The Texas AgriLife Extension Service is the new name of Texas Cooperative Extension, which provides Texans in all 254 counties with objective, research-based education programs and services in agriculture and natural resources, 4-H and youth development, family and consumer sciences, and community economic development.

“We are making these changes to better communicate the life-sustaining and life-changing impacts that both AgriLife Research and AgriLife Extension deliver to the people of Texas and beyond,” said Dr. Mark Hussey, director of AgriLife Research.

The name changes are part of a re-branding initiative launching this year after two years of study and planning. These efforts were led by former vice chancellor Dr. Elsa Murano, who was named president of Texas A&M University on Jan. 3.

“The re-branding efforts are centered on one foundational message: ‘Agriculture is Life!’” Hussey said. “The central idea is that life itself is the core value that our agencies seek to sustain and enhance.”

Spotlight on MOAs

I decided to add a new item to the newsletter this year. Each issue will cover the mode of action of a commonly used pesticide. This issue covers pyrethroids. Common pyrethroids include active ingredients such as allethrin, permethrin, cyfluthrin, lambda-cyhalothrin and esfenvalerate, among others.

Pyrethrin is a naturally occurring compound that is derived from plants in the chrysanthemum family. Pyrethroids mimic pyrethrin, but are modified to be more stable in the environment, so they have a residual effect.

Both these compounds prevent sodium channels within the nervous system from closing, causing continual nerve stimulation which leads to tremors, paralysis and death of the arthropod.

Did You Know?

- Termites are now thought to have evolved from cockroaches.
- A flea can jump 130 times its own height.
- Some spiders use hairs on their body to sense when prey is nearby.
Temperatures are chilly outside, but customers are calling about little black gnats flying around the office. Well, the bugs probably aren’t coming in from outside, so where do you begin your search? The breakroom? The bathroom? Around the potted plants? Depending on what type of “gnat” your customers are complaining about, any of those answers would be feasible. Fortunately, your customer has a sample they collected when you get to the site. The gnat is dark brownish-black with long, slender legs and antennae. The wings are clear with few distinct veins. The customer also informs you that they been seeing the majority of the gnats in the office area. So what is pest and where do you begin your search?

The customer is having a problem with fungus gnats, so your inspection should begin where there are potted plants in the office. Fungus gnat larvae feed on decaying organic matter and sometimes roots of plants. They prefer very moist environments, so encourage your customer to reduce the watering schedule for their plants; allowing soil to completely dry out between waterings. No real treatment is required for fungus gnats, as they are more of a nuisance than a problem, but to get rid of future infestations the source must be located and managed. Larvae can be killed by using insecticide soil drenches and adults can often be captured utilizing fly strips, traps or lights.

American cockroaches, also called waterbugs or palmetto bugs, are about 1 ½” long, reddish-brown with tan markings on the pronotum (the shield that covers the head). Nymphs are similar looking to the adults, but do not have fully developed wings. Like all roaches, females lay eggs in a purse-like sac called an ootheca.

American cockroaches are not a common pest that breeds indoors in Texas. Typically these cockroaches move in from outdoors in search of food and water or to escape cold temperatures. They can enter structures around pipe penetrations, vents in the attic, through weep holes or cracks around doors and windows.

Exclusion is great method to keep the cockroaches outside, so encourage customer cooperation in a cockroach management program. Commonly used formulations for cockroach management include baits, sprays and dusts. Residual sprays and dusts should not be used in the same location as baits to avoid contamination of the baits. Sprays and dusts should be targeted to crack and crevice areas or wall voids. When using baits, old bait should be scraped away before new bait is placed out. Target baits to areas where cockroaches will be able to locate it easily.