

Sep. 2022 NEWSLETTER

#### **Back-to-School Issue**

It's back-to-school time at the IPS newsletter, and here is your first quiz!

#### **PALM QUIZ**

Q1: What palm species is known as the "Devil Palm" in the local vernacular?

**Q2**: Name the four *Dypsis* species that are not native to Madagascar.

Q3: In what country does Loxococcus rupicola naturally occur?

**Q4**: Name the palm species with the greatest number of chromosomes.

**Q5**: Name the palm with the largest inflorescence in the plant kingdom.

Q6: What was Dr. David Fairchild's favorite palm?

Q7: What island has the largest number of endemic palm genera per square kilometer of land area?

**Q8**: What palm was Charles Darwin describing when he wrote, "These palms are, for their family, ugly trees"?

**Q9**: What is the extinct palm species of Easter Island?

Q10: Which palm attracts its pollinators with a fragrance emitted from its leaves?

**Extra credit**: Name the hole at Augusta National golf course, home of The Masters golf tournament, on which grows the only palm on the entire property. For extra, extra credit name the species.

The answers are on the following pages

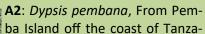
### **Back-to-School Issue: Palm Quiz**

#### **Answers**

A1: Neoveitchia brunnea

Neoveitchia brunnea (much rarer than N. storkii) is found on Pentecost Island (one of the 83 islands of Vanuatu). Known as the Devil Palm by local people because its fruit were thought to be consumed by demons. Many of the elders maintain that evil spirits fed on its fruits, and it was also believed that a poison could be concocted from its bark which could make women sterile and kill a man (PALMS 50: 179–183. 2006). Photo at right courtesy of Jean-Michel Dupuyoo.

The name of the genus *Daemonorops* means "demon shrub" and refers to the devilishly spiny leaves.



nia. Hence it is the member of the genus found nearest to the African continent, where astonishingly, no species of *Dypsis* naturally occur.

Dypsis cabadae (at left, photographed in cultivation by Gregg Hamann), D. humblotiana, and D. lanceolata are from the Comoros Islands. Interestingly D. cabadae was initially described by Hal Moore (as Chrysalidocarpus cabadae) in 1962 from plants in cultivation in Cuba.

**A3**: Sri Lanka. The genus has only one species, which is the only endemic palm species from the island.

**A4**: *Voanioala gerardii* (the forest coconut) with a diploid chromosome number of ca. 600, the highest chromosome number among flowering plants (some ferns have higher numbers).

At the other end of the spectrum, in a handful of unrelated plant species, the diploid chromosome number is just 4. By contrast, humans have 46 chromosomes.

Voanioala gerardii, fruiting, in the type locality on the Masoala Peninsula, Madagascar. Photo at right by John Dransfield, 1989.

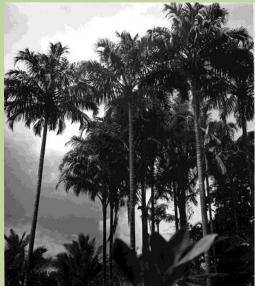


### **Back-to-School Issue: Palm Quiz**



**A5**: Corypha umbraculifera (talipot palm) has an inflorescence 6–8 m (20–26 feet) tall. The titan arum (Amorphophallus titanum) can claim only to be the largest unbranched inflorescence. The parasitic plant Rafflesia arnoldii has the largest flower. Corypha umbraculifera, at left, in fruit. Photo by Andrew Street.

**A6**: Although he was never able to grow it at The Kampong (his home and garden in Miami, Florida), *Pigafetta elata* was his favorite. Upon viewing this palm along the banks of a river in Indonesian Sulawesi, Dr. Fairchild exclaimed (*Garden Islands of the Great East*), "From that moment I became unreasonable in my admiration for this tree, and I have remained so to this day." Photo below left by Edward Beckwith from the *Chêng Ho* expedition, courtesy of the Archives of Fairchild Tropical Botanic Garden.





Pigafetta elata is arguably the world's fastest growing palm. In fact, it quickly grew right through the roof of Mardy Darian's multi-story greenhouse in Vista, California (pictured at left in 1986 by S. Zona).

