

## **STUDENT CO-AUTHORED PUBLICATIONS IN PEER-REVIEWED JOURNALS AND BOOKS**

(2004-2016)

\*=COA undergraduate student author; \*\*=former COA undergraduate student, ^=SJSU graduate student

### **2017**

30. Medeiros, I. D.\*, Mathieson, A. C., and N. Rajakaruna. Heavy Metals in Seaweeds from a Polluted Coastal Maine Estuary. *Rhodora* (in review)
29. Urban, A. J.\*\*\*, Mittelhauser, G. H., Dickinson, M.\*\*\*, and N. Rajakaruna. The Alpine Vascular Plants of Baxter State Park, Maine, USA. *Rhodora* (accepted pending revision; undergraduate senior project of Abbe Urban)

### **2016**

28. Negoita, L\*\*, Dickinson, M.\*\*\*, Mittelhauser, G. H. and Rajakaruna, N. 2016. A Comparative Study of the Flora and Soils of Great Duck and Little Duck Islands, Maine, USA. *Rhodora* 118: 46-85 ([PDF](#); undergraduate senior project of Luka Negoita)
27. Stern, M.\*\*\*, Medeiros, I. D.\*, Negoita, L.\*\*\*, and N. Rajakaruna. 2016. Limestone flora of the Simonton Corner Quarry Preserve, Rockport, Maine, USA. *Rhodora* 118: 206-226 (in press; undergraduate senior project of Margaret Stern; [Supplementary Table](#))
26. Boyd, R. S., Krell, N. T.\*, and Rajakaruna, N. 2016. Extreme Environments. In: [Oxford Bibliographies in Ecology](#). Ed. David Gibson. New York: Oxford University Press.
25. Trau, M.\*\*\*, Owings, R.\*\*\*, and N. Rajakaruna. 2016. Implementing Traditional Ecological Knowledge in Conservation Efforts. In *Plant Biodiversity: Monitoring, Assessment and Conservation* (A. A. Ansari and S. S. Gill Eds.). CABI (in press; [proofs](#))

### **2015**

24. Medeiros, I. D.\*, Rajakaruna, N. and Alexander, E. B. 2015. Gabbro Soil-Plant Relations in the California Floristic Province. *Madrono* 62: 75-87 ([PDF](#))
23. Gall, J. E.\*\*\*, Boyd R. S., and N. Rajakaruna. 2015. Transfer of heavy metals through terrestrial food webs: A review. *Environmental Monitoring and Assessment* 187: 201 ([PDF](#))

## 2014

22. Rajakaruna, N., R. S. Boyd, and T. B. Harris\*\*. 2014. Synthesis and Future Directions: What have harsh environments taught us about ecology, evolution, conservation and restoration. In *Plant Ecology and Evolution in Harsh Environments*. Pp. 393-409. Nova Science Publishers, Inc., NY, USA ([PDF](#))
21. Medeiros, I. D.\*, Fryday, A. M., and N. Rajakaruna. 2014. Additional lichen records and minerological data from metal-contaminated sites in Maine. *Rhodora* 116: 323-347 ([PDF](#))
20. Rajakaruna, N., R. S. Boyd, and T. B. Harris\*\*, eds. (2014). [\*Plant Ecology and Evolution in Harsh Environments\*](#). Nova Science Publishers, Inc., NY, USA. 426p
19. Mansfield, M.\*, Pope, N.\*\*, Mittlehauser, G., and N. Rajakaruna. 2014. Diversity and Soil-Tissue Elemental Relations of Vascular Plants of Callahan Mine, Brooksville, Maine, USA. *Rhodora* 116: 283-322 ([PDF](#); undergraduate senior project of Maggie Mansfield; [Supplementary Table](#))
18. Barton, J.\*, Ciccotelli, B.\*\*, Gall, J. E.\*, Olday, F. C., Connery, B., T. B. Harris\*\*, A. M. Fryday, and N. Rajakaruna. 2014. Lichens of six vernal pools in Acadia National Park, ME, USA. *Evansia* 31: 31-39 ([PDF](#); undergraduate senior project of Jason Barton)
17. Neilson, S.\*\* and N. Rajakaruna. 2014. Phytoremediation of Agricultural Soils: Using plants to clean metal-contaminated arable lands. In: [\*Phytoremediation: Management of Environmental Contaminants\*](#), pp. 159-168, Eds. A. A. Ansari, S. S. Gill, G. R. Lanza, and L. Newman. Springer ([PDF](#)).

