

Activists blame scientists, GMOs for dying iconic Italian olive trees, block GM solution

The olive tree is one of Italy's two [national trees](#). Images are easily evoked of olive-oil infused cuisine, and rolling acres of sun-drenched orchards, striped with row after row of often century-old olive trees.

Now, in Southern Italy at least, at least [one million](#) of those iconic olive trees are dying. While scientists have worked on determining a cause, certain anti-GMO groups have pointed to genetic modification experiments and the Italian government has been investigating the scientists themselves as culprits.

An olive die-off

Starting in 2013, farmers and agricultural officials started recording large scale leaf scorch and die-off of olive trees in the southern part of the country, in the Puglia region. [Investigators found](#) three pests that appeared to contribute to the issue: the leopard moth, several species of fungus, and a bacteria called *Xylella fastidiosa*.

The outbreak of *Xylella* was the first confirmed occurrence in Europe. For years, the bacteria have plagued olive, citrus and ornamental oleander plants in North and South America. Scientists conducted molecular analyses to determine the existence of *Xylella* and fungal species (which also were new to Europe), and to search for the existence of new or unusual strains of the bacteria that could lend more evidence to the source of the unprecedented outbreak.

The Italian government has instituted emergency measures, including cutting down trees, to try and contain the outbreak. However, the European Food Safety Authority [warned](#) that their scientists indicated that *Xylella* could spread throughout Europe despite these measures. In fact, an infestation was discovered in Corsica in July by French authorities. The EFSA recommended screened-in greenhouse production, certification for nursery-grown plants, eradication of infected insects, and insecticides for imported plants. That last measure was not popular with Italian growers, who [have resisted](#) pesticides and other chemical applications for years.

Activists rush in with blame

And the farmers' resistance may have ushered in more than the outbreak. While evidence has [shown clearly](#) that the bacteria was brought in by insects imported from Central America, [anti-GMO activists](#) have started openly questioning whether scientists may have instituted a "covert assault by the biotech industry." And the Italian government is investigating the scientists.

Anti-GMO activists pointed to what they believe is a hasty blame on *Xylella* as the sole reason for the outbreak, and claim that scientists had in 2010 brought samples of *Xylella* to a meeting in Bari, Italy, and they suggested that it may have got loose. Accusations have ranged from a plot by Monsanto to introduce strains of olive trees that resist the bacteria, to a deliberate plot to eradicate olive trees, to even a test to determine Europe's response to a bioterrorist attack.

Police action

A second conspiracy scenario has [attracted Italian police](#). This scheme involves the deliberate release of *Xylella* (via insect vectors and other methods), which killed the olive trees, and forced farmers to sell their land to land developers at low prices. The result? Cheaper development of hotels and other tourist attractions in the area. The fact that groves of olive trees on rural hillsides were part of the region's attractiveness was not mentioned in this conspiracy theory.

Scientists with the CNR Institute for Sustainable Plant Protection (IPSP) were [questioned](#) by Italian police earlier last summer. They, the Italian Ministry of Agriculture, and other scientists investigating the outbreak also have had their computers and documents confiscated, in addition to more questioning by the police. It has turned out, according to the scientists interviewed, that police were following up on the "claims" initiated by anti-GMO and local activists.

Where science could have helped over hype

Growers and scientists have expressed hope for olive trees in southern Italy nonetheless. So far, just about a million trees are affected, just a fraction of the [11 million trees](#) in the region. In addition, the *Xylella* in Italy is a perfect match to the *Xylella* in trees from Costa Rica. This is the same *Xylella* that has infected plants in Brazil and [California](#) — and while pest management is expensive, it has prevented a complete die-off.

Ironically, anti-GMO activists may have eliminated one promising solution to the *Xylella* outbreak just a year before it was discovered. Since 1982, scientists had been working on various ways to genetically engineer resistance to fungal and bacterial infections in olive trees, including growing test trees in Italy. In 2012, the Italian government ordered these new strains of [trees destroyed](#), to comply with a law banning field research on genetically engineered plants.

Instead of reaping die-offs sown by hysteria, the country's olive growers could have used modern technology to reap healthy olive trees.

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