**Babu Panthi, Ph.D.**

Postdoctoral Scholar, Oregon State University

Field Crops Entomology, Crop and Soil Science Department

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**EDUCATION**

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| --- | --- |
| 2016 – 2020 | **Ph.D. in Entomology**University of Florida, Gainesville, FL |
| 2013 – 2015 | **M.S. in Entomology** University of Florida, Gainesville, FL |
| 2007 – 2011 | **B.S. in Agriculture (minor in Entomology)**Tribhuvan University, Kathmandu, NP |

**RESEARCH EXPERIENCES**

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| 2020 – present | **Postdoctoral Scholar**Oregon State University, Crop and Soil Science DepartmentResearch projects:* Mating disruption to manage casebearer moth in red clover seed
* Phenology models to predict flights of casebearer moth in red clover seed
* Screening varieties with endophyte-mediated resistance against sod webworm
* Surveying for entomopathogenic nematodes of sod webworm in grass seed fields
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| 2016 – 2020 | **Graduate Research Assistant**University of Florida, Gulf Coast Research and Education CenterResearch projects:* *Spatial and temporal distribution of chilli thrips in strawberries and blueberries*
* *Threshold determination and sampling plan development of chilli thrips*
* *Assessment of short-range movement of chilli thrips in strawberries*
* *Optimization of insecticide application in strawberries for managing chilli thrips*
* *Field trials to evaluate products against chilli thrips in strawberries and blueberries*
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| 2015 – 2016 | **Research Assistant**University of Florida, Entomology and Nematology DepartmentResearch projects:* *Biological control of flower thrips in blueberries using predatory mite and minute pirate bug*
* *Monitoring the effect of cover crops on above-ground pest and beneficial insects in organic zucchini using pan trap and in-situ observation*
* *Evaluating the effect of biopesticides and strawberry cultivars on twospotted spider mite in organic strawberry*
* *Evaluating the effect of companion crops and reduced-risk insecticides in diamondback moth in cabbage*
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| 2015 | **Research Assistant**University of Florida, Agronomy DepartmentProjects:* *Planting and crop maintenance, data collection, harvesting, and seed processing in wheat and oat breeding program*
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| 2013 – 2015 | **Graduate Research Assistant**University of Florida, Tropical Research and Education CenterResearch projects:* *Seasonal abundance, within-field, and within-plant distribution of melonworm in yellow squash*
* *Adult ovipositional preference and larval preference, survivability, and growth response of melonworm in yellow squash, zucchini, cucumber, and watermelon*
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| 2012 – 2013 | **Research Assistant**Nepal Agricultural Research Council, Entomology DivisionResearch projects:* *Evaluated the efficacy of several plant extracts against storage grain pests (grain weevil and grain moth) in maize*
* *Evaluated the efficacy of biological and chemical pesticides against cabbage aphid in cauliflower*
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| 2011 | **Assistant**Tribhuvan University, Rampur Campus, Chitwan, NPResearch projects:* *Tested the efficacy of biological and chemical insecticides against Epilachna beetle in bitter gourd*
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**PUBLICATIONS**

**Refereed Journal Articles**

2020  **Panthi, B.,** J. Renkema, S. Lahiri, and O. Liburd. The short-range movement of *Scirtothrips dorsalis* (Thysanoptera: Thripidae) and rate of spread of feeding injury among strawberry plants. Environmental Entomology, nvaa149.

