

A unique laboratory, quarantine station, and greenhouse complex, hidden in the dense rain forest within 100 yards of the brink of an active volcano near the visitors center at the crater of Kilauea NP is described in the Sept. 21, 1989 issue of the Portland **Oregonian**, by Leverett Richards. George P. Markin of the USFS is in charge of the research program there, where more than 100 insects are being studied for possible use in protecting and restoring Hawaii's natural forests.

"Using nature to fight nature is the only sound, permanent control," Markin says. Biological control is not cheap – "it takes 5 years and \$1 million to develop a safe, effective bio agent," Markin claims, and if any of the 10,000 or so insects quarantined in his research complex were to escape, "they might do as much harm as an A-bomb."

It takes about 2 years of testing to satisfy about 38 different agencies that they will eat "only off their own plates," Markin explains. No entomologist wants to make "the mongoose mistake." (The mongoose, introduced in 1873 by ranchers to control rats is now a bigger pest than rats, living on the eggs and young of native birds.)

A small blue moth, tested at the facility, was released during the past year to combat Hawaii's most incredible forest enemy – the banana poka, or *Passiflora mollissima*. It grows with incredible speed, climbs the tallest trees and topples them by its sheer weight. "It will even kill koa and ohia – Hawaii's principal hardwood trees, 100 feet tall," Markin says. "If the blue moth doesn't slow it down, we will lose most of our remaining forest within 50 years."