Make Hawaii State-of-the-Science in Island Biosecurity:

New Investments in Research and Technology

Research and Technology (R&T) programs are vital to providing state-of-the-science management solutions against alien invasive species. As a complement to control and outreach actions, The Hawaii Invasive Species Council (HISC) strives to support a balanced and diverse R&T portfolio targeting the wide range of high-priority invasive pest species. Since 2005, the HISC has invested over \$3.2M in R&T. With these investments have come new knowledge and better techniques in support of the HISC mission to efficiently protect 100,000s of acres of natural, agricultural and urban landscapes.

This year the HISC received 50 R&T proposals with a combined budget exceeding \$5M. These are the highest totals on record. The HISC was only able to support 16 of these projects with just over \$800K allocated, equal to 17% of its \$4.75M budget and well short of the total request. The HISC anticipates high-impact results from the funded projects, but simply won't realize the full potential of the R&T program without greater financial support.

New developments to expect in FY18:

- 1. New control methods for Coconut Rhinoceros Beetle (CRB)
- 2. New control methods for Little Fire Ant (LFA) and other highly invasive ants
- 3. New surveys for Rapid Ohia Death (ROD)
- 4. New surveys for Rat Lung Worm Disease (RLW)
- 5. Progress for biological control of Albizia and Miconia
- 6. Deployment of Unmanned Aerial Systems (UAS)
- 7. Deployment of Herbicide Ballistic Technology (HBT)

The lost (unfunded) opportunities for FY18:

- 1. New research and technologies for detecting ROD
- 2. New control methods for RLW
- 3. New control methods for coqui frog
- 4. New surveillance and control methods for Zika, Dengue and Malaria vectors
- 5. Progress for biological control on toilet brush ginger

Over 95% of the R&T proposals were submitted by local scientists representing the highest caliber of professionals in the public sector. These were all evaluated as meritorious with decisions not to fund based primarily on the lack of available funds. A State-of-the-Science R&T program for alien invasive species management would be fostered with support closer to the requested FY18 research request of \$5M, in addition to critical funds needed for prevention, control, and outreach projects. A total HISC appropriation of \$10M, with \$5M intended for investments in research and \$5M intended for subsidiary investments in early detection, rapid response (EDRR) of new targets while the majority of invasive species prevention, control and outreach, would become institutionalized programs with separate funding sources independent of the HISC proposal process.