2017 **Panthi, B.,** D. Seal, G. Nuessly, and J. Capinera. Seasonal abundance and spatial distribution of melonworm, *Diaphania hyalinata* L. (Lepidoptera: Crambidae) on yellow squash in southern Florida. Florida Entomol. 100(3): 647-652

2016 **Panthi, B.,** D. Seal, J. Capinera, G. Nuessly, and C. Martin. Host selection, growth, and survival of melonworm, *Diaphania hyalinata* L. (Lepidoptera: Crambidae) on four cucurbit crops under laboratory conditions. Environ. Entomol. 45(4): 945-951

**Conference Proceedings**

2020 **Panthi, B.** and J. Renkema. Managing *Scirtothrips dorsalis* Hood (Thysanoptera: Thripidae) in Florida strawberry with flupyradifurone. In: Proceedings, XI North American Strawberry Symposium, 3-6 January 2019, Orlando, FL. Int. J. Fruit Science. 0:1-11

**Scientific Reports**

2020 **Panthi. B.,** O. Liburd, S. Lahiri, and E. Rhodes. Efficacy test of various insecticides to control *Scirtothrips dorsalis* in southern highbush blueberries. Arthropod Manag. Tests. 45(1): 1-3

2020 Lahiri, S. and **B. Panthi.** Insecticide efficacy for chilli thrips management in strawberry, 2019. Arthropod Manag. Tests. 45(1): 1-2

**Extension Publications**

2020 Liburd, O., **B. Panthi,** and D. Phillips. 2020. Chilli thrips on blueberries in Florida. EDIS. University of Florida. ENY-2053. https://edis.ifas.ufl.edu

2019 **Panthi, B.,** O. Liburd, and J. Renkema. 2019. *Echinothrips americanus* Morgan. Featured Creatures, University of Florida, Publication Number: EENY-730. https://edis.ifas.ufl.edu

2018 **Panthi, B.,** B. Evans, and J. Renkema. 2018. False chinch bug. Featured Creatures, University of Florida, Publication Number: EENY-706. https://edis.ifas.ufl.edu

**Thesis and Dissertation**

2020 **Panthi, B.** PhD Dissertation: Ecology, behavior, and management of chilli thrips, *Scirtothrips dorsalis* Hood (Thysanoptera: Thripidae), in Florida strawberry and blueberry

2015 **Panthi, B.** MS Thesis: Biology and population dynamics of melonworm, *Diaphania hyalinata* L. (Lepidoptera: Crambidae), in Florida cucurbits

**Manuscripts in Preparation**

*In prep* **Panthi, B.,** J. Renkema, S. Lahiri, and O. Liburd. Determining the critical density, the spatial distribution, and a sequential sampling plan for *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida strawberry

*In prep* **Panthi, B.,** J. Renkema, A. Abd-Elrahman, S. Lahiri, and O. Liburd. Spatio-temporal distribution and sampling plan of *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida blueberry

*In prep* **Panthi, B.,** J. Renkema, S. Lahiri, and O. Liburd. Distribution, host plants, plant damage, and management of *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida blueberry

**AWARDS AND HONORS**

2020 Megha Parajulee SONE Student Award for Academic Excellence, Society of Overseas Nepalese Entomologists

2015 Graduate student of the year award. Tropical Research and Education Center, University of Florida, Homestead, Florida

2014 Dade County AgriCouncil Seymour Goldweber Scholarship award, Homestead, Florida

2007 – 2011 Merit Scholarship for entire duration of B.S. Agriculture, Tribhuvan University, Nepal

**GRANTS**

**Research Support**

2021 Kaur, N., B. Panthi. Exploration of native entomopathogenic nematodes associated with sod webworm, *Chrysoteuchia topiaria* (Zeller) (Lepidoptera: Crambidae) in Oregon grass seed crops. Western-IPM center. Grant award: $29,961, Oregon State University

2021 Kaur, N., B. Panthi. Leveraging innovative insect pest management approaches for the management of red clover casebearer moth in Oregon’s clover seed crops. Agricultural Research Foundation. Grant award: $14,981, Oregon State University

2019 Panthi, B., J. Renkema, S. Lahiri, and O. Liburd. Determining when to spray insecticide after scouting for *Scirtothrips dorsalis* Hood in Florida strawberry. Florida Entomological Society Student Minigrant. Grant award: $250, University of Florida

2017 Panthi, B. and J. Renkema. Developing chilli thrips sampling plan for Florida strawberries. Southern Sustainable Agriculture Research and Education, (SARE) Graduate Student Grant Award: $16,170 (proposal submitted, not funded), University of Florida

