

Nano Science, Technology and Industry Scoreboard

EPA Approves Fungicide Premix with Proprietary Nanotechnology

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The Environmental Protection Agency has registered AZterknot fungicide from Vive Crop Protection for use on a wide array of crops, including corn, cotton, peanuts, rice and soybeans.

It is a premix of a traditional strobilurin fungicide, azoxystrobin, and a biological, an extract of the plant Reynoutria sachalinensis. They are delivered using Allosperse, a proprietary nanopolymer technology developed by <u>Vive</u> that allows previously incompatible products to be mixed and applied in one application, reducing fuel, time and water use, according to a news release.

Nanoparticles used as carriers improve uptake, solubility and product stability and reduce soil leaching, among other benefits. As carriers, they're also commonly used to entrap, encapsulate, absorb or attach active molecules to develop effective agricultural formulations. Among the common are silica nanoparticles, chitosan nanoparticles, Solid lipid nanoparticles (similar to an amulsion) and layered double hydroxides (types of clay).

"AZterknot is the first step in mobilizing the power of both biological and chemical active ingredients, using our Allosperse technology," Darren Anderson, Vive CEO, said in the release. "Vive is working on a pipeline of products to integrate a broad range of biological actives with Allosperse and other trusted chemistries to provide grower solutions that were not possible before."

"One of the greatest challenges for biological products (is) in wide distribution and competition with conventional synthetics," Joshua Haslun, a senior analysist at <u>Lux Research</u>, said in the release. "Solving for shelf life and compatibility issues when used in combination with synthetic products would be a blockbuster advance for a biological product. With this in mind, Vive's current partnership with Marrone represents an opportunity to prove the

additive value of the Allosperse technology."	
Read the <u>original article</u> on One Grower Publishing.	