BUDGET JUSTIFICATION

- B1. **Postdoctoral Researcher Salary**. Theoretical development will be coordinated by postdoc Andrew Rominger on the UC Berkeley campus. We are requesting 20 months of funding for a postdoc to perform the theoretical work. \$80,690
- B1. **Postdoctoral Researcher Salary**. Lab work (genomic) will be coordinated by postdoc Henrik Krehenwinkel on the UC Berkeley campus. We are requesting 20 months of funding for a postdoc to perform the molecular work. \$80,690
- B1. **Postdoctoral Researcher Salary**. Microbial work will be coordinated by Eion Brodie at the Lawrence Berkeley lab. We are requesting 20 months of funding for postdoc Javier Ceja Navarro to perform the microbial work. \$80,690
- B3. **Graduate Students** (Graduate Student Researchers, step IV, 1 full time in year 1. Jun Ying Lim will work for a year on the project, developing work on plants. He is based at Berkeley. \$21,917
- C. **Fringe**. Benefits calculated at a projected weighted amount, as follows, due to division of fiscal years and the start/end date of the project:

	FY17	FY18	FY19
Postdoc	21%	21%	21%
Grad/Undergrad	0.0%	0.0%	0.0%

D. Equipment

None requested

E1. Travel, Domestic

Fieldwork in Hawaii. To sample and collect populations and species of arthropods and other organisms. Airfare Hawaii \$750/trip, interisland flights \$90 (5 each), accommodation 15 days, \$20/ day. Vehicle \$100/ day. \$1,500 for each of 4 participants for first 2 years, one participant in 3rd year

Travel for co-PI Jonathan Chase from Germany. \$4000/ year for 4 years.

G1. **Materials and Supplies**. We are requesting funds for molecular and microbial work at the rate of \$100,000 for the first 2 years, \$20,000 for the third.

G6.Other direct costs:

Graduate Student Fees. (Year 1), \$15,733.

I. **Indirect Costs**. Under the new Indirect Cost Rate Agreement dated 6/29/12, rates are set by fiscal year. We applied the FY16 rate (57%) for Years 1-3. Indirect costs are calculated using the Modified Total Direct Cost (MTDC). MTDC excludes equipment over \$5000 and fee remission.

TOTAL: \$798,866

(additional funds will be requested for collaboratives at the University of Hawaii Hilo, and the University of Maryland, for a total budget of \$1,499,572)