## 2013

16. Gall, J. E.\* and N. Rajakaruna. 2013. The physiology, functional genomics, and applied ecology of heavy metal-tolerant Brassicaceae In: [\*Brassicaceae: Characterization, Functional Genomics and Health Benefits\*](#) (Ed. Minglin Lang), pp. 121-148. Nova Science Publishers, Inc., NY, USA ([PDF](#))
15. Pope, N.\*\*, Fong, M.^, Boyd, R., and N. Rajakaruna. 2013. The role of elevation and soil chemistry in the distribution and ion accumulation of floral morphs of *Streptanthus polygaloides* Gray (Brassicaceae), a Californian nickel hyperaccumulator. *Plant Ecology and Diversity* 7: 421-432 ([PDF](#); [Supplementary Material](#))

## 2012

14. Yost, J. M., Barry, T. ^, Kay, K.M. and **N. Rajakaruna**. 2012. Edaphic adaptation maintains the coexistence of two cryptic species on serpentine soil. *American Journal of Botany* 99 (5): 890-897. ([PDF](#))
13. Harris, T.B.\*\*\*, N. Rajakaruna, S.J. Nelson, and P.D. Vaux. 2012. Stressors and Threats to the Flora of Acadia National Park, Maine: Current Knowledge, Information Gaps, and Future Directions. *Journal of the Torrey Botanical Society* 139: 323-344 ([PDF](#))
12. Rajakaruna, N., Knudsen, K., Fryday, A., O'Dell, R. E., Pope, N.\*\*, Olday, F. C., and S. Woolhouse^. 2012. Investigation of the importance of rock chemistry for saxicolous lichen communities of the New Idria serpentinite mass, San Benito County, California, USA. *The Lichenologist* 44: 695-714, DOI: <http://dx.doi.org/10.1017/S0024282912000205> ([PDF](#))
11. Davoodian, N.\*, J. Bosworth\*, and N. Rajakaruna. 2012. Mycorrhizal colonization of *Hypericum perforatum* L. (Hypericaceae) on adjacent serpentine and granite outcrops on the Deer Isles, Maine, USA. *Northeastern Naturalist* 19: 517-526 ([PDF](#); undergraduate senior project of Naveed Davoodian)
10. Neilson, S.\*\* and N. Rajakaruna. 2012. Roles of rhizospheric processes and plant physiology in phytoremediation of contaminated sites using oilseed Brassicas. In: Anjum N. A., Ahmad I., Pereira M. E., Duarte A. C., Umar S., Khan N. A. (Eds.) *The Plant Family Brassicaceae: Contribution Towards Phytoremediation*, pp. 313-330. Environmental Pollution Book Series, Vol. 21, Springer (Science + Business Media), Dordrecht, The Netherlands ([PDF](#))

## 2011

9. Rajakaruna, N., T. B. Harris\*, S. Clayden, A. Dibble, and F. S. Olday. 2011. Lichens of Callahan Mine, a copper and zinc-enriched Superfund site in Brooksville, Maine, U.S.A. *Rhodora* 113: 1-31 ([PDF](#))
8. Ciccotelli, B.\*, T. B. Harris\*, B. Connery, and N. Rajakaruna. 2011. A preliminary study of the vegetation of vernal pools of Acadia National Park, Mount Desert Island, Maine, USA. *Rhodora* 113: 260-279 ([PDF](#); undergraduate senior project of Brett Ciccotelli)

## 2010

7. Pope, N.\*, Harris, T. B.\*, and N. Rajakaruna. 2010. Vascular plants of adjacent serpentine and granite outcrops on the Deer Isles, Maine, USA. *Rhodora* 112:105-141. ([PDF](#); undergraduate senior project of Nate Pope)

## 2009

6. Harris, T. B.\* and N. Rajakaruna. 2009. *Adiantum viridimontanum*, *Aspidotis densa*, *Minuartia marcescens*, and *Symphyotrichum rhiannon*: Additional Serpentine Endemics from Eastern North America. *Northeastern Naturalist* 16 (5): 111-120. ([PDF](#))
5. Rajakaruna, N., N. Pope\*, J. Perez-Orozco\*, and T. B. Harris\*. 2009. Ornithocoprophilous Plants of Mount Desert Rock, a Remote Bird-Nesting Island in the Gulf of Maine, USA. *Rhodora* 111: 417-448. ([PDF](#))
4. Rajakaruna, N., T. B. Harris\*, and E. B. Alexander. 2009. Serpentine geocology of eastern North America: a review. *Rhodora* 111:21-108. ([PDF](#))
3. Briscoe, L. R. E.\*, Harris, T. B.\* Dannenberg, E.\*, Broussard, W.\*, Olday, F. C., and N. Rajakaruna. 2009. Bryophytes of adjacent serpentine and granite outcrops on the Deer Isles, Maine, USA. *Rhodora* 111:1-20. ([PDF](#); undergraduate senior project of Laura Briscoe)

