

The establishment of genetically engineered canola populations in the US

October 5 2011

Large, persistent populations of genetically engineered canola 1 have been found outside of cultivation in North Dakota. As genetically engineered crops become increasingly prevalent in the United States, concerns remain about potential ecological side effects.

A study published today by the online journal [PLoS ONE](#) reports that genetically engineered canola endowed with [herbicide resistance](#) have been found growing outside of established cultivation regions along roadsides across North Dakota. These "escaped" plants were found state-wide and accounted for 45% of the total roadside plants sampled.

Furthermore, populations were found to persist from year to year and reach thousands of individuals. The authors also found that the escaped plants could hybridize with each other to create novel combinations of transgenic traits.

The authors argue that their result, more than 10 years after the initial release of genetically engineered canola, "raises questions of whether adequate oversight and monitoring protocols are in place in the U.S. to track the [environmental impact](#) of biotech products." However, they also note that biotechnology can provide important tools to feed the rapidly growing [population](#). "We must safely engage all tools available to us to advance food, fuel and fiber alternatives as modern agriculture rises to the challenges of the next decade," they conclude.

"More than half of the earth's terrestrial landscape is managed in

cultivated [crops](#) or forage species," says lead researcher Cynthia Sagers, "yet we have little understanding of how domesticated plants influence their wild relatives. This study is a first step in addressing these questions by documenting that domesticated species have a life outside of cultivated fields."

More information: Schafer MG, Ross AA, Londo JP, Burdick CA, Lee EH, et al. (2011) The Establishment of Genetically Engineered Canola Populations in the U.S.. PLoS ONE 6(10): e25736.
[doi:10.1371/journal.pone.0025736](https://doi.org/10.1371/journal.pone.0025736)

Provided by Public Library of Science

Citation: The establishment of genetically engineered canola populations in the US (2011, October 5) retrieved 2 May 2024 from <https://phys.org/news/2011-10-genetically-canola-populations.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
