Scientist tracks origins of bootleg honey from China

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A Texas A&M University scientist spends hours at a time peering at slides of pollen samples, comparing them to track down the origins of honey with questionable heritage. Some of the samples contain labels from other countries when in fact they originated in China but were re-routed to avoid tariffs of up to 500 percent, says Vaughn Bryant, a palynologist and an anthropology professor at Texas A&M University.

The tariffs were attached to the import of Chinese honey about two years ago because exporters there were "dumping" it in the U.S. - selling it at a much lower price than its cost, which is about one-half what it costs U.S. honey producers. The practice has almost ruined the market for domestic honey, says Bryant, who is also director of the palynology laboratory at Texas A&M.

China is the largest honey producer in the world.

Bryant, who examines more than 100 honey samples a year for importers, exporters, beekeepers and producers, says he believes he is the only person in the United States doing melissopalynology - the study of pollen in honey - on a routine basis. For the last five years, he has analyzed the pollen in honey samples from all over the world to determine the nectar sources and origin of the honey.

He examines imported samples purported to come from Viet Nam, Cambodia, Indonesia and Laos, and usually discovers that the samples are blends "with a little honey from those countries and a majority of the

blend coming from Chinese sources."

"Now there are lots of shenanigans going on to avoid having to pay those tariffs, and the investigators are way behind in following them," Bryant says. "The beekeepers of the U.S. have been pleading with the FDA to enact stricter guidelines about accurate labeling for honey, but that is a long, slow process. Meanwhile, I'm trying to help out here and there, but it's almost impossible to keep up."

Some foreign exporters get around the tariff by mixing honey from different sources, while others infuse up to 50 percent high fructose corn syrup into the honey, he says.

DNA studies of the pollen in honey is expensive and difficult, Bryant says. Isotopic studies can reveal the source, provided you have a database of isotope signatures, which for now are very limited, he adds.

"We've never had 'truth in labeling' for selling honey, and we should," he says. "And the U.S. needs to make it illegal to import honey that has been filtered to remove the pollen, which makes it almost impossible to detect where it came from."

Bryant has been a professor of either biology or anthropology at Texas A&M since 1971. He holds degrees in geography, anthropology and botany. Such variety has enabled him to address many topics - ranging from charting paleoenvironments and ancient human diets to his current emphasis on forensics and honey research.

John Thomas, who was an entomologist with the Texas A&M Extension Service from 1957 to 1992 and is a beekeeper and a major donor to the new Texas Honey Bee Facility at Texas A&M, says he is grateful for Bryant's work.

"We have fought with the Chinese importers because honey is not a primary export there; it is just a byproduct they get from these other products they produce for medicinal purposes," Thomas says. "This system the A&M anthropologists have devised is a mechanism to trace the origins of the honey through the pollens. Unfortunately, it doesn't solve the problem."

Provided by Texas A&M University