## 2007

2. Harris, T. B.\*, Olday, F. C., and N. Rajakaruna. 2007. Lichens of Pine Hill, a peridotite outcrop in Eastern North America. *Rhodora* 109: 430-447. ([PDF](#); undergraduate senior project of Tanner Harris)

## 2006

1. Rajakaruna, N., Tompkins, K. M.\*, and P. G. Pavicevic.\* 2006. Phytoremediation: An affordable green technology for the clean-up of metal contaminated sites in Sri Lanka. *Ceylon Journal of Science* 35: 25-39. ([PDF](#))

## **STUDENT CO-AUTHORED CONFERENCE PRESENTATIONS**

(2004-2015)

\*=COA undergraduate student author; \*\*=former COA student; ^=SJSU graduate student

presenter in **bold**

## **2016**

**Medeiros, I. D.** and N. Rajakaruna. 2016. Serpentinite Outcrops Do Not Support a (Particularly) Distinctive Biota in Western Massachusetts. Paper to be presented at the Botanical Society of America Meeting. Savannah, GA, USA. July 30-August 3.

**Medeiros, I. D.** and N. Rajakaruna. 2016. Serpentinite Outcrops in Massachusetts: A Botanical and Ecological Overview. Paper presented at the 2016 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 22-24.

**Medeiros, I. D.** and N. Rajakaruna. 2016. Documenting the Rocks, Soils, and Biota of Serpentinite Outcrops in Western Massachusetts. Poster presented at the Geological Society of Maine 2016 Spring Meeting. University of Maine, Orono, ME, USA. April 1. *Honorable Mention.*

**Medeiros, I. D.** and N. Rajakaruna. 2016. Documenting the rocks, soils, and biota of serpentinite outcrops in western Massachusetts. Poster presented at the Northeastern Section – 51st Annual Meeting of the Geological Society of America. Albany, NY, USA. March 21-23.

## **2015**

**Samuel, E. M.\***, Porter, D., Munson, T., and N. Rajakaruna. 2015. Mycoremediation in the face of anthropogenic environmental damage. Poster to be presented at the 2015 New England Botanical Club Conference. Northampton, Massachusetts, USA. June 5-7.

**Samuel, E. M.\***, Porter, D. and N. Rajakaruna. 2015. Mycoremediation in the face of anthropogenic environmental damage. Poster to be presented at the 2015 Mycological Society of America Meeting. Edmonton, Alberta, Canada. July 25-29.

**Medeiros, I.D.\*** and N. Rajakaruna. 2015. Research in Progress: Documenting the Serpentine Biota of Massachusetts. Poster to be presented at the NEBC 120th Anniversary Research Conference. Smith College, Northampton, Massachusetts, USA. June 5-7

**Excoffier, P.\***, Olday, F. C., and N. Rajakaruna. 2015. Vernal Pool Bryophytes of Acadia National Park, Maine. Poster to be presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

**Medeiros, I.D.\*** and N. Rajakaruna. 2015. Research in Progress: Documenting the Serpentine Biota of Massachusetts. Poster to be presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

**Krell, N. T.\***, Dawson, H. R.\*, and N. Rajakaruna. 2015. Are yarrow and St. John's wort locally adapted to serpentine and granite outcrops on Deer Isles, Maine? Poster to be presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

**Krell, N. T.\***, Dawson, H. R.\*, and N. Rajakaruna. 2015. Are yarrow and St. John's wort locally adapted to serpentine and granite outcrops on Deer Isles, ME? Poster to be presented at the NEBC 120th Anniversary Research Conference. Smith College, Northampton, Massachusetts, USA. June 5-7

Knudsen, K., A. Fryday, N. Rajakaruna, F. Olday, **R. E. O'Dell**, N. Pope\*\*, and S. Woolhouse^.

2015. Lichens of the New Idria serpentine mass, San Benito County, California: a preliminary study of the lichen-substrate relationship. Poster presented at California Native Plant Society's 2015 Conservation Conference: Celebrating 50 years of Progress and Promise, San José, CA, USA. January 13-17.

## **2014**

**Medeiros, I. D.\*** and N. Rajakaruna. 2014. A Biodiverse Polluted Site in Coastal Maine: Opportunity and Dilemma. A poster presented at XX International Conference of the Society for Human Ecology (Ecological Responsibility and Human Imagination: Saving the Past~Shaping the Future), College of the Atlantic, Bar Harbor, ME, USA. October 22-25.

