

## Farmers Learning Limits of Popular Herbicide

This is the VOA Special English Agriculture Report.

Pigweed spreads fast and grows as tall as two meters. This weed can overpower cotton and other crops. It comes from the amaranth family and is also known as Palmer amaranth or Palmer's pigweed.

A cultivated version of amaranth is grown for food and medicine in Africa and Asia. In the United States, some people buy amaranth as a gluten-free substitute for wheat flour. But wild pigweed is a big problem in cotton-growing states in the South. And now the plant is spreading into the Midwest.

Cotton plant

In many cases the pigweed is killing genetically modified cotton and soybeans. For years farmers could control it by spraying with

But weed scientist William Curran at Pennsylvania State University says over the past three or four years, pigweed has become resistant to glyphosate. Now, farmers in some areas can no longer depend on that popular herbicide alone to defend against pigweed.



**WILLIAM CURRAN:** "When a weed is resistant, either the herbicide that it is resistant to has no effect at all or, you know, it might have some effect, but usually not enough to kill it."

He says farmers can try other herbicides. Or they can mix another herbicide with Roundup and use the mixture when they would normally spray their fields.

**WILLIAM CURRAN:** "The reality is even though have this weed, this one one weed that is resistant, there's still a lot of other weeds that Roundup still kills."

Farmers in the American Northeast face a growing threat from another weed. Scientists call it horseweed; farmers call it mare's tail. Like pigweed, this plant has also developed the ability to resist glyphosate.

Professor Curran sees one major reason for this. Farmers are depending too much on individual products and not enough on different strategies to manage weeds.

The question, he says, is how best to use a system of integrated pest management to control weeds. For example, IPM calls for farmers to rotate their crops instead of planting the same ones in the same soil year after year.

Professor Curran says farmers should also consider planting cover crops. These crops are grown temporarily to protect the soil. For instance, planting rye in the fall can suppress horseweed.

WILLIAM CURRAN: "If you have winter rye out there occupying that space, it is very competitive and the horseweed is less successful in establishing."

In the next two or three years, several companies expect to have new herbicides, along with crops that can survive spraying with those chemicals.

And that's the VOA Special English Agriculture Report, written by Jerilyn Watson. If you have a farm, tell us how you manage weeds. Share your comments at [voaspecialenglish.com](http://voaspecialenglish.com). I'm Jim Tedder.