

***Geonoma appuniana* – A Palm of The Lost World**

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1. Kukenán tepuy in southern Venezuela is adjacent to Mt. Roraima.



After six days of difficult trekking across savannah, through rainforest and ascending Mt. Roraima's 1200 meter sheer perpendicular sandstone wall, we finally reached the place where one of the most remote palms in the world is said to grow. In April 2005, we went in search of *Geonoma appuniana* (once known as *Geonoma roraimae*) in an area known as The Lost World (Fig. 1).

Mt. Roraima is in the Guyana Highlands region of southern Venezuela, at the border with Brazil and Guyana. Cascading from a nearby mountain is Angel Falls. At 979 meters (3212 feet), it is the tallest waterfall in the world. About one hundred of these table top mountains (locally called *tepuy*s) cover the landscape. Each *tepuy* rises about 1000–1250 meters above the surrounding land. These ancient remnants of continental drift and other natural processes are estimated to be 1.8 billion years old. Many of them have never been visited.

Sir Arthur Conan Doyle made Mt. Roraima famous when he wrote the *The Lost World*. The book described a fictional British expedition in the 1880s to confirm the existence of prehistoric dinosaurs living in an isolated world that time forgot.

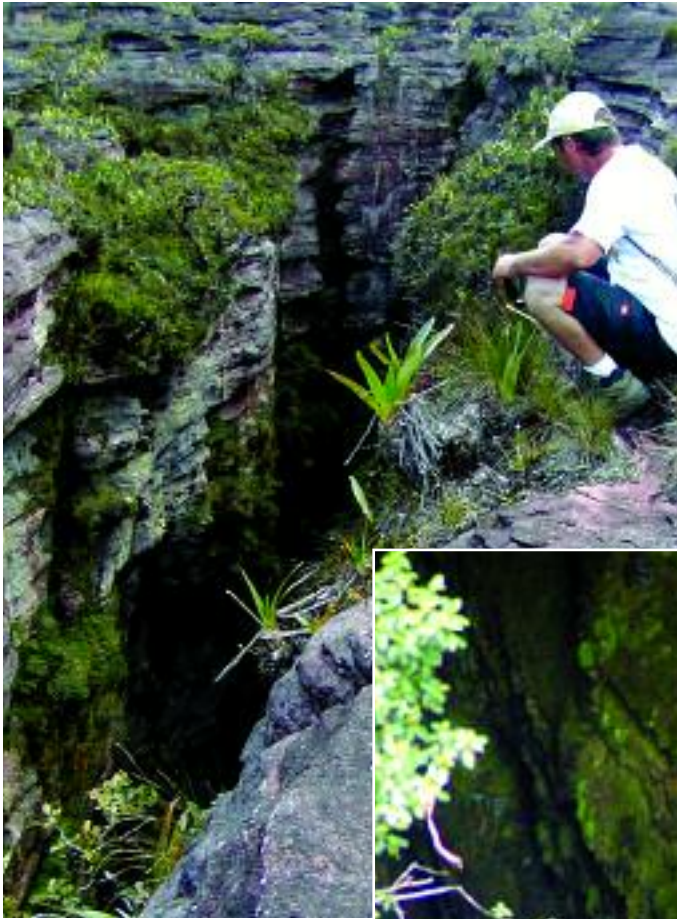
The sheer sides of the mountain create a geological barrier behind which the plant life

has evolved in isolation for millions of years. A strange plant life grows on these isolated, island-like mountains. Many species are carnivorous because of the lack of soil and nutrients. The mountains have one of the highest rates of endemism in the world. An estimated 75% of the plants are endemic to this region, and about 50% are endemic to single *tepuy*s. A large *tepuy* may harbor an amazing 500–1000 plant species. Many new species await discovery.

Geonoma appuniana appears primarily at the base of the *tepuy* (Fig. 2). They grow in dense populations of about 100 individuals. This large *Geonoma* attains a height of 10 meters. Little is known of its ecology or natural history. How did some of the palms get distributed into crevices (Fig. 3) on top of the *tepuy*? Oilbirds (*Steatornis caripensis*), known locally as *guacharos*, feed on the fruits and sometimes carry the seeds to this moist and protected place.



2. A large population of mature *Geonoma appuniana* found at the base of Mt. Roraima.



3. Overlooking the crevice where *Geonoma appuniana* was found growing on Mt. Roraima.



4. *Geonoma appuniana* hugs the ledge of a crevice on Mt. Roraima. The seeds were distributed here by oilbirds. This photograph required hanging over the side of the crevice without any way to steady the camera.

The ascent up Mt. Roraima to see *Geonoma appuniana* was arduous; however, one last major obstacle still lay ahead of us: The palm grows far inside a deep, deadly crevice on top of Roraima's soiless and weather-scared plateau. It grows in one of the most scenic but

inaccessible places on earth. Expedition team members Cesar Diaz and Roberto Campano each held my ankles as I inched out over the side of the crevice to photograph this palm. It is seen here in what could have been a very expensive photograph (Fig. 4).