**Barton, J.,\*** N. Rajakaruna, and B. Connery. 2014. Lichens of selected vernal pools in Acadia National Park, Maine. Poster presented at the Acadia National Park Science Symposium, Schoodic Education Research Center, Winter Harbor, Maine, USA. April 16.

**Medeiros, I. D.\*** Fryday, A. M. and N. Rajakaruna. 2014. Diversity and Conservation of Lichens at Two Metal-Enriched Sites in Coastal Maine, USA. Paper presented at the 8<sup>th</sup> International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

## **2013**

**Georgaklis, E.\***, Rajakaruna, N. 2013. Environmental Influences on Chemical Variation and Growth of Four Asian Botanicals. Poster presented at Northeast Undergraduate Research and Development Symposium, University of New England, Biddeford, ME, March 2.

## **2012**

**Jumper, K.\*** Porter, D. and Rajakaruna, N. 2012. Diversity and Heavy Metal Uptake of Macrofungi found on Serpentine and Granite Outcrops on the Deer Isles, Maine, USA. Poster presented at the Conference of the Mycological Society of America, Yale University, New Haven, Connecticut, USA, July 15-19.

**Jumper, K.\***, Porter, D., Rajakaruna, N., and Stern, M\*. 2012. Biodiversity and Heavy Metal Uptake of Macrofungi found on Serpentine and Granite Outcrops on the Deer Isles, Maine, USA. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

**Barton, J.\***, Olday, F., and N. Rajakaruna. 2012. A Study of Lichens of Vernal Pools of Acadia National Park, Maine, U.S.A. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

**Negoita, L.\***, Dickinson, M.\*, Rajakaruna, N., Mittelhauser, G., and Pope, N.\*\* 2012. Herbivory and Soil Features: A Case Study of Coastal Maine Island Plant Communities. Paper presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

**Stern, M.\*** and N. Rajakaruna. 2012. Plant Soil Relations of the Rockland/Thomaston Limestone Quarry. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

**Rajakaruna, N.** Harris, T. B.\*\*, S. J. Nelson, and P. D. Vaux. 2012. Stressors and Threats to the Flora of Acadia National Park, Maine: Current Knowledge, Information Gaps, and Future Directions. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

**Yost, J. M.**, Barry, T.^, Kay, K. M., and N. Rajakaruna. 2012. Edaphic Adaptations and Speciation in California Goldfields. Paper presented at the California Native Plant Society Conservation Conference, San Diego, CA, USA, January 10-14.

**Woolhouse, S.^** and Rajakaruna, N. 2012. Ecology and Reproductive Biology of two serpentine endemic *Monardella* species from the Northern Sierra Nevada. Paper presented at the California Native Plant Society Conservation Conference, San Diego, CA, USA, January 10-14.

## **2011**

**Yost, J.**, Barry, T.^, K. Kay, and N. Rajakaruna. 2011. Local adaptation and speciation in cryptic species of *Lasthenia* (Asteraceae). Poster presented at the Botany 2011, St. Louis, MO, USA, July 9-13.

**Stark, H. Z.\*** and N. Rajakaruna. 2011. Plants and people of New England: our contemporary reliance on traditional knowledge. Paper presented at the Northeast Natural History Conference, Albany, NY, April 6-9, 2011.

**M. Mansfield\*** and N. Rajakaruna. 2011. Plant diversity and soil-tissue relations of Callahan Mine, Brooksville, Maine. Poster presented at the Northeast Natural History Conference, Albany, NY, April 6-9, 2011.

**J. E. Gall,\* Kirven-Dows, L. A.\***, C. Graham and N. Rajakaruna. 2011. Diversity and metal content of insects on adjacent serpentine and granite outcrops on the Deer Isles, ME, USA. Poster presented at the Northeast Natural History Conference, Albany, NY, April 6-9, 2011.

Pope, N.\*\*, Fong, M.^, Boyd, R., and **N. Rajakaruna**. 2011. Variation in metal accumulation among wild morphotypes of *Streptanthus polygaloides*, a Californian Ni hyperaccumulator. Poster presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

**J. E. Gall\***, **Kirven-Dows, L. A.\***, C. Graham and N. Rajakaruna. 2011. Diversity and metal content of insects on adjacent serpentine and granite outcrops on the Deer Isles, ME, USA. Poster presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

## **2010**

**Celis, J.\***, N. Rajakaruna, and M. C. Vasey. 2010. Ecological speciation in the *Lasthenia minor-L. maritima* complex (Asteraceae). Poster presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA February 13.

**Woolhouse, S.^** and N. Rajakaruna. 2010. Biology and ecology of three rare serpentine plants from Plumas National Forest in the Northern Sierra Nevada, California. Paper presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA, February 13.

