

Dr. Russ Mizell Returns from Trip to South Africa

Dr. Russ Mizell, Professor of Entomology at the NFREC-Quincy, recently returned from a professional visit to South Africa. Dr. Mizell responded to an invitation from the South African avocado growers to help develop a research and management program for stink and other plant bugs that damage avocado, macadamia and litchi (see Figures 1-4). The meeting was held at Magoebaskloof Hotel located in the mountains between Pretoria and Nelspruit at Tzaneen. Dr. Mizell presented a talk and workshop to about 150 growers, university and technical people associated with the avocado industry. He discussed his current research using geospatial techniques to determine the population dynamics of stink bugs, his patented stink bug trap used to monitor stink bugs, and his trap cropping scheme used to suppress stink bugs without chemical pesticides. He also provided extensive discussions with South African research and technical staff on arthropod behavior, biology, ecology and management. He toured several local farms where he learned about the production and marketing practices and was able to visit the Paul Kruger National park during his visit. Dr. Mizell plans to return to South Africa in September to continue this work.



Figure 1: Macadamia Nuts

Macadamia nuts incur significant damage from stink bugs in South Africa.



Figure 2: Soybean Monitoring Tool

Soybean plots are being tested as a possible monitoring tool for stink bugs in passion fruit.



Figure 3: Tomato-Eggplant

Staked tomatoes are an important crop in South Africa and growers use eggplants at the ends of rows to serve as sampling and indicator host plants for thrips, mites, and whitefly pests.



Figure 4: Avocado

Avocado is severely damaged by feeding from several stink bugs with the coconut bug causing the most severe damage. Damaged fruit must be discarded.