USDA Forest Service, Pacific Southwest Research Station, Sudden Oak Death/*Phytophthora ramorum* Research Program

Fiscal Year 2011 funds to cooperators –$407,154

Continuing Projects (presented alphabetically by principal investigator's last name)

Episodic abiotic stress and ramorum blight in nursery ornamentals: impacts on symptom expression and chemical management of *Phytophthora ramorum* in Rhodedendron – Richard Bostock, UC-Davis - $70,308 (Note – Project to be conducted at the National Ornamentals Research Site at Dominican University of California)

Inoculum thresholds, sporulation, and tissue colonization associated with infection of western hemlock, larch, and Douglas-fir by *Phytophthora ramorum* - Gary Chastagner, Washington State University, Puyallup - $28,347

Research in support of sudden oak death containment and management in Western tanoak forests - Everett Hansen, Oregon State University; Alan Kanaskie, Oregon Department of Forestry and Ellen Michaels Goheen, USDA Forest Service, Forest Health Protection, Central Point, OR - $44,649

Variation in tanoak's resistance to *Phytophthora ramorum* – Matteo Garbelotto and Katy Hayden. UC-Berkeley - $33,000

Management of *Phytophthora ramorum* in tanoak and oak stands - Matteo Garbelotto, UC-Berkeley - $33,000; Ted Swiecki, Phytosphere Research -$14,193; Yana Valachovic, UC Cooperative Extension – Humboldt and Del Norte Counties - $10,100

Monitoring migration, population structure and evolution of the Sudden Oak Death pathogen *Phytophthora ramorum* in North America - N. J. Grunwald, USDA Agricultural Research Service, Corvallis and E. M. Hansen, Oregon State University - $20,000

Detecting and monitoring *Phytophthora ramorum* and other species of *Phytophthora* in forest streams in the Eastern USA - S. N. Jeffers and Jaesoon Hwang, Clemson University - $37,000

Global forest *Phytophthora* website - Jennifer Parke, Oregon State University - $21,011

Adaptive management of *Phytophthora ramorum* in the Big Sur Ecoregion: links between sudden oak death and fire, David Rizzo, UC-Davis -$19,000 and Ross Meentemeyer, University of North Carolina, Charlotte - $25,000

Efficacy of Sudden oak death adaptive management in Humboldt County – David Rizzo, UC Davis and Yana Valachovic, UC Cooperative Extension Humboldt and Del Norte Counties - $31,800

Accelerated breakdown of leaf litter naturally infected by *Phytophthora ramorum* and *P. kernoviae* as a method of disease management – Joan Webber and Sandra Denman, UK Forest Research; and Anna Maria Vettraino, University of Tuscia - $19,846

Agricultural Research Service, Corvallis and E. M. Hansen, Oregon State University - $58,935
Epidemiology of *Phytophthora ramorum* in tanoak forests - Everett Hansen, Oregon State University - $98,182
Detecting and monitoring *Phytophthora ramorum* and other species of *Phytophthora* in forest streams in the Eastern USA - S. N. Jeffers and Jaesoon Hwang, Clemson University - $36,900
Sudden oak death information synthesis and delivery – Douglas McCreary and Katie Palmieri, UC-Berkeley - $50,001
The role of elicitins in the pathogenesis and biology of *Phytophthora ramorum* – Daniel Manter, USDA Agricultural Research Service – Fort Collins; Everett Hansen and Jennifer Parke, Oregon State University - $87,789
Global forest *Phytophthora* website - Jennifer Parke, Oregon State University - $13,120
Adaptive management of *Phytophthora ramorum* in the Big Sur Ecoregion:
links between sudden oak death and fire, David Rizzo, UC-Davis -$96,450 and
Ross Meentemeyer, University of North Carolina, Charlotte - $67,256
Studies on the latency period of *Phytophthora ramorum* - Marko Riedel, Stefan Wagner and Sabine Werres, Julius Kühn Institute, Federal Research Centre for Cultivated Plants, Germany - $23,645