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Dispelling Myths About Asian Soybean Rust

There certainly have been plenty of articles on Asian soybean rust in magazines and electronic news sources this past year. Rust is the biggest thing to affect U.S. agriculture since the introduction of Roundup Ready soybeans. The problem is that much of the information is either exaggerated, taken out of context or just flat out wrong.

Beware of false prophets when it comes to soybean rust. There are those among us who want you to believe this disease will arrive in the United States this summer and that it will be severe enough in the Midwest to warrant treatment with fungicides. Don't believe them. Science and history say otherwise; not that it can't happen, it is just very unlikely that it will.

There is no clear evidence to suggest soybean rust will enter the United States this year. In fact, plant pathologists who have been working with soybean rust for many years believe it will follow a similarly slow pathway into the United States as another disease, sorghum ergot. This disease took thirteen years to traverse the land bridge between South and North America. If, as most scientists believe, soybean rust follows the same pathway, it will likely take several years for the disease to enter North America.

Rumors of rust crossing our borders this year on wings of birds and antennae of insects are a stretch of the imagination. Birds have an oil-producing gland that causes feathers to repel water. This same oil could easily kill the germination of the rust spore if it survived the trip in the first place. Besides, birds bathe regularly – this would cause spores to quickly germinate and die.

Other speculation is that rust spores would enter the U.S. as dust on whole soybeans in the holds of ships. In theory, the spores would become wind-borne as the grain is unloaded inside our borders. In reality, we have been importing whole soybeans from rust-infected countries, such as Asia, for many years without brining in soybean rust. So why are we worrying about it now that rust is in Brazil?

Concern over the United States not rushing to change the standards for allowances of foreign material in imported whole soybeans from South America is injudicious. Brazil already has a tolerance limit of foreign material in grain destined for export that is less than what we allow for import. Their limit for foreign material in

exported grain is 1 percent; we allow up to 2 percent foreign material in imported grain. Changing the rules for something you already have seems unwise. Once you demand that grain be cleaned to 1 percent or less foreign material, other countries will quickly demand the same from the United States. The USDA has repeatedly said they would consider changing the limits if it made sense and if the need is supported by sound science.

Speculation that soybean rust has established itself north of the equator in Venezuela and Brazil's Roraima state may now be put to rest. A representative from one of the fungicide manufacturers recently stated that their employees who live and work in these areas have yet to find rust on soybean or any host crop. Although only time will tell for sure, this reduces the chance for soybean rust to enter the U.S. this year. Employees of USDA-APHIS will continue monitoring these critical areas to provide an advanced-warning system for U.S. soybean producers.

Much of the scientific information suggests soybean producers will not have to treat for soybean rust this year. The pre-purchase of fungicides to treat soybean rust this year seems unwise. However, if they are all wrong and soybean rust shows up in the South this year, it would still be too late to cause any significant damage to soybean in the Midwest. At least the wait would be over and we would have the winter months to manufacture and stockpile fungicides for next year. For more information on rust or other pathogens, log on to www.planthealth.info.



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