**Travel Support**

2019 Gulf Coast Research and Education Center Student Travel Grant ($250)

2019 Florida Entomological Society Student Travel Grant ($150)

2017 Florida Entomological Society Student Travel Grant ($150)

**PRESENTATIONS**

**Scientific Presentations**

2021 **Panthi, B.,** L.G. Van Slambrook, E.C. Verhoeven, J. M. Duringer, N. Kaur. Screening grass cultivars for resistance against sod webworm. Virtual. 80th Annual Pacific Northwest Insect Management Conference. 5 Jan. Paper

2020 **Panthi, B.** Ecology, behavior, and management of chilli thrips in Florida strawberry. ***Invited speaker.*** SONE Webinar Series, Society of Overseas Nepalese Entomologists. 6 Dec. Paper

2020 **Panthi, B.,** S. Lahiri, J. Renkema, and O. Liburd. Determining the critical density, the spatial distribution, and a sequential sampling plan for *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida strawberry. 2020 Entomology Virtual Annual Meeting, Entomological Society of America. 11-25 Nov. Paper

2020 **Panthi, B.,** S. Lahiri, J. Renkema, and O. Liburd. Biology and management of chilli thrips in strawberry. 2020 Entomology Virtual Annual Meeting, Entomological Society of America. 11-25 Nov. Infographic

2020 Lahiri, S. and **B. Panthi.** Thrips management in Florida strawberries. Southeast Regional Fruit and Vegetable Conference, Savannah, Georgia, 9-12 Jan. Paper

2019 **Panthi, B.,** S. Lahiri, J. Renkema, and O. Liburd. The short-range dispersal of chilli thrips, *Scirtothrips dorsalis,* among strawberry plants. AgExpo 2019, Gulf Coast Research and Education Center, University of Florida, Wimauma, Florida. 21 Nov. Poster

2019 **Panthi, B.,** S. Lahiri, J. Renkema, and O. Liburd. Assessing distribution and critical density of *Scirtothrips dorsalis* in Florida strawberry and blueberry. Entomological Society of America Annual Meeting, St. Louis, Missouri, 16-21 Nov. Paper

2019 Lahiri, S. and **B. Panthi.** Current pest management practices and challenges in winter strawberry production in Florida. Entomological Society of America Annual Meeting, St. Louis, Missouri, 16-21 Nov. Paper

2019 **Panthi, B.,** S. Lahiri, J. Renkema, and O. Liburd. Optimizing spray timing for chilli thrips management in Florida strawberry. Science Communication Seminar. Gulf Coast Postdoc and Student Association, Gulf Coast Research and Education Center, University of Florida, Wimauma, Florida. 26 Sep. Paper

2019 **Panthi, B.**, S. Lahiri, J. Renkema, and O. Liburd. Determining when to spray insecticide after scouting for *Scirtothrips dorsalis* Hood in Florida strawberry. Annual meeting of Florida Entomological Society in Jupiter, Florida. 21-23 Jul. ***Invited speaker***. Symposium on: “Uncharted Territory: Entomology in Support of Florida’s Emerging Crops and Production.” Paper

2019 **Panthi, B.** and J. Renkema.Estimating aggregation and dispersion parameters of chilli thrips, *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida berries. 2019 Graduate Student Research Day, Gulf Coast Postdoc and Student Association, Gulf Coast Research and Education Center, University of Florida, Wimauma, Florida, 4 Apr. Poster

2019 **Panthi, B.** and J. Renkema.Behavior and management of chilli thrips in Florida strawberry. North American Strawberry Symposium. Orlando, Florida, 3-6 Feb. Paper

2018 **Panthi, B.** and J. Renkema.Assessing spatial distribution of chilli thrips, *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida berries. 92nd Annual Meeting of the Southeastern Branch, Entomological Society of America. Orlando, Florida, 4-7 Mar. ***Invited speaker***. Symposium on: “Bridging the Gap in Berry Production and Research in the Southeast: Updates on the Latest Issues.” Paper

