

**Project ICP continuation budget justification for  
USDA ARS Pollinating Insects Research Unit**

**A. Senior/Key Personnel**

Dr. Theresa Pitts-Singer, Dr. Jim Cane, and Dr. James Strange as leads for this project at the USDA ARS Pollinating Insects Research Unit (PIRU) and managers of personnel and activities of the projects at their institution and field sites, request no salary for the time spent on this project.

**B. Other Personnel**

1. *Post-doctoral researcher:* none

2. *Graduate Student*

\*A Utah State University Ph.D. Candidate will undertake implementation and evaluation of bee pollination efficiency and floral “pasture” plots with managed *Osmia* bees, tracking performance and productivity of both plants and bees. (\$15,500 + \$2,325 = \$17,825)

3. *Biological Science Aids (usually undergraduates):*

\*\*One student for 2.5 academic months for 20 hours per week, at \$10.72 per hour with 1.076% fringe benefits, for entering field data for sampling efforts, and for counting, shelling, and weighing nuts harvested for project and entering data. (\$2,144 + \$23 = \$2,167)

\*Fringe rates are based on the standard rates of Utah State University.

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**C. Equipment**

none

**D. Travel**

1. *Domestic Travel Costs:*

Travel to field sites in California (3 trips for 2 people) and Pennsylvania (2 trips for 1 person) are required to collect bee and plant data, to execute manipulated field trials, to sow bee forage plots, and to harvest crops.

Travel for ProjectICP meetings, plus at least one national or regional scientific/grower meetings are for requested for 2 people each for projects focused on almonds, raspberries, and pumpkins (6 total person traveling for meetings).

(Total: \$19,955)

**E. Participant support costs.** – None requested.

**F. Other Direct Costs**

1. *Materials and Supplies:*

Storage bags for collecting nuts for yield assessment, bee attractant for nesting materials (new patent-pending substance), flagging, aluminum marking tags, *Osmia* bees and their shipping, shipping for almonds, shelter stands, paper straw liners, and straw plugs, polystyrene nesting blocks, and microscopy supplies, plot preparation materials (seeds, solarizing plastic, and herbicides). (\$2,550)

2. *Publication Costs:*

Page charges for one publication in a peer-reviewed journal. (\$600)

3. *Consultant Services:* \*\*\*See note in the instructions for how to budget for consultant costs\*\*\*

4. *ADP/Computer Services:* n/a

5. *Subcontracts:*

Pacific Pollination Company is using their equipment and labor to handle all blue orchard bee management, including removing bees from the field, sorting them by treatments, storing them under prescribed thermal regimes, and collecting data on nut set, nest cell numbers, sex of bees, dead bees, other mortality, etc. and assists in nut harvest and data collection. (Consulting fee \$8,000, plus one skilled field technician for 40 hours per week at \$25.50 per hour for 3 months with 7.65% fringe benefits). (\$8,000 + \$12,240 + \$936 = \$21,176)

6. *Equipment of Facility Rental/User Fees:* none requested

7. *Alterations and Renovations:* none requested

8. *Graduate Student Tuition and Fees:* none requested

**G. Direct Costs Summary**

Federal \$64,273; Non-Federal \$0; Total (Fed + Non-Fed): \$64,273

**H. Indirect Costs**

A rate of 11.11% was used to calculate indirect costs.

Federal \$7,141; Non-Federal \$0; Total (Fed + Non-Fed): \$7,141

**I. Total Direct and Indirect Costs**

Federal \$71,414; Non-Federal \$0; Total (Fed + Non-Fed): \$71,414