**A7**: Lord Howe Island. While only 14.6 km<sup>2</sup> (5.6 mi<sup>2</sup>), the island is home to three endemic genera: *Howea, Lepidorrhachis,* and *Hedyscepe.* 

**A8**: He wrote that about *Jubaea chilensis*. (We love you, Charlie, but you're so wrong!) Photo at right courtesy of the Jardín Botánico Nacional of Chile.

**A9**: Paschalococos disperta, which is known from subfossilized endocarps, trunk casts, and fossil pollen, went extinct in the mid-17th century. The species was described by Dr. John Dransfield in 1984. Some anthropologists have linked the extinction of the palm with the decline of the human civilization on the island.



### **Back-to-School Issue: Palm Quiz**

A9: The European fan palm or dwarf palm, Chamaerops humilis. The leaf below an inflorescence emits a jasmine-like fragrance while the flowers are open. This amazing discovery was made by Dr. Mathilde Dufaÿ and coworkers in 2003. Photo at right by Forest & Kim Starr.

**Extra**: Hole #4 (named Flowering Crab Apple), and the palm is a *Sabal palmetto*. This is especially apropos given that the tournament frequently concludes on Palm Sunday. See story and photo <a href="https://example.com/here">here</a>.



# International Palm Society's Hawaiian Islands Biennial

#### The Maui Pre-Biennial Tour

October 6 – 9, 2022 A Bespoke Experience (SOLD OUT)

#### Hawaiian Islands Biennial

October 9 - October 16

(LAST CHANCE)

Registration closes September 25, 2022. Registration information here.

**HAWAII GARDENS PREVIEW 1** 

**HAWAII GARDENS PREVIEW 2** 

**HAWAII GARDENS PREVIEW 3** 

The IPS, in conjunction with HIPS, is thrilled to present an outstanding roster of speakers for the evening banquets. Included will be **Dr. Andrew Henderson**, a true pioneer of palm botany. Dr. Henderson's talk will concentrate on the "Thrinax Unit," a group of five, closely related genera (Coccothrinax, Hemithrinax, Leucothrinax, Thrinax, Zombia). As he explains, "I'll discuss each genus in turn, show how it differs from the other genera, discuss its distribution, and illustrate some of the species. I'll try to show how the systematics of Coccothrinax is complicated by its insular distribution pattern, propensity to hybridize, and ability to disperse long distances." Dr. Henderson will join us, walking the gardens and trails, for the entire biennial! His attendance (and presentation) is funded by the IPS along through the kind generosity of Mary and Michael Lock.

Please read this lovely tribute to Dr. Henderson, as published by the New York Botanical Garden here.

#### The full slate of speakers:

#### **OAHU**

<u>Sunday October 9</u>: opening remarks by President Blenker followed by a presentation by **Dr. Wolf Eiserhardt** (introduced by Jeff Marcus). Dr. Eiserhardt will address species diversity in the genus *Dypsis* in Madagascar.

Monday, October 10: presentation by **Mike DeMotta**, introduced by Andrew Street. Mr. DeMotta will review the endemic palms of Hawaii and unveil the next "save the species" campaign in partnership with the NTBG.

#### HILO

<u>Tuesday, October 11</u>: presentations by **Don Hemmes** (introduced by HIPS President Rick Kelley) and **Jason Dewees** (introduced by Tom Jackson). Professor Hemmes will reflect upon the Hawaiian Island Palm Society's role in the establishment of botanical gardens at the University of Hawai'i at Hilo and the Panaewa Rainforest Zoo. Mr. Dewees will highlight landscaping with palms and preview the following day's Biennial excursion to La Casa de las Palmas.

<u>Wednesday, October 12</u>: presentation by **Dr. Andrew Henderson**, introduced by Dr. Scott Zona. Dr. Henderson's talk will focus upon the "Thrinax Unit," an exciting group of five, closely related genera (*Coccothrinax, Hemithrinax, Leucothrinax, Thrinax, Zombia*).

<u>Saturday, October 15</u>: closing ceremonies emceed by Vice President Jeffry Brusseau with entertainment by the band **Just Us**.

