Anti-Mite Gel Gets Commercial License

A new gel treatment invented by ARS scientists in Maryland has been licensed to a private firm, moving the product closer to helping beekeepers stop varroa mites. The mites cause economic losses for beekeepers, as well as for U.S. farmers who depend on honey bees to pollinate $10 billion worth of crops. The struggle against the mites became more difficult once they began developing resistance to the standard control, fluvalinate. But ARS has now licensed a gel containing formic acid to Betterbee, Inc., of Greenwich, New York. In field tests, formic acid gel killed up to 84 percent of varroa mites. It also killed 100 percent of tracheal mites. Betterbee must obtain U.S. Environment Protection Agency approval before selling the product to beekeepers. They would simply place a small, sliced-open plastic bag of the gel inside a beehive. The formic acid slowly evaporates, leaving a harmless residue. *Hachiro Shimanuki, USDA-ARS Bee Research Laboratory, Beltsville, Maryland; phone (301) 504-8975, e-mail hshimanu@asrr.arsusda.gov.*

Ag Info Network To Expand

Twenty-one U.S. and Canadian universities and other organizations aim to expand the global reach of AgNIC, the Agriculture Network Information Center, on the World Wide Web. Their goal: make AgNIC the world's most comprehensive, helpful, and well-used agricultural information resource. It could help people around the world find reliable, fast sources of agricultural information—especially during drought or other natural disaster. Visitors to AgNIC at ***http://www.agnic.org*** can find links to more than 900 databases, a contact list of specialists, a calendar of conferences, and other agricultural information. A prototype went on-line in 1995 through efforts of Cornell and Iowa State Universities, the Universities of Arizona and Nebraska at Lincoln, and the National Agricultural Library, which is part of ARS. AgNIC members plan to continue expanding the subject-area coverage and attract new members. Organizations interested in joining AgNIC can contact *Melanie Gardner, USDA-ARS National Agricultural Library, 10301 Baltimore Ave., Beltsville, MD 20705-2351; phone (301) 504-6780, e-mail mgardner@nal.usda.gov.*

Reliable Pig Virus Test

A new genetic test quickly distinguishes a damaging pig virus from a harmless strain of the same virus used in a vaccine. The virus causes PRRS—porcine reproductive and respiratory syndrome. PRRS is one of the world's most costly swine diseases. It causes late-term fetal deaths, abortions, weakness in newborn pigs, and severe respiratory disease in young pigs. When an outbreak occurs, lab diagnosticians have difficulty differentiating disease-causing field strains from the vaccine strain. But the new test developed by ARS researchers in Iowa pinpoints genetic markers in both field and vaccine strains. The test is accurate and takes only 2 days to report results after the virus is isolated. ARS and NOBL/Boehringer Ingelheim Laboratories of Sioux Center, Iowa, evaluated the test under a cooperative research and development agreement. In a 1995 study of 286 herds, PRRS virus—previously known as mystery pig disease—was found in 60 percent of the unvaccinated herds tested. *William L. Mengeling, USDA-ARS National Animal Disease Center, Ames, Iowa; phone (515) 239-8254, e-mail wmengeli@nadc.ars.usda.gov.*

20-Year Test Finds Sewage Sludge Safe, Beneficial

Growing crops with municipal sewage sludge is safe and beneficial to crops and soil, according to a 20-year study in Minnesota. A common concern has been that sludge, or biosolids, will put toxic heavy metals into food crops. The study indicates this won't happen if biosolids are used correctly. Each fall, researchers injected a liquid suspension of sludge into the soil of fields used to grow corn and reed canarygrass. Crop yields were slightly higher with the biosolids than with commercial fertilizer. Importantly, no extra metals showed up in the corn or grass except slightly higher levels of zinc. The zinc—well within safety guidelines—would be beneficial as a dietary nutrient. The biosolids also help return carbon to the soil. By contrast, incinerating or composting sludge results in loss of carbon to the atmosphere as carbon dioxide. Biosolids contain a slow-release form of nitrogen less likely to be lost to surface water or groundwater. Like commercial fertilizers, however, biosolids should be applied only at rates that allow for nutrient uptake by crops. *Robert H. Dowdy, USDA-ARS Soil and Water Management Research Unit, St. Paul, Minnesota; phone (612) 625-7058, e-mail bdowdy@soils.umn.edu.*