



“Understanding drivers of plant diversity through historical and contemporary approaches”

Dr. Ivalu Cacho

Universidad Nacional Autónoma de México

I am fascinated by the interplay between historical and contemporary drivers of biological diversity. In the first part of my talk I present research from the Caribbean basin on lineage divergence, one of the main processes by which biological diversity is generated. In the second part of my talk I focus on research on endemic plants in the California Floristic Province that demonstrates how integrating phylogenies with clade-wide ecological data creates a powerful framework to study the forces driving ecological specialization. Using phylogeny, greenhouse experiments, and field data, I explore evolutionary trends in soil occupation and plant defense, as well as tradeoffs between competitive ability and habitat quality, all factors that have been proposed as drivers of biological diversity through ecological specialization and endemism. I conclude with a brief overview of my current and future research.

RESEARCH TALK

Monday January 25; Room 27, Alumni Memorial Bldg; 3:20 – 4:20PM.