#### The Biennial Keeps Getting Better!!

First, we have added the legendary Donn Carlsmith (IPS president 1978–1980) garden for viewing. This historic garden contains the original cultivated *Dypsis carlsmithii* (once referred to as "stumpy"). Later this was discovered in habitat and given its eponymous name by Dr. John Dransfield.

Next, Rick Kelley, president of HIPS, has worked tirelessly to create an exceptional biennial. Rick, along with our kind local hosts, have provided us with an exciting array of private gardens now open to the biennial attendees!

Finally, the IPS is happy to announce that acclaimed local (palm) fiber artist, **Shelley Moen Hoist** will have a booth at the banquets in Hilo. As Shelley explains: "I have been working with palm sheath as an artistic medium for over 25 years. It is not a common plant fiber to work with, and I have developed many new techniques to share my artistic vision while allowing the palm fiber to find new life. I have won awards on the mainland and in Hawaii for my innovative work, have shown in San Francisco at the American Craft Council, in Jackson, Wyoming at the Western Design Conference, had a solo show at the Kahilu Theatre "Transcending Palms," and more." Shelley has graciously offered to donate a percentage of her sales to the IPS endowment fund! Please see story by Kim Cyr <a href="here">here</a>, which appeared in the IPS Newsletter from November 2016.

# Invitation to visit some magnificent private residential palm gardens on your day off

by Rick Kelley

On Friday, October 14, IPS visitors will have a free day. Some may sign up for the all-day bus trips to either Hawaii Volcanoes National Park or to go over to the Kona side to visit the wonderful gardens of Dean Ouer (PalmTalk moderator) and Norm Bezona (IPS board member). The local Hawaii Island Palm Society (HIPS) would like to invite all interested people to sign up for private tours of some of the great residential palm gardens that could not be squeezed into the primary itinerary. Below are brief descriptions of the available gardens along with a map of the locations. Links are provided to gardens that have been featured on PalmTalk so you can see a preview.

#### How it works:

Read over the list of gardens and select the one(s) you would like to see. Allow 90 minutes per garden. If you are interested in more than one garden, we recommend you choose gardens located somewhat near each other to reduce the drive times. Send your request to <a href="ricklkelley@att.net">ricklkelley@att.net</a>. We have limited space, so you may not get your first choice. We suggest you list your top four picks in order with the expectation that you may get to see two of them. Let us know if you prefer to visit gardens in the morning, the afternoon, or if your schedule is flexible.

Once we have a list of how many visitors we have and where they want to go, we will do our best to recruit local HIPS members to volunteer as drivers. They would arrange to pick you up at the hotel either around 9 in the morning or shortly after lunch for afternoon visits. This arrangement saves visitors the expense of renting a car for the day and speeds travel times since the drivers know the small, unmarked rural backroads in East Hawaii and will not waste time getting lost. We ask all visitors to follow any masking requests that the drivers make while in transit.

After you finish your tour, the local driver will return you to your hotel. This is something completely new for us. We are not sure what our capacity will be. But we hope it fosters interactions between IPS visitors and the large palm community on the Big Island. Should be fun.

#### David Longacre #1

Location: Hamakua Coast north of Hilo

Size: 12 acres

First palms went in the ground 2003

Notable species: Towering Pigafetta filaris, Clinostigma samoense, Veitchia joannis and hybrids

**Special Attractions**: This is not strictly a palm garden. Instead, it is a reforestation project to recreate a tropical forest starting from abandoned sugarcane plantation. The reforestation plants are all Hawaii/ other Indo-Pacific and include fruit/nut tree species such as *Durio* and *Canarium* (pili nut), and woodworking species such as Narra (rosewood) and Rainbow Gum (*Eucalyptus deglupta*).

**Physical Challenges**: Surface tree roots, and often wet/muddy conditions mean enclosed shoes are a must. Visitors will need bug spray. Trails meander through the regenerating forest. Garden is a fairly gentle slope of Mauna Kea, but it is not flat. Not accessible to those using wheelchairs or walkers.

