

Orchid News

The latest stories from the RHS and all over the orchid world



Vigorous *Dactylophiza x grandis* 'Blackthorn Hybrid' displayed on the Crops for Health stand



The tuber of *Dactylophiza x grandis* 'Blackthorn Hybrid' could be used for salep production

Fair trade in wild plants

Crops for Health was an educational exhibit, in the Growing Tastes area, at the 2010 Hampton Court Palace Flower Show. Designed by Sue Minter and staged by The Herb Society, it was sponsored by the RHS.

The exhibit stressed that about 80 percent of our herbal supplies come from the wild, usually in an unsustainable way. An example was *Dactylophiza* tubers, which are collected in Turkey and Iran to make the nutritious, and aphrodisiac, drink and ice-cream, salep. This is exported to Turkish communities overseas (sometime illegally) despite the orchids being CITES-listed.

A vigorous hybrid *D. x grandis* 'Blackthorn Hybrid' was on show. The society suggests this could be cultivated to produce salep, which would bring in money for local

farmers and reduce the pressure on wild plants. A similar project is working successfully for snowdrop and cyclamen cultivation for horticultural use.

The display also highlighted the work of the FairWild Foundation, recently established with offices in Switzerland and Cambridge. The FairWild Standard gives guidelines for fair trade plant collection. This Standard works with international partners to specify schemes for plant materials collected from the wild for direct consumption, or to be used in manufactured products. It covers conservation issues and benefit-sharing for the people who do the collecting. The first 'certified' products, FairWild herbal teas were introduced in the USA last November and more are in the pipeline, for America and the EU.

Herbarium destroyed

A herbarium in Peru was destroyed by fire in June. The herbarium in the Museum of Natural History at the Antenor Orrego Private University, in Trujillo, Peru contained 12,000 species from different regions in northern Peru. The archives of the museum's magazine, *Arnoldoa*, were also destroyed.

Curator of the museum, Mario Zapata Cruz, asks colleagues and friends to contact the rector and vice-rectors of the university to express support for rebuilding the herbarium. Please email Victor Raul Lozano Ibanez at vlozano@upao.edu.pe copying to injchangl@upao.edu.pe and gguerra@upao.edu.pe plus a separate copy to Mario himself, mazacruz@hotmail.com

New orchid appears at Wisley

In June Roy Lancaster found three southern marsh orchids, *Dactylophiza praetermissa*, in a meadow at RHS Garden Wisley.

This is a first record for the area. He was with Barry Phillips from the Botany department who, with co-author James Armitage, is writing a flora of Wisley, encompassing the Garden, Deer's Farm and meadowland beyond. The purpose of Roy's visit was to see the large population of grass vetchling, *Lathyrus nisolia*, they had recently discovered. While there, he noticed the orchid and two more plants of it were seen nearby.



Barry Phillips/RHS

New books for RHS library

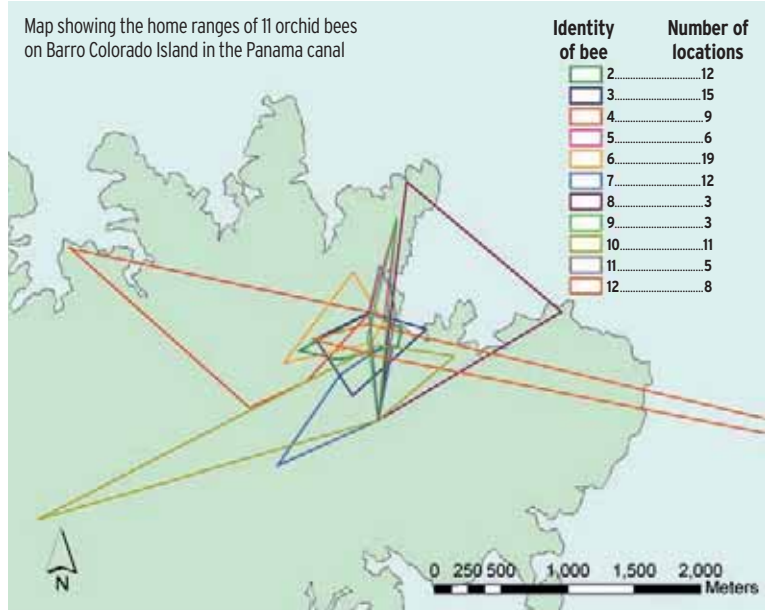
The Sri Lanka Tourism Promotion Bureau celebrated the RHS Chelsea Flower Show by presenting two rare books to the RHS. *The Complete Writings of Eduardo Quisumbi on Philippine Orchids*, and Sam Seagal's *Tulips*, have been lodged with the Lindley Library. The Bureau sponsored the gold medal-winning exhibit staged by the Orchid Society of Great Britain.

