

How GMOs Help Reduce FOOD WASTE & LOSS

In the United States, approximately **133 BILLION POUNDS**

of food is **WASTED** annually, contributing to **18% of the total U.S. landfill methane (greenhouse gas) emissions.**¹



GMOs help farmers minimize these losses and grow more food using less land.

In 2018, GMOs enabled farmers to use 59.7 million less acres of land to produce the same amount of crops⁷—equivalent to an area larger than the state of Idaho.



GM APPLES ARE NON-BROWNING, ELIMINATING THOSE SUPERFICIAL ISSUES that cause people to unnecessarily throw them away.²

In 2010, each American on average

THREW AWAY

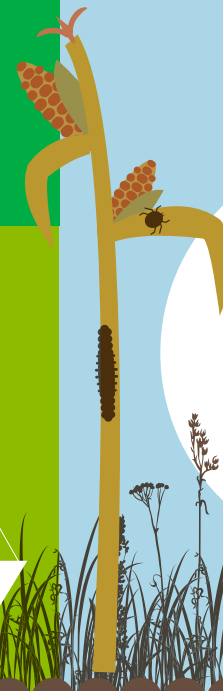


totaling 1.7 billion pounds of food waste.⁴

GM POTATOES ARE LESS PRONE TO BRUISING AND BLACK SPOTS, meaning fewer potatoes will end up in landfills.



20 - 25% of all crop yields in the U.S. are **LOST** to pests, crop diseases, or post-harvest losses. In the developing world, it's as high as 40 - 50%.⁸



¹ America's Food Waste Problem (2016). Retrieved from <https://www.epa.gov/sciencematters/americas-food-waste-problem>

² Arctic Apple Benefits. Retrieved from <http://www.arcticapples.com/arctic-apples-r/arctic-apples-benefits/>

³ Smithsonian: This Is How Much Water You Waste When You Throw Away Food (2015). Retrieved from <http://www.smithsonianmag.com/science-nature/how-trashing-food-wastes-water-too-180957239/?no-ist>

⁴ U.S. Census Bureau Announces 2010 Census Population Counts – Apportionment Counts Delivered to President. Retrieved from <https://web.archive.org/web/20101224044247/http://2010.census.gov/news/releases/operations/cb10-cn93.html>

⁵ Halterman, D., Guenther, J., Collinge, S. et al. Biotech Potatoes in the 21st Century: 20 Years Since the First Biotech Potato (2016). Retrieved from: <http://link.springer.com/article/10.1007/s12230-015-9485-1>

⁶ All You Need to Know about the Eiffel Tower. Retrieved from http://www.toureffel.paris/images/PDF/all_you_need_to_know_about_the_eiffel_tower.pdf

⁷ Brookes, G. and Barfoot, P. (2020). GM crops: global socio-economic and environmental impacts 1996 - 2018. Retrieved from <https://pgeconomics.co.uk/pdf/globalimpactfinalreportJuly2020.pdf>

⁸ Global Scientists Meet for Integrated Pest Management Idea Sharing (2015). Retrieved from <https://nifa.usda.gov/blog/global-scientists-meet-integrated-pest-management-idea-sharing>

