Neonics, genetic engineering can save U.S. citrus industry from greening disease

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Farmers in the major U.S. citrus-producing regions — Florida, California, Texas and Arizona, in particular — are facing a plague of epic proportions. Oranges and a range of other citrus fruits are being decimated by an incurable disease, a lethal, bacterial infection known as "citrus greening" or Huanglongbing, spread by a tiny insect, the Asian citrus psyllid.

...Researchers at the University of Florida's Institute of Food and Agricultural Sciences have hit the trifecta; they've developed genetically engineered citrus trees that show not only resistance to greening but also to canker and black spot, two other perennial problems...

The "cure" developed by the University of Florida plant biologists is ingenious: They inserted a gene isolated from the Arabidopsis plant, a member of the mustard family, to create enhanced resistance to greening and reduced disease severity . . .

Nevertheless, it will be a decade or more before these disease-resistant trees have received regulatory approvals, been planted widely and are yielding fruit. Until then, there is only one effective treatment: a soil drench of neonicotinoid ("neonic") pesticide. . .

Environmental activists have spent several years and many millions of dollars campaigning to ban neonics claiming that the insecticide is responsible for catastrophic honeybee population declines. . . . [But] large-scale field studies and real-world experience show that bees are not adversely affected by crops treated with neonics. It would be a shame to sacrifice an entire U.S. industry to already-disproven activist claims. .

The long-term solution lies with genetic engineering. Meanwhile, if we don't want to condemn the U.S. citrus industry to extinction, we need neonicotinoid pesticides.

Read full, original post: We have the scientific juice to save citrus