SULAV PAUDEL, PhD

Senior Scientist — Entomology & International Development

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EDUCATION

2019 — PhD (Dual-Title), Entomology & International Agriculture and Development, Pennsylvania State University, USA

2013 — MSc (Dual-Title), Entomology & International Agriculture and Development, Pennsylvania State University, USA

2009 — BSc Agricultural Sciences (Entomology major), Tribhuvan University, Nepal

PROFESSIONAL EXPERIENCE

- **2023–Present** Senior Scientist (Entomology & International Development), Bioeconomy Science Institute (ex- AgResearch Ltd), New Zealand
- **2022–2023** Scientist (Entomology & International Development), AgResearch Ltd, New Zealand
- **2020–2022** Post-doctoral Scientist, AgResearch Ltd, New Zealand
- **2018–2019** Consultant, Centre for Agriculture and Bioscience International (CABI), UK
- **2013–2016** Integrated Pest Management Program Manager, International Development Enterprises, Nepal
- **2009–2013** Earlier research, advisory and teaching roles in Nepal, Bhutan, Brazil, Bangladesh and Russia, incl. Adjunct Assistant Professor, HICAST, Nepal

RESEARCH FOCUS

Applied entomology and integrated pest management (IPM) / biological control of economically significant pests, with field experience across Bangladesh, Bhutan, Cambodia, Nepal, New Zealand, South Pacific Island countries and the USA. Currently leads coconut rhinoceros beetle surveillance and biocontrol programmes in the South Pacific (including AI-based remote surveillance tools) and pest risk analysis for New Zealand forage crops using R.

13 years of research experience | 24 journal articles, 3 books/chapters, 5 conference proceedings

SELECTED GRANTS & FELLOWSHIPS

- **2023 —** Project Leader, USAID-funded coconut rhinoceros beetle management project, Samoa (NZD 385,000)
- **2016 —** USAID Graduate Study Fellowship (PhD) (USD 187,725)
- **2013 —** Principal Investigator, USAID Integrated Pest Management Associate Award, Nepal (USD 327,812)
- **2013 —** Principal Investigator, IPM Innovation Lab, Virginia Tech, Nepal (USD 303,994)
- **2011 —** USAID Graduate Study Fellowship (Masters) (USD 150,000)

SELECTED AWARDS & HONOURS

National Science Foundation Award, Colorado State University (2019) • Michael E. Duke Memorial Award in Entomology, Penn State (2019) • U.S. Borlaug Fellow in Global Food Security, Purdue University (2017) • Next Generation Delegate, Chicago Council on Global Affairs (2018)

PROFESSIONAL MEMBERSHIPS

Founding Member & Convenor, Plant Protection in International Development NZ (2023–) • NZ Plant Protection Society • International Association of Plant Protection Society • Entomological Society of America • International Society of Chemical Ecology

SELECTED PUBLICATIONS

(from 24 peer-reviewed journal articles; full list available on request)

- Paudel, S., Pakoawia, J., Ero, M., & Marshall, S.D.G. (2024). A tiny island and a giant beetle: a fight to save coconut palms in Vanuatu. *American Entomologist* 70(1), 32–35.
- Paudel, S., Jackson, T.A., Mansfield, S., Ero, M., & Marshall, S.D. (2023). Use of pheromones for monitoring and control strategies of coconut rhinoceros beetle: a review. *Crop Protection* 150, 106400.
- Paudel, S., & Jackson, T.A. (2023). Tracking potential biosecurity incursions using publicly available images: a case of coconut rhinoceros beetle. *Journal of Applied Entomology* 147(5–6), 487–494.
- Paudel, S., Marshall, S.D., Richards, N.K., Hazelman, G., Tanielu, P., & Jackson, T.A. (2022). Coconut rhinoceros beetle in Samoa: review of a century-old invasion and prospects for control in a changing future. *Insects* 13(5), 487.
- Paudel, S., Mansfield, S., Villamizar, L.F., Jackson, T.A., & Marshall, S.D. (2021). Can biological control overcome the threat from newly invasive coconut rhinoceros beetle populations? A review. *Annals of the Entomological Society of America* 114(2), 247–256.
- Paudel, S., Felton, G.W., & Rajotte, E.G. (2022). Anti-herbivore resistance changes in tomato with elevation. *Journal of Chemical Ecology* 48(7–8), 641–651.
- Paudel, S., Kandel, P., Bhatta, D., Pandit, V., Felton, G.W., & Rajotte, E.G. (2021). Insect herbivore populations and plant damage increase at higher elevations. *Insects* 12(12), 1129.
- Paudel, S., Lin, P.A., Hoover, K., Felton, G.W., & Rajotte, E.G. (2020). Asymmetric responses to climate change: temperature differentially alters herbivore salivary elicitor and host plant responses to herbivory. *Journal of Chemical Ecology* 46(9), 891–905.
- Paudel, S., Sah, L.P., Devkota, M., Poudyal, V., Prasad, P.V., & Reyes, M.R. (2020). Conservation agriculture and integrated pest management practices improve yield and income while reducing labor, pests, diseases and chemical pesticide use in smallholder vegetable farms in Nepal. *Sustainability* 12(16), 6418.
- Paudel, S., Lin, P.A., Foolad, M.R., Ali, J.G., Rajotte, E.G., & Felton, G.W. (2019). Induced plant defenses against herbivory in cultivated and wild tomato. *Journal of Chemical Ecology* 45(8), 693–707.