



*Anther and stigma of Curcuma stenochila, Zingiberaceae*

# Pha Tad Ke Botanical Garden

Newsletter Nr. 15 - May 2015

Pha Tad Ke - The Cliff to Untie and Resolve Sokdee Pimai ! That's happy New Year in Lao. We've just enjoyed the annual week of blessings and blasts from water guns, a celebration of the end of the dry season when we wash away all the bad things of the previous year and start afresh. It is a time of joy and fun for Lao people and PTK staff. Now we're back at work, preparing the garden for the rains to come when the plants will enjoy the best watering they can get, from the sky and not from the end of a hose.

**RIK GADELLA, GENERAL DIRECTOR - PHA TAD KE**

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BY *KEOUDONE SOUVANNAKHOUMMANE*

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Big thanks to our volunteer collaborators, and if anyone is interested to  
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ຂີ້ພິ້ນຕີ້ນ - *Mahonia napaulensis*, Berberidaceae

## Friends of Pha Tad Ke Botanical Garden

In January 2010 the Friends of Pha Tad Ke Association was created in France followed in July 2011 in the Netherlands and September 2011 in Laos. Each of these non-profit associations helps the creation of the Pha Tad Ke Botanical Garden with scientific support, fund raising efforts and educational projects. In addition the Luang Prabang Fund for Culture and Conservation that was created in 2011 in the USA accepts donations that are tax-deductible for the benefit of Pha Tad Ke Botanical Garden or other cultural and conservation projects in the Lao PDR.

Helping the Friends of Pha Tad Ke will allow you to follow the day-to-day evolution of the garden, look behind the scenes of its operations and participate in the Pha Tad Ke adventure !

**Information:** [www.friends-pha-tad-ke.com](http://www.friends-pha-tad-ke.com)



ເອື້ອງໜວດປາດຸກ - *Holcoglossum subulifolium*, Orchidaceae



December 10 / 4, 2014  
*Kittisack Pouttavong and Keooudone Souvannakhoummane (Botanists PTK), Dr. Pramote Triboun, Prof. Dr. Piya Chaluemglin (TISTR) and Assoc. Prof. Dr. Vichith Lamxay (NUoL), coordinated a field trip to Nakai - Nam theun National Protected Area (Khammouane) to do a survey of rare plants and endangered species and to look at ways of conserving these plants.*





January 13 / 19, 2015

*Kittisack (Botanist PTK), working with Assoc. Prof. Dr. Vichith Lamxay (NUoL), Dr. Philip Thomas (RBGE), Dr. Gretchen C. Coffman (USF), joined forces on a field trip for an ecology population survey of *Glyptostrobus pensilis* at Nakai - Namtheun Protected Area (Khammouane). They also collected specimens and seeds for propagation.*





*Pha tad ke Botanical Garden coordinated with @ My Library to organize a series of photo workshops with both a junior and a senior group. The workshop program was held from July to December 2014. On the 20th of February 2014, we presented an exhibition of the photos taken by participants and launched a book of the senior group's work, 'Five Young Lao Photographers' at the French Cultural Institute, Luang Prabang. Awards were presented for the best photographs. The work was on show for a month at the French Cultural Institute. Thanks for the support of the Government of Switzerland through the Lao Culture Challenge Fund.*



February - March 19 / 2 - 13 / 3, 2015

*Two interns, Mrs. Pitsana and Mrs. Xaisomvang from the National University of Laos, Faculty of Forestry, Department of Ecotourism, came to PTK for three weeks to collect information about the potential of Pha Tad Ke Botanical Garden for Ecotourism. The Director and staff were interviewed and also the village chief and local people at Chantai village. Later, the visitors took part in a practical course on plant care and propagation techniques.*





March 9, 2015

*Kittisack, Keooudone, the botanists at PTK, worked with Assoc. Dr. Andrew McDonald (University of Texas), on surveying limestone plants and planning for in-situ conservation in the Nameuang area, Nane District, in Luang Prabang Province. They found many species including wild orchids, palms, gingers and many other interesting small plants living on limestone.*



January 23, 2015  
*Pha Tad Ke Botanical Garden, along with ethno-botanist and writer Biba Vilayleck and artist Somsanith Nithakhong, organized a presentation of their new book about how children play and learn through nature at an exhibition at the French Embassy, Vientiane. On the 27th, they also presented the book and the accompanying exhibition at the French Cultural Institute in Luang Prabang. The exhibition was on show there for a month.*





March 28 / 2, 2015  
*PTK Director Rik Gadella, Kittisack Pouttavong and Keooudone Souvannakhoummane (Botanists), participated in the Association for Tropical Biology and Conservation Asia-Pacific Congress in Phnom Penh, Cambodia. Besides attending the congress, Kittisack and Keooudone also participated in the Rufford proposal writing workshop.*