Long-haul flights for orchid bees

The foraging habits of male orchid bees (*Euglossini*), which pollinate tropical orchids, have been studied by the use of radio transmitters to track their movements. A team of scientists working on Barro Colorado Island, in the Panama Canal, caught 16 wild orchid bees, *Exaerete frontalis*, and attached small transmitters to their bodies using a mixture of eyelash adhesive and superglue. The strong-flying bees were able to forage even when carrying a transmitter. The team successfully followed the distances and spatial patterns of the flights of five bees for the full 10-day battery life of the transmitter. Seven other bees were tracked for shorter periods. Four bees were lost on the first day, and one bee was only recorded in one location.

Flights were often more than three hours long, covering about 2km, in an area of 42–115ha of rainforest. Three bees returned to the same trees, at the same time, for three to four days. One bee even crossed the Panama Canal, a distance of 5km, to the forests of Soberania Park, and returned to the

Map showing the home ranges of 11 orchid bees on Barro Colorado Island in the Panama canal



site where it was first caught five days later. 'The data explains how rare plants in scattered locations over a fragmented landscape can be pollinated,' said Roland Kays of the New York State Museum. 'Radio tracking improves our understanding of bees and the plants

they pollinate. Given the escalating rate of human interference and the increase in pollination problems, it is critical that we understand the complexities of these relationships,' the authors say in their paper, published online in the journal *PLoS ONE* in May.



The tiny transmitter weighed 300mg

Roland Kays



Roland Kays

An orchid bee is fitted with a transmitter

Helleborines mown down for third time

A population of *Cephalanthera longifolia* on a roadside verge was cut down by council contractors in May before seed set. Narrow-leaved (or sword-leaved) helleborines have grown on the verge at Mascombe Bottom in the Meon Valley, Hampshire, for more than 50 years. But changes in mowing regimes adopted by Hampshire County Council have resulted in early mowing for the last three years.

Jayne Chapman, who acts as a Flora Guardian for the wild plant conservation charity Plantlife, keeps a regular check on the site. She said, 'The verge does need to be cut but we made it clear in 2008 and 2009 that this should happen in August after the orchids have set seed. This verge is listed on the council's Road Verges of Ecological Importance project.'

Cephalanthera longifolia is classified as Vulnerable on the IUCN (International Union for Conservation of Nature) Red List, which means it is at high risk of extinction. Dominic Price, Species Recovery Officer for Plantlife, explains that section 41 of the Natural Environment and Rural Communities



Dominic Price/Plantlife

Cephalanthera longifolia

Act 2006 requires local authorities to 'have regard to the conservation of biodiversity in England when carrying out their normal functions.'

Hampshire environment councillor Mel Kendal said, 'I will ensure the procedure is changed so that verges of ecological importance are individually assessed.' The council says it will mark all rare species with white posts so the mistake does not happen again.



Jayne Chapman/Plantlife

The verge where the helleborines have grown for 50 years

Online orchid resources

Work continues on a world orchid iconography at the Swiss Orchid Foundation. The aim is to document online all the orchid species on earth, with photographs, line drawings and herbarium specimens.

The first complete genera are *Paphiopedilum* and *Cypripedium* (in advance of the Foundation publishing *Cypripedium*, a magazine about the lady's slipper *C. calceolus* and its close relatives). Curator Samuel Sprunger said, 'Genera with fewer species such as *Abdominea*, *Acrolophia*, *Diadenium* and *Lyperanthus* have also been completed. But there are still a lot missing. We would be very glad for any help with pictures'. Email schweizerische-orchideenstiftung@unibas.ch.

The Foundation was set up in 2001 to maintain the herbarium and library of Jany Renz, left to the University of Basel.

Appeal for resources

The Colombian National Herbarium (Herbario Nacional Colombiano, COL) is appealing for help to develop its virtual herbarium. Established in 1929, it now has more than 600,000 specimens. Efforts to database the herbarium began in the 1970s and in 2004 the information was made available on the internet. The website has been newly designed with a host of facilities to aid research. To date, approximately 50 percent of the Herbarium has been databased, and the majority of records are linked to high quality specimen images. Visit www.biovirtual.unal.edu.co

'COL is a major source of information for Andean orchids', says Eric Christenson writing from Florida. 'However the eternal problem is funding and orchids are woefully underrepresented on the website.' Digitising the collection would be a tremendous boon for orchid research.

Lauren Raz, Director of Biodiversity Informatics at the Instituto de Ciencias Naturales, explains that 'Researchers or organizations often have project funds they can use for the databasing and imaging of specific taxonomic groups'. If you can help please contact her at lraz@unal.edu.co

Veitch Memorial Medal for orchid ambassador

Haruhiko Nagata has been awarded an RHS Veitch Memorial Medal. This prestigious honour is conferred on people who have made an outstanding contribution to the advancement of the science and practice of horticulture.