2017 **Panthi, B.** and J. Renkema.Assessing spatial distribution of chilli thrips, *Scirtothrips dorsalis* (Thysanoptera: Thripidae) in Florida berries. Entomological Society of America Annual Meeting, Denver, Colorado, 4-8 Nov. Poster

2017 Renkema, J., S. Devkota, **B. Panthi**, O. Liburd, and J. Funderburk. Insecticide rotations for thrips (Thysanoptera: Thripidae) management in Florida strawberry. Entomological Society of America Annual Meeting, Denver, Colorado, 4-8 Nov. Paper

2017 **Panthi, B.** and J. Renkema.Chilli thrips, movement among potted strawberry plants. 100th annual meeting of Florida Entomological Society in San Juan, Puerto Rico. 16-20 Jul. Paper

2016 **Panthi, B.,** D. Seal, G. Nuessly, and J. Capinera. Host Selection, growth, and survival of melonworm (Lepidoptera: Crambidae) on four cucurbit crops under laboratory conditions. 90th Annual Meeting of the Southeastern Branch, Entomological Society of America. Raleigh, North Carolina, 13-16 Mar. Poster

2014 **Panthi, B.,** D. Seal, G. Nuessly, and J. Capinera. Seasonal abundance and distribution of melonworm *Diaphania hyalinata* L. (Lepidoptera: Crambidae) in cucurbits. 97th Annual Meeting of Florida Entomological Society. Jupiter, Florida. 3-6 Aug. Paper

2014 **Panthi, B.,** D. Seal, G. Nuessly, and J. Capinera. Growth response of melonworm, *Diaphania hyalinata* Linnaeus (Lepidoptera: Crambidae) to 4 cultivars of cucurbit grown in South Florida. 127th Annual Meeting of Florida State Horticultural Society. Clearwater Beach, Florida. 1-3 Jun. Paper

**TEACHING EXPERIENCE**

**Mentoring and supervision**

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| 2019 – 2020 | Gagandeep Kaur (PhD student), Joseph Montemayor (MS student), Chastity Perry (DPM student), Armand Yambisa (Undergraduate intern), Marissa Cassaway and Daniel Cabral (Lab technicians). Identification and rearing methods of chilli thrips and twospotted spider mites, operation of camera-mounted microscope, growth chambers, data loggers, Potter spray tower, and CO2-powered backpack sprayer, planning field surveys for chilli thrips sampling, calculation and application of insecticide formulations, bioassays, experimental design, chilli thrips feeding injury scoring, and collection, curation, and analysis of data. Small Fruits IPM lab, University of Florida |
| 2019 | Ryan Batts (Lab technician). Operation of growth chambers and data loggers and analysis of images of strawberry plant canopies using ImageJ software. University of Florida |
| 2018 – 2020 | Santosh Sanjel (PhD Student), Jariani Jani (PhD student), Jaqueline Coburn (MS student). Data carpentry and analysis and use of JMP software to produce presentable figures. University of Florida |
| 2017 – 2018 | Xinjie Yu (MS student). Disease scoring, image analysis using ImageJ software, and curation and analysis of data for screening of resistant pomegranate cultivars to leaf spot disease. University of Florida |
| 2015 | Zulaikha Mazlan (MS student). Experimental design, insect identification, and collection and curation of data for managing diamond back moth in cabbage with companion crops and reduced-risk insecticides. University of Florida |

**LEADERSHIP AND SERVICE**

**Professional Memberships**

2020 – present Association of Nepalese Agricultural Professionals of Americas (NAPA)

2014 – present Society of Overseas Nepalese Entomologists (SONE)

2014 – present Florida Entomological Society (FES)

2012 – present Entomological Society of America (ESA)

