



# OSGKC News

ORCHID SOCIETY OF GREATER KANSAS CITY [www.osgkc.org](http://www.osgkc.org) December 2008

## OSGKC December Meeting

### Annual Holiday & Awards Banquet

December 14, 2008

1:00 PM

Bristol Seafood Grill

5400 W. 119<sup>th</sup> St., Leawood

\$19.95/person includes juice

Contact Doug Martin if you'll be attending the Annual Awards Banquet: [bethdougm@kc.rr.com](mailto:bethdougm@kc.rr.com)  
913-248-8669.

## AOS Corner

Submitted by Melba Butler,  
AOS Representative

**O**rchid Trivia: A plant having only a few roots cannot utilize all the water in a large pot and the mix will quickly become anaerobic and soggy, producing a variety of attendant problems. A well-grown mature plant with several growths can be maintained and flowered in a 7.5 centimetre (3 inch) pot or even less. When in doubt underpot rather than overpot." Ref.: "Novelty Slipper Orchids: Breeding and Cultivating Paphiopedilum Hybrids", p 22, by Dr. Harold Koopowitz and Dr. Norito Hasegawa; Angus and Robertson Publishers, New Zealand in 1989.



## DNA 'Barcode' Identified For Plants

Submitted by Doug Martin

From ScienceDaily (Feb. 7, 2008) and adapted from materials provided by Imperial College London.

**A** 'barcode' gene that can be used to distinguish between the majority of plant species on Earth has been identified. This gene, which can be used to identify plants using a small sample, could lead to new ways of easily cataloguing different types of plants in species-rich areas like rainforests. It could also lead to accurate methods for identifying plant ingredients in powdered substances, such as in traditional Chinese medicines, and could help to monitor and prevent the illegal transportation of endangered plant species.

The team behind the discovery found that DNA sequences of the gene 'matK' differ among plant species, but are nearly identical in plants of the same species. This means that the matK gene can provide scientists with an easy way of distinguishing between different plants, even closely related species that may look the same to the human eye.

The researchers made this discovery by analysing the DNA from different plant species. They found that when one plant species was closely related to another, differences were usually detected in the matK DNA.

The researchers, led by Dr Vincent Savolainen, dual appointee at Imperial College London's Department of Life Sciences and the Royal Botanic Gardens, Kew, carried out two large-scale field

## Inside...

Officers' Reports:	pg. 2
OSGKC Sponsors	pg. 2
OSGKC Member Profile	pg. 3

studies: one on the exceptionally diverse species of orchids found in the tropical forests of Costa Rica, and the other on the trees and shrubs of the Kruger National Park in South Africa. Dr Savolainen and his colleagues in the UK worked alongside collaborators from the Universities of Johannesburg and Costa Rica who played a key role in this new discovery.

Using specimens collected from Costa Rica, Dr Savolainen and colleagues were able to use the matK gene to identify 1,600 species of orchid. In the course of this work, they discovered that what was previously assumed to be one species of orchid was actually two distinct species that live on different slopes of the mountains and have differently shaped flowers adapted for different pollinating insects.

In South Africa the team was able to use the matK gene to identify the trees and shrubs of the Kruger National Park, also well known for its big game animals.

Dr Savolainen explains that in the long run the aim is to build on the genetic information his team gathered from Costa Rica and South Africa to create a genetic database of the matK DNA of as many plant species as possible, so that samples can be compared to

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this database and different species accurately identified.

"In the future we'd like to see this idea of reading plants' genetic barcodes translated into a portable device that can be taken into any environment, which can quickly and easily analyse any plant sample's matK DNA and compare it to a vast database of information, allowing almost instantaneous identification," he says.

Although Dr Savolainen concedes that such technological applications may be some years away from realisation, he says the potential uses of the matK gene are substantial: "There are so many circumstances in which traditional taxonomic identification of plant species is not practical - whether it be at ports and airports to check if species are being transported illegally, or places like Costa Rica where the sheer richness of one group of plants, like orchids, makes accurate cataloguing difficult."

The matK gene may not, however, be able to be used to identify every plant species on Earth. In a few groups of species, additional genetic information may be required for species-level identification because hybridization - where species cross-breed and genetic material is rearranged - may confuse the information provided by matK. Journal article: 'DNA barcoding the floras of biodiversity hotspots' Proceedings of the National Academy of Sciences, Online Early Edition, Monday 4 January 2008.

