

A New “Giant *Zamia*” Discovered: *Zamia tolimensis*



Hector Esquivel with *Z. tolimensis*



Michael, Hector and Deicy processing the specimens



The Collecting Team



Hector and Michael processing specimens

Two historical herbarium specimen collections were known for an intriguing arborescent species of *Zamia* occurring in Tolima, Colombia; one collected 86 years ago by Russian botanist Georg Woronow, the other collected 68 years ago by American botanist Elbert L. Little, Jr.

Based on similarities in leaflet shape, these collections were previously considered to belong to the species *Zamia poeppigiana*, but it was necessary to study these plants in the field in order to confirm if this was the case or whether these belonged to a new species altogether.

After many decades of remaining obscure, this long-lost taxon was accidentally re-discovered! It was found in the Mountains of the Central Cordillera of Southern Tolima, during a plant diversity study by a research team from Universidad del Tolima led by Hector Esquivel, director of the TOLI herbarium.

After such an amazing accidental discovery, a collaborative field expedition was organized between the Universidad del Tolima and Montgomery Botanical Center in June of 2010, in order to shed some light on this poorly known arborescent *Zamia*. Two geographically distant populations of this intriguing *Zamia* were located and studied in the field, and our results indicated that the plants from Tolima belonged to an undescribed species, which is easily distinguished from other arborescent South American species such as *Zamia poeppigiana* and *Z. lindenii*.

Described collaboratively by authors from the Universidad del Tolima, Montgomery Botanical Center, and The New York Botanical Garden, it was named *Zamia tolimensis* to honor the Department of Tolima where it was discovered. The formal description* was published in the December 2011 issue of *BRITTONIA*.

Zamia tolimensis is an unusual cycad in many respects (see front cover). With leaves over 10 feet long, leaflets close to 1.5 feet long, a trunk over 13 feet tall and massive seed cones that weigh up to 7 pounds, it is one of the largest species of *Zamia* ever known!

It is also the first species known to occur in the highlands of the Central Cordillera mountain range, and occurring at one of the highest elevations (up to 6000 feet) known for the entire genus.

Plants were locally abundant in the two populations studied, but limited to small forest fragments in a largely deforested region, so the species is considered to be Critically Endangered.

The native range of this species has remained inaccessible to botanists for decades because of the precarious security situation in the region from armed conflict – perhaps explaining how such a large, locally abundant *Zamia* could remain obscure for so many years.

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Hector and Claudia with a giant leaf

* Calonje, M., H.E. Esquivel, D. Stevenson, C. Calonje and D. Pava. 2011. A new arborescent species of *Zamia* from the Central Cordillera of Tolima, Colombia (Cycadales, Zamiaceae), with comments on the *Z. poeppigiana* species complex. *BRITTONIA* 63: 442-451.