**Professional Services** (c= committee, w= workshop and seminar, m= meeting, v= volunteer)

2020 – present President, Society of Overseas Nepalese Entomologistsc

2019 – 2020 President-Elect, Society of Overseas Nepalese Entomologistsc

2019 Organizer and Moderator, ESA Organized Meeting, Society of Overseas Nepalese Entomologists Annual Meeting, St. Louis, MOm

2019 Organizer, Graduate Student Research Day, Student Poster Competition, Gulf Coast Postdoc and Student Association, University of Florida

2019 Organizer, Workshop on “Scientific Poster and Abstract Writing: Translating Science Across Different Audiences”. Gulf Coast Postdoc and Student Association, University of Floridaw

2018 – 2019 Treasurer, Society of Overseas Nepalese Entomologistsc

2018 – 2019 Secretary, Nepalese Student Association, University of Floridac

2018 Organizer and Moderator, Seminar on “Three Years in Industry: Observations of a Reformed Graduate Student”, Nepalese Student Association and Society of Overseas Nepalese Entomologists, University of Floridaw

2018 Organizer, ESA Organized Meeting, Society of Overseas Nepalese Entomologists Annual Meeting, Vancouver, Canadam

2018 Organizer, Workshop on “Understanding your Evolving Role: Leadership and Teamwork in the Workplace”. Gulf Coast Postdoc and Student Association, University of Floridaw

2018 Organizer, Workshop on “The Science of Science Communication”. Gulf Coast Postdoc and Student Association, University of Floridaw

2017 – 2018 Organizer, GCPSA Bi-monthly Research Seminar Series, Gulf Coast Postdoc and Student Association, University of Floridaw

2017 – 2018 Marketing and Communication Officer, Gulf Coast Postdoc and Student Association, University of Floridac

2017 – 2018 Webmaster and Communication Officer, Society of Overseas Nepalese Entomologistsc

2017 – 2018 Executive Committee Member, Nepalese Student Association, University of Floridac

2016 – 2017 Executive Committee Member, Society of Overseas Nepalese Entomologistsc

2012 Editor, Graduate's Profile 2011 published by Institute of Agriculture and Animal Science, Tribhuvan University, Nepalv

2011 Coordinator, a research on “Performance of different rice varieties under direct seeded rice technique at inner terai region of Nepal” conducted at Institute of Agriculture and Animal Science, Tribhuvan University, Nepalv

**Community Service and Outreach**

2016 – 2020 Diagnosis of insect pests and damage on plant samples sent to Plant Diagnostics Clinic, Gulf Coast Research and Education Center, University of Florida

2018 Middle School STEM Tour, Gulf Coast Research and Education Center, University of Florida

2017 Field Day, Florida Strawberry Growers Association, Dover, FL

2017 GCREC AgExpo 2017, Gulf Coast Research and Education Center, University of Florida

2016 Entomology Booth, Florida State Fair, Tampa, FL

2015 Grower’s Field Day, Tropical Research and Education Center, University of Florida

**Certifications, Workshops, and Training**

2019 – present Pesticide Applicator License (Certified). Florida Department of Agriculture and Consumer Services. University of Florida

2019 UF/IFAS Grantsmanship Workshop. University of Florida

2019 Workshop on Scientific Poster and Abstract Writing: Translating Science Across Different Audiences, Gulf Coast Research and Education Center, University of Florida

2018 Workshop on Understanding your Evolving Role: Leadership and Teamwork in the Workplace, Gulf Coast Research and Education Center, University of Florida

2018 Workshop on The Science of Science Communication, Gulf Coast Research and Education Center, University of Florida

2015 Workshop on Strategy and Practical Approaches to Managing Vegetable Pests, UF/IFAS Miami-Dade County Extension, University of Florida

**Designing**

2017 Logo design of Gulf Coast Postdoc and Student Association, University of Florida

2017 Graphic design of T-shirt for promoting Nepalese Student Association, University of Florida

2014 Logo design of Nepalese Student Association, University of Florida

2010 Graphic design of T-shirt to represent students of Paklihawa Campus of Tribhuvan University