April 3 / 12, 2015

*Insavai Sitthivohane (Office manager), Somdy Oudomsack (Head gardener), Kittisack and Keooudone (Botanists PTK), visited Thailand Institute of Scientific and Technology Research, to learn about plant research, horticulture and botanical garden creation, with the generous assistance of Dr. Pramote Triboun and Prof. Dr. Piya Chaluemglin (TISTR), Thailand. After the visit to TISTR, the PTK staff went to visit Lum Ta Kong Agricultural Station, Sa Kae Rat Environmental Research Station and Khao Yai National Park in Nakhon Racha Sima province, and also made an useful and interesting field trip in Kanchanaboury province.*





*Pha Tad Ke Botanical Garden has a new staff member as Senior Gardener. He is of Hmong ethnicity from a village in northern Luang Prabang Province. Mr. Biesong (Bie) is 30 years old and is working closely with Mr. Somdy (Head gardener) as horticultural assistant. He is also interested in studying and researching medicinal plants. He is very happy to be a part of the creation of Pha Tad Ke Botanical Garden.*





April 14 - 15 - 16, 2015

*On the occasion of the passing of the year 2557, Lao New Year was celebrated by the Pha Tad Ke Botanical Garden team with great happiness and big smiles. Following local tradition, they threw water at each other to wash away all the bad things from the old year and organized a garden picnic to welcome the New Year. Everyone in the team was very happy and full of good wishes for the good things to come in the New Year at Pha Tad Ke Botanical Garden. We would like to wish our readers all the best for the New Year as well!*



*Paul Mitchell and Angela Mateo Martinez from Sidney are doing one month volunteer work. They enjoy sharing with our staff their knowledge on horticulture and garden design while at the same time learning from Pha Tad Ke gardeners about the local plants.*



# The Conservation of Orchidaceae in Lao PDR

*The Orchidaceous family is the second largest of all flowering plants, consisting of about 880 genera and 26,049 species. It is distributed around the world. Orchid species are important for medicinal, ornamental, commercials and other uses. Moreover, since the introduction of tropical species into cultivation in the 19th century, horticulturists have produced more than 100,000 hybrids and cultivars. They are found in several diverse habitats such as limestone areas, pine forest, evergreen forest, dry evergreen forest, mixed deciduous forest and dipterocarpus forest. Laos is one country which is very rich in orchid species, but now many are being collected and sold to Chinese and Thai businesses and many others are lost when rural people in Lao PDR burn the forests for agriculture purposes. For this reason, we need to conserve them through ex-situ conservation at Pha Tad Ke Botanical Garden. In Lao PDR, 531 native orchid species, 116 genera have been enumerated in previous works (Newman et al., 2007, A.Schuiteman et al., 2008, L.V.Averyanov, 2013, O. Grub et al. 2014). An estimate is 831 species of expected size of the orchid flora of Lao PDR.*

By K. Souvannakhoummane

ເືອນເກີເລກ້ານຍາວ - *Cymbidium lowianum* var. *concolor*, Orchidaceae





ເອື້ອງສິງໂຕ - *Bulbophyllum morphologorum*, Orchidaceae



ເອື້ອງປົກແມງກະເບື້ອ - *Cheirostylis chinensis*, Orchidaceae



ເອື້ອງໃບຫາຍ - *Chilochista usneoides*, Orchidaceae



ເອື້ອງແປນ - *Chilochista arietinum*, Orchidaceae



ເອື້ອງຫົວໂປ - *Calanthe succedanea*, Orchidaceae



ເຂື່ອງເກົ້າປ່ອງເກົ້າກິ້ວ - *Dendrobium linavianum*, Orchidaceae



ເອ້ອງນາງເອັນ - *Dendrobium ellipsophyllum*, Orchidaceae



ເອື້ອງເຂົ້າຕ່ອກ - *Dendrobium oligophyllum*, Orchidaceae



ເຂື່ອງແປງສີແຂ້ວ - *Dendrobium secundum*, Orchidaceae



ເອື້ອງຫົວເຂົ້າຕົ້ມ - *Eulophia andamanensis*, Orchidaceae



ເອື້ອງຕິນເຕົ້າ - *Gastrochilus calceolaris*, Orchidaceae



ເອືອງຕິນເຕົ້າ - *Gastrochilus obiquus*, Orchidaceae



ນາງອິ້ວປາກເປັດ - *Habenaria lindleyana*, Orchidaceae



ນາງອິ້ວປາກສະຫຼາມ - *Habenaria rhodocheila*, Orchidaceae



ເອື້ອງໜວດປາດຸກ - *Holcoglossum subulifolium*, Orchidaceae