A formal presentation was made at the opening ceremony of the Singapore Garden Festival and Orchid Show in July, by Kiat W Tan, vice-president of the RHS and Johan Hermans, Chairman of the RHS Orchid Committee.

Haruhiko (Harry) has successfully promoted orchid growing and breeding throughout the world through his exhibits, publications, lectures and organizing skills at national and international levels for the past 25 years. He is an international ambassador for orchids through his Presidency of the Asia Pacific Orchid Conference Trust.

At home in Japan he is director of the family orchid nursery, Nagata Engei, in Nagoya and a vice-president of the Japan Orchid Growers Association.

Harry has been a member of the Organising Committee of the Japan Grand Prix International Orchid Festival (JGP) for 20 years and is Secretary (and Editor of Proceedings) of the Nagoya International Orchid Festival.



Kiat Tan (left) presents Harry Nagata (right) a Veitch medal

Ye Chuan

These are huge international events and attract many hundreds of thousands of visitors. The JGP regularly publicizes the work of the RHS through exhibitions from the Lindley Library and by assisting RHS Japan.



Destario Metusala

New *Dendrobium*

A researcher from the Indonesian Institute of Sciences has discovered a new species of epiphytic *Dendrobium* belonging to section *Calcarifera* in Borneo. It has been named *Dendrobium kelamense* D. Metusala, P. O'Byrne and J.J. Wood, and was described in the *Malesian Orchid Journal*, March 2010. Destario Metusala said, 'We are not revealing the discovery site for fear of large-scale collection. The species has great potential for mass cultivation'

Orchid collection goes to Wales

Orchids from Bill Watts' collection have been handed to the National Botanic Garden of Wales for safe keeping by his widow Jacque.

Bill, who died in April last year, was an early member and secretary of Cheltenham & District Orchid Society, which was formed in 1975. Acclaimed as a skilled grower, Bill also judged and lectured on orchids. He covered the 9th World Orchid Conference in Bangkok for *The Orchid Review* in 1978, and in 1985 wrote the RHS report on the International Centenary Orchid Conference held in London to celebrate the centenary of the RHS's first-ever Orchid Conference, held in May 1885.

When Ann Maloney from the National Botanic Garden took over the collection she found four unnamed plants bred by Bill. They



Ann Maloney is looking after Bill's orchids

National Botanic Garden of Wales

were registered in August 2009 as *Paphiopedilum* Bill Watts, *Dendrobium* Jacqueline Watts, *Odontocidium* Beaumont the name of their home in Cardigan, and *Paphiopedilum* 10th Anniversary to celebrate the recent birthday of the Botanic Garden. Ann said, 'I am still waiting for some of the others to flower so we can identify them'.

Long-term *Ophrys* study

A paper published in March by Mike Hutchings of the University of Sussex covers a 32-year old population census of the rare, early spider orchid charting the effect of management regimes and climate variables.

This study of the largest remaining population of *Ophrys sphegodes* in the UK was on chalk downland in East Sussex. A permanent 20m sq plot was marked up. Numbers of new, dormant, vegetative and flowering plants were counted every year for 32 years, except in 2001 when foot and mouth disease restricted access to the countryside. Survival, life expectancy and life span of all stages of the plants were assessed.

As with many orchids there were considerable population fluxes from year to year. Nevertheless certain trends could be detected, for example the orchids did better when grazed by sheep than cattle. Over the study period, peak flowering occurred significantly earlier, by an average of 0.5 days per year. Flowering was later but not reduced after winters with more frosts, and earlier in warmer years. Warmer winters did, however, appear to encourage the appearance of more new plants. Rainfall only affected performance at the time of inflorescence extension in March and April. More rainfall resulted in taller plants with more leaves. Higher temperatures and more sunshine hours



Ophrys sphegodes,
the early spider orchid



Mike Hutchings

were associated with fewer plants flowering and more vegetative growth. These results were surprising because *Ophrys* has its centre of distribution in the Mediterranean where winters are wet and summers hot and dry.

Because the species is usually short-lived the future of such populations depends on successful seed production and management techniques must encourage this by removing grazing stock at flowering and seed production time.

Future papers will look at further aspects of population behaviour and responses to different management regimes and climate occurrences. Ref: *Journal of Ecology* (2010) 98: 867–878.



Maxillaria macrura
f. *aurea*

Iain Stewart

Maxillarias win major award

Orchids won the award for the Best Exhibit in the Plant Heritage Marquee at the RHS Hampton Court Palace Flower Show in July.

Michael McIlmurray, National Plant Collection holder for *Maxillaria*, showed more than 40 taxa of these fascinating orchids, native to South

America. A rarity was *Maxillaria macrura* f. *aurea*, which had come from Roy Barrow who, with Eric Christenson, discovered it in Venezuela in 2004. This unusual form has less extensive purple veining on the lip than plants of *Maxillaria macrura*.

