

Please sign the ballot so that I know that I have received a valid ballot. \_\_\_\_\_

\_\_\_\_\_ I will be at the Hershey Meeting

\_\_\_\_\_ I do not plan to attend the Meeting

**SHAP RESEARCH COMMITTEE - First Ballot - January 7, 2019**

Total Requested = \$332,404.80      11 Continuing Projects = \$142,938.80      14 New Projects = \$189,466

- \_\_\_\_\_ 1. J. Schupp – Development of a High Density, Highly Mechanized, Pedestrian Production System  
\$10,691 (Continuing – Year 2 of 7)
- \_\_\_\_\_ 2. J. Schupp – Development of a High-Accuracy Digital Model for Orchard Sites, Improving Rootstock Performance with Terrain Analysis Using Drone Technology and Geographical Information Systems  
\$8,931 (New – 1 Year)
- \_\_\_\_\_ 3. J. Schupp – Blossom Thinning Pennsylvania Apples Using the Pollen Tube Growth Model  
\$8,789 (New – Year 1 of 2)
- \_\_\_\_\_ 4. J. Schupp – Crop Load Effects on High-Tannin Apples and Evaluation of American-Origin Hard Cider Varieties  
\$5,962 (New – 1 Year)
- \_\_\_\_\_ 5. R. Marini – Soil Amendments for Blueberry Plant Establishment and Variety Trial  
\$4,534 (Continuing – Year 5 of 5)
- \_\_\_\_\_ 6. R. Crassweller – Apple Rootstock and Cultivar Evaluations  
\$20,810 (Continuing – Year 4 of 6)
- \_\_\_\_\_ 7. R. Crassweller – Buy-and-Fly Orchard Management using Unmanned Aircraft (UA)  
\$16,000 (Continuing – Year 3 of 3)
- \_\_\_\_\_ 8. R. Crassweller – Third Generation Apple System Trials  
\$9,600 (Continuing – Year 2 of 5)
- \_\_\_\_\_ 9. R. Crassweller – Effects of Maintenance of Training Systems to a Hedgerow  
\$9,100 (Continuing – Year 2 of 5)
- \_\_\_\_\_ 10. G. Krawczyk – Utilizing the Samurai Wasp as a Potential Control Tool Against Brown Marmorated Stink Bug  
\$9,954 (Continuing – Year 2 of 2)
- \_\_\_\_\_ 11. G. Krawczyk – Utilization of Insecticide Treated Nets as an Alternative Method to Monitor and Manage Brown Marmorated Stink Bug  
\$28,777 (Continuing – Year 2 of 2)
- \_\_\_\_\_ 12. J. Kovac – Combating *Listeria Monocytogenes* Growth in Tree Fruit Packinghouse Biofilms  
\$16,486 (New – 1 Year)

- \_\_\_13. L. He – Branch and Fruit Accessibility for Mechanical Operations with Various Tree Canopies  
\$11,744 (New – 2 Year – Total Request \$ 23,488)
- \_\_\_14. L. He – A Sensor- Based Irrigation Test System for Apple Orchards  
\$13,244 (Continuing – Year 2 of 2)
- \_\_\_15. K. Peter – Completing the Picture: Characterizing Bitter Rot Fungal Isolates and Verification of Lab Results with Field Trials  
\$11,000(New – 1 Year)
- \_\_\_16. K. Peter – Optimizing Fire Blight Control Alternatives: Non-antibiotic Blossom Protection and Full Season Shoot Blight Management  
\$12,344 (New – 1 Year)
- \_\_\_17. K. Peter – Investigating and Understanding Different Sources for Fruit Rot Fungi in the Packhouse and Field to Better Control Postharvest Decay of Stored Apple Fruit  
\$16,500 (New – 1 Year)
- \_\_\_18. K. Peter – Investigating the Role of Viruses and Other Causes in Rapid Apple Decline  
\$25,044 (New – 1 Year)
- \_\_\_19. D. Choi – Evaluation of Effective Canopy Depths of Apple Trees for Optimal Machine Sensing Performance  
\$12,885 (Continuing – Year 2 of 2)
- \_\_\_20. M. Lopez- Uribe – Maximizing Pollination Services for Blueberry Production in Pennsylvania  
\$23,870 (New – 1Year)
- \_\_\_21. H. Medeiros – How Many Flowers Are There, Really? Autonomous Estimation of Flower Counts with Image Pairs  
\$20,200 (New – 1 Year)
- \_\_\_22. J. Chemeres – Harvest Quality Vision for Quantitative Fruit Assessment  
\$5,000 (New – 1 Year)
- \_\_\_23. C. Walsh – Monitoring and Utilizing Fruit Maturity to Improve Harvest and Storage Decisions of New Apple Cultivars and Reduce Storage Disorders of Honeycrisp  
\$7,343.80 (Continuing – Year 2 of 2)
- \_\_\_24. A. Nielsen – Investigating Codling Moth Phenology Model and Management  
\$12,515 (New – 2 Year)
- \_\_\_25. H. Gohil – Delayed Harvest and Extended Cold Storage of Evelynn and Redhaven Peaches  
\$11,081 (New – 1 Year)