

The goals of the Exotic Pest Plant Council include building public awareness about the serious threats invasive exotic plants pose to wildlands. On September 9th of this year, a workshop was held to provide an overview of the problems that skunk vine (*Paederia foetida*) is causing in Central Florida, share what is known about its control, and gain input from land managers and the public. Kudos to Sheryl Bowman, Brian Nelson and Tony Richards for spearheading this cooperative effort. Jennifer Possley and Dorothy Brazis have provided a workshop summary (see p. 11). I hope it encourages other groups to get together to share information about pest plants in their area. Remember, misery *loves* company.

Fatal Interactions?

When exotic plants are lethal to native insects

By Tracy S. Feldman

Effects of introduced plants on native flora and fauna remain virtually unstudied. Many areas in the United States (e.g.: Florida and Hawaii), for better or for worse, would likely prove fertile ground for such work. However, the following example comes from investigations I conducted in Monteverde, Costa Rica.

Many species of flora and fauna make their homes in forest patches and pastures outside of the famed Monteverde Cloud Forest Reserve, as well as within its boundaries. One herbaceous plant, with showy dark-green or purple leaves with pink splotches, is common in pastures and along roadsides. This African plant, called *Hypoestes phyllostachya* Baker (Acanthaceae), also "polka-dot plant" or "paint plant," was brought to Monteverde as an ornamental by a well-meaning resident over 40 years ago. Five to 15 years ago, it spread along roadsides and into pastures, forming sometimes dense stands. Typical of many invasive species, the plant is

fed upon by few if any insects. Apparently, cows do not like it either, so it is considered a pest in pastures.

My studies in Monteverde centered on interactions between plants and butterflies. Much of my time there was spent following female butterflies, observing them laying eggs (ovipositing) on plants, and then assessing the suitability of those plants as larval hosts. Many butterflies are fairly specific in their oviposition requirements—they will choose only certain plant species in one or a few plant families. Visual cues and plant chemistry (Fraenkel, 1969) often play very important roles in insect oviposition choice. Larval feeding choices are of-

ten broader, at least in a laboratory setting (Wiklund, 1975). However, the larvae are often restricted to feeding on plants from one or a few plant families. On several occasions, I followed females of two species of *Anthanassa* butterflies, only to observe them searching and ovipositing on the exotic *H. phyllostachya*. These butterflies laid clusters of 28-177 eggs on the undersides of the leaves, perhaps putting up to 11% of their reproductive effort on any one leaf (Feldman, in preparation a). I collected several egg clusters to rear the butterflies, and found that *Anthanassa* larvae readily ate most native plants in the



Many butterflies are fairly specific in their oviposition requirements—they will choose only certain plant species in one or a few plant families. Visual cues and plant chemistry often play very important roles in insect oviposition choice. Photo by Tracy S. Feldman.