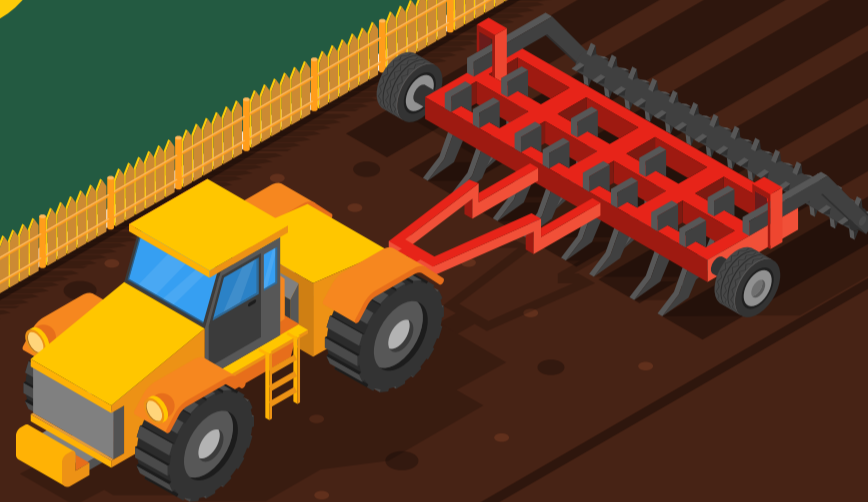


GMOs Improve



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



Over the last
20 YEARS,
GMOs
HAVE:

↓ **8.2%**
REDUCED PESTICIDE
APPLICATIONS²

&



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

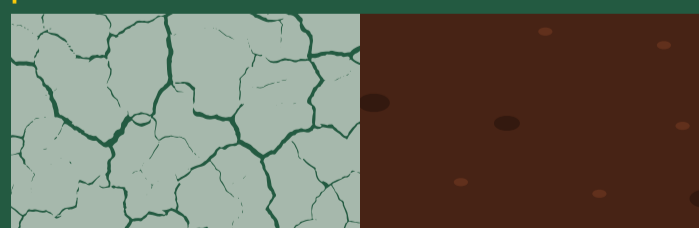


LESS TILLING⁵ =



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

↓ **50% Less**



**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. and Barfoot, P. (2018) Environmental impacts of genetically modified (GM) crop use 1996-2016: Impacts on pesticide use and carbon emissions. <http://www.tandfonline.com>

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>

