Podcast: What Doctor Who can teach us about protecting California's grape industry from 'alien' bugs

Are you a fan of the long-term sci-fi comedy Doctor Who? It's the bizarre but entertaining story of an extraterrestrial being called "The Doctor" who keeps showing up to protect the human race as well as other races on other planets. This hero can do that because he has the ability to travel through space and time in a ship called the Tardis. From the outside it looks like a classic, blue, British Police Phone Box, but fancifully, the Tardis is bigger on the inside.

Imagine if the Daleks of Dr. Who successfully completed their mission to exterminate all humans! This running feature is one of many pop culture examples of battles between humans and some type of alien invader. On this episode of Biotech Facts and Fallacies, Steve discusses the extermination of some alien invaders who were threatening the grape industries of California.

Grapes^{found} or type unknown Image: Jim G, via Wikimedia Commons)

The drama for our story began in the summer of 2009 in a famous, premium wine grape-growing region called the Napa Valley. One of the growers there spotted a caterpillar munching away on some of his grapes. Now there are several kinds of moths that can be pests of California grapes, particularly during their larval stage as caterpillars. But the grower noticed that this one didn't look like those familiar types.

It turned out that was a new kind of moth to California—an alien invader! Ok, not a space alien, but scary from the perspective of grape farmers. It was called the European Grapevine Moth or "EVGM." As its name implies it has been a pest on that continent for a long time. That name doesn't sound scary enough for our story so lets use the scientific name, Lobesia botrana.

Now of course there wasn't an extraterrestrial "Doctor" to lead this campaign, but even Dr. Who drafts a team of regular humans to help defeat the aliens. In this case the team comprised representatives of the grower communities, university experts and government employees from the relevant state and federal departments. They held an emergency meeting and decided that they wanted to see if they could come up with a way to not only stop the spread of the pest, but if at all possible to completely eradicate it from California. Eradicate! Doesn't sound quite as harsh as "exterminate!" but it's essentially the same idea.

Full show transcript available here.

Steve Savage is a plant pathologist and senior contributor to the GLP. Follow him on Twitter @grapedoc. The Pop Agriculture podcast is available for listening or subscription on iTunes and Google Podcasts.