Karl Mendonca, Pi`ihonua

Paradise #2 Location: Hilo Size: 1.3 acres

First palms went in the ground 15

years ago

About 150 species

**Notable species**: huge *Caryota obtusa, Pigafetta filaris, Caryota zebrina, Raphia farinifera, Dypsis* "lafazamanga" and *Livistona chinensis*.

**Non-palms**: Cycads, Bonsai Collection, Bamboo, orchids, Spice garden, citrus, and anthuriums.

Special Attractions: Koi Pond and Koi Collection, Water Garden, Garden was part of a late 1800s plantation garden, located adjacent to the Wailuku River (longest river in Hawaii). Visitors capable of moderate level hiking can take a short hike to the top of a 40 foot waterfall.

Physical Challenges: The garden

itself is easy terrain to walk, grass lawns/paths and gravel walkways. Those wanting to hike to the waterfall - moderate difficulty requiring covered toe footwear.

Times available: All day

#### Tim Brian and Bob Gibbens #3

**Location:** Hilo **Size**: 1 acre

First palms went in the ground 15 years ago

About 200 species

Notable species: Trunking Lemurophoenix, Metroxylon amicarum, Mauritia flexuosa, Dictyocaryum,

Tahina, Marojejya, very diverse collection

Non-palms: Cycads, bromeliads, anthuriums, lots of tropical garden jewelry.

Physical Challenges: Very steeply sloping property. Slippery in the rain. Sturdy footwear essential.

Times available: All day

PalmTalk previews: <u>here</u>, <u>here</u>, and <u>here</u>.

Jason Dunn #4 Location: Hilo Size: 0.5 acre

First palms went in the ground 6 years ago



About 80 species

**Notable species**: Extensive collection of *Dypsis* and hybrids

**Non-palms**: Cycads, bromeliads, anthuriums, lots of tropical garden jewelry.

Physical Challenges: Flat, easy walking

Times available: All day PalmTalk preview: <a href="here">here</a>.

Pana'ewa Rainforest Zoo and Gardens (free, but no host. Self-guided tours) #5

**Location:** Hilo **Size**: 12 acres

First palms went in the ground 1979

About 100 species

Notable species: Zoo entrance lined by a dozen towering Cyrtostachys renda, tall trunking Dypsis deci-

piens, Lumerophoenix halleuxii, massive Arenga undulatifolia, Metroxylon anicarum Non-palms: large cycad garden just outside entrance. Many orchids mounted in trees

The zoo has a very modest collection of mammals, reptiles, and birds. Main attraction is the tropical

landscaping.

Physical Challenges: Paved flat paths, easy walking

Times available: open 10 AM to 3:00 PM

Botanical Gardens of the University of Hawaii at Hilo (free) #6

Dr. Don Hemmes, director. Also, one of the after-dinner speakers in Hilo

**Location**: Hilo **Size**: 4 acres

First palms went in the ground 30 years ago

Notable genera: Tahina, Majojeya, large Dypsis, collection of Licuala

**Special Attractions**: Three separate areas: palms, outstanding cycad collection, and bromeliads.

Physical Challenges: Palm and bromeliad garden are level and easy to navigate. The cycad garden is on

a steep slope.

Times available: all day PalmTalk preview: <a href="https://example.com/here">here</a>.

**Bill Austin #7** 

Location: Hawaiian Acres/Kurtistown, 15 miles southwest of Hilo, near Floribunda

Size: 6 acres

First palms went in the ground over 30 years ago

Over 300 palm species

**Notable species**: *Tahina spectabilis,* grove of fruiting *Marojejya darianii, Johannesteijsmannia,* very extensive *Dypsis* collection, one of the few fruiting *Lemurophoenix* outside Madagascar, extensive

collection of blooming New Caledonia palms

**Non-palms**: orchids, cycads, large collection of aroids **Physical Challenges**: Mostly level, easy walking

Times available: all day PalmTalk preview: here.

