Syngenta's Science Project

VERO BEACH, FLA., FACILITY A NERVE CENTER FOR COMPANY'S R&D

By Larry Aylward, Editor

It's hot and muggy, even by central Florida's standards. Kevin Casey, clad in a white lab coat, stands inside the plant production area at Syngenta Professional Products' Vero Beach (Fla.) Research Center (VBRC). The dusty area, laden with intricate machinery, resembles a huge garage. There's no respite from the heat because the area is open to the outside. Casey, whose face contains speckles of sweat, will attest to that.

Despite the heat, Casey is upbeat on this early June day as he speaks about his job — blending and pasteurizing soil to use in tests for turf and ornamentals — to a group of visitors at the VBRC. Casey, a research and development assistant on Syngenta's R&D technical support team, creates soil mixtures to mimic certain soil conditions from different regions of the United States and the world.

Casey flips the "on" switch of the elaborate mixing machine, and it drones loudly while blending batches of soil and sand. Casey grabs a handful of dirt from a table in front of him and runs the rich, dark blend through his fingers. "This is a really nice soil to work with," he says of the muck soil, used to grow sugar cane.

The VBRC is one of four Syngenta facilities of its kind in the United States. It was built in 1963 and is located on 240 acres. It features nearly 40,000 square feet, with 20,000 square feet devoted to 12 greenhouses.

Syngenta invested $5 million in the facility in 2001 to upgrade it. From the outside, it looks like a posh hotel. In fact, travelers have been known to walk in the front door and ask for single rooms with king-size beds.

STEVE TRUSTY

Les Glasgow, the senior R&D group leader in the weed-control unit, conducts an experiment focusing on formulation.

Vero Beach, located in rural central Florida, is often called "Dodgertown" because it's the spring-training ground for the Los Angeles Dodgers. Syngenta prefers the location because the company is able to do green work on-site for the entire year. That wouldn't be the case if the facility was located in the season-changing North. With plenty of pest pressure year-round in central Florida, Syngenta scientists can conduct many tests with fungicides and insecticides. The VBRC supports new-product development and explores new technologies, among other initiatives.

Exploring new technology is part of Henry Wetzel's job. The R&D scientist, who joined Syngenta in January 2003 after leaving BASF, shows visitors the many turf-testing plots he created since he joined the company. He discusses overseeding bermudagrass with ryegrass. "[Superintendents] are overseeding turf a lot further south than you'd think," Wetzel says.

Wetzel invites visitors to examine the seashore paspalum plots. He explains that the turf, which is gaining popularity in the South, is sensitive to herbicides.

Later, visitors return to the laboratory where Les Glasgow, the senior R&D group leader in the weed-control unit, speaks to them about improving existing pesticide products through formulation.

Randy Cush, a senior formulation chemist, expands on the topic later. Using a variety of small, black-capped jars in front of him, Cush mixes various chemicals with water to display how Syngenta has improved several of its existing products. For instance, scientists created a better formulation to eliminate the bad odor in Primo EC, which Syngenta calls Primo Maxx.

David Ross, Syngenta's technical manager for turf and ornamental, notes the company will soon offer Heritage TC, a liquid version of the company's azoxystrobin-based fungicide. Ross says the new Heritage has a 10 percent-improved efficacy over the original product. Ross also noted that Syngenta has several fungicide premix products in development.

Syngenta makes no bones about its turf and ornamental business. Company leaders say products are premium-priced because they should be. Syngenta' sales in the golf market topped $100 million in 2003. As a basic manufacturer, the company says it's dedicated to researching molecules to develop new products. ■