**Fong, M. G.^**, R. S. Boyd, and N. Rajakaruna. 2010. Are morphotypes of *Streptanthus polygaloides* (Brassicaceae) distinct genotypes worthy of taxonomic subdivision and conservation? Poster presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA February 13.

**Barry, T.^**, Rajakaruna, N., and K. M. Kay. 2010. Local adaptation and seasonal distribution of edaphic races of *Lasthenia californica-L. gracilis* complex in two distinct regions of a serpentine outcrop. Poster presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA February 13.

## **2009**

**Davoodian, N.\*** and N. Rajakaruna. Arbuscular mycorrhizal colonization of St. John's Wort (*Hypericum perforatum*) on adjacent serpentine and granite outcrops. Poster presented at Botany and Mycology 2009, Snowbird, Utah, July 25-29.

**Fong, M. G.^**, R. S. Boyd, and N. Rajakaruna. Are morphotypes of *Streptanthus polygaloides* (Brassicaceae) distinct genotypes worthy of taxonomic subdivision and conservation? Poster presented at California Native Plant Society 2009 Conservation Conference: Strategies and Solutions. Sacramento Convention Center and Sheraton Grand Hotel, Sacramento, CA, January 17-19.

## **2008**

**Rajakaruna, N.**, T. B. Harris\*\*, and E. B. Alexander. 2008. Serpentine Outcrops of Eastern



North America: Model Habitats for Geoecological Studies. Paper presented at Northeast Natural History Conference X, Empire State Plaza in Albany, NY, April 17 – 18

**Ciccotelli, B.\*** and N. Rajakaruna. 2008. A Study to Characterize the Flora of Vernal Pools, Acadia National Park. Poster presented at the Northeast Natural History Conference X, Empire State Plaza in Albany, NY, April 17 - 18

Rajakaruna, N., **T. B. Harris,\*\*** and E. B. Alexander. 2008. Geoecology of serpentine in eastern North America: Critical information gaps and future directions. Paper presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

Davoodian, N.\*, **N. Rajakaruna**, and D. D. Ackerly. 2008. Evolution of serpentine endemism in fire-prone habitats: a preliminary model from California's chaparral. Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

**Briscoe, L. R.\***, F. C. Olday, and N. Rajakaruna. 2008. A floristic survey of bryophytes on a peridotite and a granitic outcrop in Deer Isle, Maine, USA. Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

**Harris, T. B.\*\***. and N. Rajakaruna. 2008. *Adiantum viridimontanum*, *Aspidotis densa*, and *Minuartia marcescens*, additional serpentine endemics from eastern North America? Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

Pope, N.\* and **N. Rajakaruna**. 2008. Vascular plants of serpentine and granite in the Deer Isle complex, Maine, USA. Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 – 23

## **2007**

**Harris, T. B\*\*.**, Dannenberg, E\*., Pope, N.\*, Briscoe, L.\* Thrall, A.\*, Olday, F. C., and N. Rajakaruna. 2007. Plant life on metal-enriched soils in Maine: involving undergraduate students in ecological research. Poster presented at Maine Space Grant Consortium Annual Meeting, The University of Southern Maine, Portland, ME, April 20

**Thrall, A.\***, Pope, N.\*, Dannenberg, E.\*, Tompkins, K.\*, Pavicevic, P.\*, Harris, T. B.\*\* and N. Rajakaruna. 2007. Plant-Soil Relations on Serpentine Outcrops of Deer Isle, Maine in Northeastern United States. Poster presented at Maine Space Grant Consortium Annual Meeting, The University of Southern Maine, Portland, ME, April 20

## **2006**

Harris, T. B.\*, Olday, F. C., and **N. Rajakaruna**. Saxicolous and Terricolous Lichens of a peridotite outcrop in the Northeastern United States: A baseline study exploring the lichen-substrate relationship. Poster presented at the V International Conference on Serpentine Ecology, Siena, Italy May 09-13

Thrall, A.\*, Pope, N.\*, Dannenberg, E\*., Tompkins, K\*., Pavicevic, P\*., Harris, T. B.\* and **N. Rajakaruna**. Plant-Soil Relations on Serpentine Outcrops of Deer Isle, Maine in Northeastern United States. Poster presented at the V International Conference on Serpentine Ecology, Siena, Italy May 09-13

**Harris, T. B.\***, Olday, F. C., and N. Rajakaruna. Lichens of a Peridotite Outcrop in Eastern North America: An Investigation into the Lichen-Serpentine Relation. Paper presented at the Botany 2006 Meeting, Chico, California, USA July 28 - August 03