Mary Beth Cohen #8

Location: Hawaiian Paradise Park, 15 miles south of Hilo

Size: 1 acre

First palms went in the ground 7 years ago

Over 100 palm species

Notable species: Tahina spectabilis, Marojejya darianii, Dypsis hovomantsina, Dypsis carlsmithii, and a

grove of Carpoxylon macrospermum

Non-palms: tree ferns, orchids, flowering trees, vireya

Physical Challenges: Mostly level, a few rock outcrops, but easy walking with care

Times available: 10 AM- 3:00 PM

Rick Kelley #9

Location: Orchidland Estates 17 miles south of Hilo

Size: 3 acres

First palms went in the ground 9 years ago

About 150 species

Notable genera: Tahina, Sabinaria, Marojejya, Kerriodoxa, Clinostigma, Pigafetta, Raphia, Attalea, and

several *Metroxylon* spp.

Non-palms: tree ferns, orchids, large masses of coleus as groundcover, large-growing tropical

hardwoods for canopy down the road

Physical Challenges: Mostly level but many steps climbing up and over lava formations. Not handi-

capped accessible.

Times available: All day

PalmTalk preview: here.

Kim Cyr, Kim's Moku Garden #10

Location: Leilani Estates 35 miles south of Hilo, 200 yards from the 2018 lava flow.

Size: 2 acres

First palms went in the ground 12 years ago

About 130 species

Notable species: Voanioala gerardii, Metroxylon amicarum, lots of Cyrtostachys renda

Non-palms: bromeliads, anthuriums, orchids

Special Attractions: Path lined with 36 or more Areca vestiaria 'maroon'

Physical Challenges: Stay on trails! Many lava tree holes big enough to swallow people; unstable ter-

rain.

Times available: All day

PalmTalk previews: here, here, and here.

Bo-Göran Lunkvist, Pomaikai Garden #11

Location: Leilani Estates 35 miles south of Hilo. Adjacent to Kim Cyr's garden

Size: 2 acres

First palms went in the ground 11 years ago

About 100 species

Notable genera: grove of eight Tahina, Clinostigma, many large Dypsis

Non-palms: bromeliads, lots of native hapu'u tree ferns

Times available: All day

David Davenport & Robert Welsh, Hawaii Paradise Found #12

Location: Kalapana (Lower Puna) 40 miles south of Hilo

Size: 11 acres

First palms went in the ground 15 years ago

About 100 species

**Notable genera**: *Tahina, Caryota, Clinostigma, Licuala, Dypsis Metroxylon, Chamaedorea, Latania* **Non-palms**: bromeliads, anthuriums, orchids, ti, bamboo, staghorn ferns, bird's nest ferns, monkeypod

trees

Special Attractions: Large grove of hundreds of coconut palms, 90+ hive apiary, ocean views

Physical Challenges: Level property. No special hazards

Times available: All day Preview photos: here.

Mike Merritt #13 Location: Kurtistown

Size: 8 acres

First palms went in the ground 2009

About 200 species

Notable genera: Tahina, Lemurophoenix, Oenocarpus, large Dypsis, 5 Clinostigma species, Voanioala,

Satranala, Euterpe species, Livistona species.

Non-palms: A few Hawaiian hibiscus, a few bromeliads and Anthuriums and Vireyas

Physical Challenges: A hillside property. Some moderate uphill climbing. Some holes, but well away

from normal pathways. Tall grass in places

Times available: All day PalmTalk preview: here.





### Pritchardia in Hawaii by Donald R. Hodel

#### Pritchardia in Hawaii: Pritchardia martii

Named for the great 19th-century German palm botanist Carl F. P. von Martius, *Pritchardia martii* is endemic to O'ahu where it mostly resides in the moist and wet forests in the steep and rugged Ko'olau mountain range behind Honolulu. In protected locales, such as here deep in Kaipapau Valley (photo below), it can become a large, elegant, and imposing specimen but on exposed, steep ridges it appears thrifty and compact (photo next page). Photos by Donald R. Hodel.



Volume 10.09 · Sep. 2022 · Newsletter of the International Palm Society | Editor: Andy Hurwitz ashcvs@yahoo.com

# *Pritchardia* in Hawaii



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# **Parting Shot**

In keeping with our back-to-school theme, here's a classic book, though ostensibly not about palms. But who could resist that cover? (first British edition, 1936).

