UVM Professor Develops Product To Stall Hemlock Wooly Adelgid

Thursday, 06/30/11 6:34am Listen (1:39) MP3 | Download MP3 Ric Cengeri - Colchester, VT

(Host) Vermont's trees face a host of challenges from invasive diseases and insects, human development and climate change. One of the insects that has made its way into southern Vermont is the hemlock wooly adelgid.

The insects have devastated hemlock trees from Georgia through southern New England. Now, a UVM professor believes he has struck upon a compound that limits the damage the adelgid does to these trees.

VPR's Ric Cengeri has more.

(Cengeri) Dr. Scott Costa is an entomologist who specializes in eradicating pest insects. Costa learned about the damage that the adelgid causes to hemlocks while he was working with fungi that feed on insects.

To make the fungi more effective, he developed a product called MicoMax, which helps the insect-killing fungi adhere to hemlocks. MicoMax is made from sweet whey, a byproduct of the cheese-making process, and then blended with the fungi. He's tested the mixture in the field.

(Costa) "Down in Tennessee we took this fungi that kills the Hemlock wooly adelgid and mixed it with the MicoMax formulation and sprayed it out in a hemlock forest using helicopters. We put very low amounts out there. And then in southern Vermont, we used hydraulic sprayers to spray it onto the trees."

(Cengeri) So far, the mixture has been effective in suppressing the hemlock wooly adelgid's spread. Costa says this is the first step in controlling the insect.

(Costa) "What I really want is the fungus to be out there and circulating in the environment so that it becomes essentially a natural controller. You don't have to put it out there all the time. And these fungi are already out there, it's just that the hemlock woolly adelgid come in too quickly - especially in the southern regions - and kill the trees before the fungi are able to knock them back."

(Cengeri) Costa says his mixture is organic and is a good alternative to chemical pesticides. Costa says the next step is to test the MicoMax compound on larger stands of hemlock. He hopes the product will be available for use by woodland agencies and home gardeners in the next year.