

February 26, 2020

IAPT Research Grants Committee

Dear IAPT:

I am writing this letter in support of **Ms. Julaina Schaefer's** application for an IAPT Research Grant. I have collaborated with Ms. Schaefer's Ph.D. co-advisor, Dr. Nataly O'Leary, and one of her active collaborators, Dr. Veronica Thode, for many years, and have visited her institution in Rio Grande do Sul a few times over the years (before Juliana began her Ph.D.). I met Juliana in a workshop on Botanical Nomenclature led by Sandy Knapp (in which I gave a couple of lectures and sat in on the rest) in Mendoza, Argentina, in 2017.

Juliana developed an interest in plant taxonomy by participating in field surveys as an undergraduate student. As a Masters student, she set out to study the chemistry of some species of *Lippia* (Verbenaceae) in southern Brazil, but discovered that the taxonomy was problematic and needed to be resolved before she could characterize the chemistry of the species she was interested in. This led her into the complex and confusing world of *Lantana/Lippia* systematics, with over 300 species and with a center of diversity in Argentina and Brazil. Her Ph.D. advisor at Universidade Federal de Rio Grande do Sul, Dr. Ilsi Job Boldrini, is a grassland taxonomist with a specialty on Poaceae. To provide expertise in Verbenaceae, Juliana sought out Dr. O'Leary of the Instituto de Botanica Darwinion, in Argentina, to coadvise her dissertation. Through this project, Juliana will develop teamwork skills while working with the region's established experts on *Lantana/Lippia* taxonomy on the Flora do Brazil 2020 project.

Verbenaceae has been the primary focus of my research for more than 15 years. During that time I have developed collaborations with taxonomists in Argentina, Brazil, and elsewhere. I am presently working on a manuscript from the dissertation of a former Ph.D. student on the phylogeny of *Lantana* and *Lippia*. It has been a steep learning curve for me, since my student had done all of the initial work, and I've learned that good information about *Lantana/Lippia* taxonomy is still very limited. Juliana has stepped up to help me out, along with her co-advisor, Dr. O'Leary, and her collaborator, Veronica Thode. The work that Juliana is proposing will be an important contribution to the systematics of a large and complex clade and, in turn, will lead to more informed conservation biology and potential commercial applications. I have invited Juliana to collaborate on a taxonomic revision of *Lantana* and *Lippia* once the phylogeny is published.

Juliana has demonstrated her commitment to public outreach through her work with Project Cambia bringing science to local schools, and by conducting plant surveys of threatened habitats near her hometown of Santa Maria.

Sincerely,



Richard Olmstead
Professor and Curator