Botanic garden under threat

The executive board of VU University Amsterdam, the Netherlands, proposes to demolish the Hortus Botanicus in two to five years to make space for new high-rise buildings associated with the medical centre, which adjoins the garden.

Although small, the garden contains more than 6,000 species. Valuable scientific and community work takes place there. A glasshouse complex contains an extensive and important collection of epiphytic orchids.

A campaign has been set up to save the garden. Sign the online petition at www.actiecomiteevuhortus.com/?page_id=18

New role

Lucinda Lachelin, Team Leader, Glass Display at RHS Garden Wisley, and secretary to the RHS Orchid Committee



John Hermans

since 1991, left the RHS in July to take up a new position of glasshouse supervisor at Thenford in Oxfordshire. Lucinda transformed the orchid collection at Wisley and was closely involved in developing the new glasshouse complex. She has been a dedicated Committee secretary and hardly missed a meeting. Many of her orchid students have progressed to successful careers all over the world. The Committee presented her with a painting by Nelly Roberts as a token of their thanks at the June meeting.

Ivens Orchids

Jean, Russell and Terry of Ivens Orchids have decided to retire and close the nursery. They have grown orchids for 23 years, winning many RHS Gold medals and the prestigious Westonbirt Medal. Jean, at the age of 72, says it is time to retire, while Russell and Terry are ready for new initiatives and challenges.

Good-sized cymbidiums, zygopetalums and many other genera are for sale, along with their two display *Angraecum sesquipedale*, which are about 50 years old. Email to request a stock list or tel. 012727 863178 to visit the nursery, open Monday to Friday 9am–5pm. Sale details of the nursery and house were in the June issue of *The Orchid Review*.

Name changes implemented

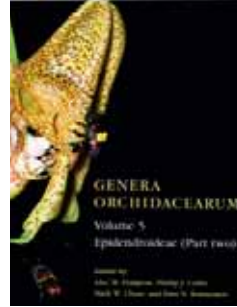
The RHS Advisory sub-Committee on Orchid Hybrid Registration (ASCOHR) met on the 26 May to discuss the implication for the Orchid Hybrid Register of name changes made in *Genera Orchidacearum vol. 5 (GO5)*. The main adjustments concern generic boundaries in the *Oncidiinae*.

ASCOHR consists of an international group of scientists, hybridisers and nurserymen. Their purpose is to advise the RHS as International registration authority for *Orchidaceae* on matters relating to orchid nomenclature and taxonomy (further information can be found in the Orchid Hybrid List, June 2010).

After consideration of written and verbal contributions it was agreed unanimously that all changes in GO5 should be implemented in the Register except for those concerning *Odontoglossum* and *Gomesa*. It was agreed that more opinion would be invited regarding the boundaries of those two genera and that these would be discussed at the next ASCOHR meeting in December.

This means that Julian Shaw, the International Orchid Registrar, will start the complex task of implementing changes in the circumscription of *Ada*, *Cyrtochilum*, *Erycina*, *Miltoniopsis*, *Rossioglossum*, *Tolumnia*, *Zelenkoa* etc. Synonyms will be recorded and it is very much hoped that this information will soon be available online: rhs.org.uk/horticulturaldatabase/orchidregister

The reasoning behind these changes has been widely reported and were clearly summarised in the April 2009 issue of *AOS Orchids* (p229–238). ASCOHR members accepted that the science and interpretation behind



the changes is sound and consistent for a number of reasons: it is coherent with the interpretation of other groups in the *Orchidaceae* and other plant families; it is based on solid evidence and a large sample base; the different species in the

Oncidiinae were found to be genetically close; recognition of broad genera shows plant relationships and is horticulturally more useable than the recognition of numerous smaller genera; the large international team behind GO research are well recognised, and contains scientists who have considerable experience with the *Oncidiinae*.

Although the science and interpretation of the boundaries of *Oncidium*/*Odontoglossum* and *Gomesa* were endorsed by ASCOHR it was felt important to defer a recommendation so that other interested parties could provide more input into a final decision. I therefore encourage everyone who has an interest in this issue to submit their thoughts and evidence as soon as possible, email: orchidsl@btinternet.com

In addition ASCOHR delayed a decision on issues concerning *Ida* and *Sudamerlycaste*; this will give individuals a short time to put their case to the relevant authorities.

At the World Orchid Conference in 2011 in Singapore we anticipate holding a forum where the broader issues of generic boundaries and hybrid registration can be discussed.

I am most grateful to Julian Shaw for his meticulous work on integrating all the new information in the Register, to Janet Cubey (RHS Chief Horticultural Data Development Manager), and all the ASCOHR members for their valuable contributions.

Joban Hermans, Chairman ASCOHR