*Authors: Renaud Lahaye, Michelle van der Bank, Diego Bogarin, Jorge Warner, Franco Pupulin, Guillaume Gigot, Olivier Maurin, Sylvie Duthoit, Timothy G. Barraclough, Vincer Savolainen.*

*This research was funded by the Defra Darwin Initiative, the Universities of Johannesburg and Costa Rica, the South African National Research Foundation, the Royal Botanic Gardens, Kew, and the Royal Society.*

## Message from the President: Monica McNamara

It seems unbelievable that the year is drawing to an end. It has been my pleasure to serve this year and I look forward to continuing to serve next year. Please contact me by email or phone with any suggestions, thoughts, or concerns. I also want to thank the board members and the committee chairpeople and members who have contributed their time and efforts to make this a successful year for the society. Doug Martin and our new program chairperson, Glen Lessenden, are already working on a terrific schedule of speakers/activities for next year! I hope to see everyone at our December Holiday & Awards Banquet.

*Monica*

## Minutes of November 9th OSGKC Meeting

by Holly Hall

The officers were duly elected for the following year:  
Pres. Monica McNamara  
Vice Pres Beth Martin  
Sec Holly Hall  
Treas Cindy Hobbs  
Board of Directors Julie Morrison and Tony King

December is the holiday banquet. It is at 1pm at the Bristol Grill at 119<sup>th</sup> & Nall. The date is December 14<sup>th</sup>. Please RSVP by the Friday before how many will be attending.

January - Dr. Scott Stewart is going to talk about Orchid Safari in Florida.

February - Max Thompson will talk on Agraecums.

Shows - We are still looking for a site to have our show. But due to the inability to find a site it will no longer be in February, it has been tentatively moved to April. Our limitations are size of the space and the cost. We would like to find something for around \$1200 for the whole weekend.

Our next show is the St. Louis Orchid Society show at the Missouri Botanical Garden the last weekend in January.

The Society is looking to do the auction in the spring either for the March or April meeting.

## Support OSGKC Sponsors:

Bergman Orchid Farm  
Bird's Botanicals  
Oak Hill Gardens  
r.f. Orchids  
Windy Hill Gardens  
Whippoorwill Orchids



OSGKC Exhibit in November 2008

## Member Profile: Cindy Hobbs- Q and A

**Q. How many years have you been growing orchids?:**

**A.** I have been raising orchids for approximately eight years. Joy Prout got me hooked by bringing blooming plants to work and placing them on my desk. After a few months of this, I agreed to go to my first society meeting. People were so friendly and knowledgeable, after two meetings I decided to join, and my journey began.

**Q. How many orchids are in your collection?:**

**A.** I am now up to around 130, but about 30 of those are mini's. I'll spend the winter weeding out ones that either aren't doing well or I'm no longer excited about, in hopes to get the collection down to a more manageable size.

**Q. Give a brief description of their growing environment:**

**A.** My growing conditions are unusual. My plants live outside under shade trees from mid-April to mid-October. Then I bring them inside on shelves in my kitchen/hearth room on the north side of the house. There are 2-story floor-to-ceiling windows and a large patio deck which both help provide lots of light (if the sun is shining). The high ceilings are a challenge to keep humidity around the plants, so I run a humidifier during the day. The plants are in clay pots also to help hold the moisture.

**Q. What's the predominant type of orchid(s) you raise?**

**A.** I have mostly members of the Cattleya alliance and the oncidium family due to my growing conditions.

**Q. Name one to three in your collection which is a/are particular favorite(s) and why:**

**A.** First favorite; Mtssa. Dark Star 'Darth Vader' - this was my first show entry & my first ribbon. The

judges raved about it's color and bloom size. I was so proud! My plant has won two show ribbons and a division I gave to Mark Prout has also won. Second favorite; Blc. Hawaii Stars 'Paradise' (B. Little Stars x lc. Memoria Robert Strait). I love it's striking color contrast of white with hot pink markings. It won me the Best-in-Class trophy and was also pulled for AOS judging (not awarded :- ( ) For third favorite would be all of my nodosa varieties. I love their strong fragrance and delicate flowers.

**Q. Name one to three in your collection that, despite your best efforts, has/have proven particularly difficult to grow:**

**A.** There are lots I have tried and failed on, but the variety most frustrating to me is the dendrobium. I love the intense colors and variety of bloom shapes. I have tried several and killed every one. Thank goodness other society members have mastered this variety, and I get to enjoy them at our meetings!

**Q. Share with readers your best orchid-culture tip.:**

**A.** My orchid culture tip is a repeat of a program Joyce Molis shared early in my society membership. She showed how to repot your orchids. What I remember most is to soak your plant roots in water for 10-15 min. Then carefully snip away dead roots to provide room and air space for new root growth. And then she showed me now to pack the medium carefully but firmly around

the roots up to the base of the leaves. What I remember most and I believe has brought me a lot of success is she urged me to use my fingers to push the bark downward into the pot and repeat until the pot is densely full of medium.

**Q. What do (or did, if you're retired) you do in life (career/work) to support your orchid addiction:**



**A.** I'm currently employed at Embarq, the local telecommunications spin off from Sprint. I've been in the information technology field for 35 years, mainly in project management and business consulting.

