

# ITTO-CITES PROGRAM FOR IMPLEMENTING CITES LISTINGS OF TROPICAL TIMBER SPECIES *NEWSLETTER*



## Donors



This is the sixth issue of the *ITTO – CITES Program for Implementing CITES Listings of Tropical Timber Species* newsletter. It is published on a quarterly basis, in English, Spanish and French, and is mainly made available to our African, Asian and Latin American colleagues, sponsors and other individuals interested in the progress of the ITTO-CITES Program. This issue covers a summary of program activities during the period April-June 2010.

Suggestions and contributions from project participants are essential to make future issues of this newsletter as informative and interesting as possible. Please send any correspondence to the relevant contact(s) listed on the last page.

## EDITORIAL

The ITTO-CITES Program Newsletter shares efforts taken by the range countries to ensure that international trade in CITES-listed tropical timber species, particularly afrormosia in Africa, ramin in Asia and mahogany in Latin America, is consistent with their sustainable management and conservation.

We continue informing stakeholders, organizations and individuals on activity results, provide information on these important threatened tropical timber species and, raising awareness of key actions that are being developed to ensure species survival and sustainable trade.

The ITTO-CITES Program has put forth efforts in disseminating results and lessons learned to the forestry sector for better forest management. The experience gained in the program implementation of more than two years has enabled to anchor the objectives and targets on a solid foundation, allowing the results to become national benchmarks in forestry research for different forest users, forest land owners, stakeholders, decision-makers and scientific authorities.

Successes are reflected in significant achievements up to date, such as production of more than twelve publications, four governmental reports, technical reports, capacity-building through workshops and training courses, creation of a solid team of researchers, strengthened partnerships with private sector and national universities, among others. The Program results also contributed to CITES, such as supporting/feeding information to the CITES Mahogany Working Group and the CITES Plants Committee.

Through the newsletter, the ITTO-CITES Program continues to keep our African, Asian and Latin American colleagues, sponsors, governments of range countries and individuals who are interested in the program informed on the progress in the development of a forestry regime to promote and ensure sustainable forest management. It should be emphasized that it will not be possible to move forward on sustainable use of forest resources without sound scientific knowledge serving as basis for technical- and political- decision making.

We would like to reiterate that this Program is made possible by the funding support of the EC and other donors such as Japan, the United States, Norway, New Zealand and Switzerland.

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*Ivan Tomaselli, General and Regional Coordinator for Latin America*

## ITTO-CITES PROGRAM IN A NUTSHELL

The "ITTO – CITES Program for Implementing CITES Listings of Tropical Timber Species" aims to ensure that international trade in CITES-listed tropical timber species is consistent with their sustainable management and conservation. The specific objective of the program is to assist national authorities to meet scientific, administrative and legal requirements for managing and regulating trade in *Pericopsis elata* (afrorosia) of Central Africa, *Swietenia macrophylla* (bigleaf mahogany) in Latin America, and *Gonystylus* spp. (ramin) in SE Asia and, in particular, to develop guidance to ensure that utilization is not detrimental to the survival of these CITES-listed tropical timber species.

The main range States exporting significant volumes of these species are Cameroon, Republic of Congo and Democratic Republic of Congo in Africa; Indonesia and Malaysia in Asia; and Bolivia, Brazil and Peru in Latin America.

The direct beneficiaries of this Program are public authorities and private sector operators in the timber sector in the range States. The indirect beneficiaries are other Parties to CITES that trade in these species, who will benefit through capacity building and awareness raising.

## FUNDING

The program has received funding from the European Commission, United States of America, Japan, Norway, New Zealand, Switzerland, and through ITTO's Bali Partnership Fund.

The European Commission provided a grant worth 2.4 million euros for program implementation, with over USD 900 000 provided from the other donors in aggregate to date. ITTO will encourage donors to continue providing funds as requests for support under the program exceed available resources. Three MoUs have been signed since the last newsletter (see signed MoUs > Recently signed MoUs). Another positive development has been the provision of funds (300,000 euros) from two private sector companies (Solvay and Indena) to facilitate work towards an NDF for *Prunus africana* in Cameroon.

## AGREEMENTS BETWEEN ITTO AND INSTITUTIONS OF RANGE STATES

Over 45 country activity proposals in Africa (5), Asia (23) and Latin America (20) have been submitted to ITTO for consideration under the Program. Of these, 13 activities in Asia, 5 in Africa and 6 in Latin America have received funding from ITTO since 2008. All approved activities are still on-going except for one activity in DRC, one in Indonesia and one activity in Peru, which have been concluded. One project in Brazil "Bigleaf mahogany (*Swietenia macrophylla*) in the Brazilian Amazon" ended in January 2010. Given the importance of the project, ITTO extended funding of the project through 2010.

ITTO has signed agreements with the following institutions since program inception:

### SIGNED MOUS

#### Brazil

FUNPEA (Foundation for Supporting Research, Extension and Teaching in Agrarian Sciences) – 2 activities

IFT (Tropical Forest Institute)/J. Grogan – 1 Activity plus extension

#### Bolivia

Vice Ministry of Environment, Biodiversity and Climate Change – 1 activity

#### Peru

UNALM (Universidad Nacional Agraria La Molina) – 2 activities

#### Cameroon

ANAFOR (Agence Nationale d'Appui au Développement des Forêts) – 2 activities

#### Democratic Republic of Congo

Direction des Ressources Fauniques et Chasse /CITES RDC – 2 activities

#### Republic of Congo

MINFE (Ministère de l'Economie Forestière) – 1 activity

#### Indonesia

Government of Indonesia and the Forestry Research and Development Agency (FORDA) - 4 Activities (2 Activities by the Centre for Forest and Nature Conservation Research and Development (CFNCRD); 1 Activity by the Remote Sensing Laboratory, Faculty of Forestry, Bogor Agricultural University; and, 1 Activity by the Research Centre for Biology, Indonesian Institute of Sciences.

#### Malaysia

Ministry of Natural Resources and Environment Malaysia (NRE) and the Malaysian Forestry Research and Development Board - 5 Activities (2 Activities implemented by the Forest Department Sarawak and Sarawak Forestry Corporation; 2 Activities by the Forestry Department Peninsular Malaysia; and, 1 Activity by the Forest Research Institute Malaysia.

## MOUs RECENTLY SIGNED

ITTO has recently signed two new MoUs in Asia for activities to be carried out during 2010. A MoU between ITTO and the Government of Indonesia was signed in April 2010 for the implementation of one activity and with the Government of Malaysia in June 2010 for the implementation of three activities.

Information about each country activity (country, title, abstract, executing agency) can be found on the ITTO website <www.itto.int>. The following section provides brief descriptions and progress reports during the period April - June 2010 for all activities that are currently underway, and information on new activities.

## ACTIVITIES IN DETAIL

### Africa

#### Cameroon

##### ***"Management of *Pericopsis elata* in forest concessions" (ANAFOR)***

Five out of six expected outputs (i) abundance/density specified for each concession, (ii) the minimum exploitable diameter well-defined for the country, (iii) indices of harvest; and, (iv) sustainable harvest quota of *P. elata*; (v) conversion ratio for *P. elata*, were completed during the first year of activity. The last output (vi) silvicultural operations is currently being conducted as planned. The objective is to assist forest companies in producing 50,000 plants of *P. elata* this year; a total of 13,680 seedlings are currently growing in 9 nurseries, in 11 forest management units (UFA) belonging to 5 forest companies. Current tasks include: seed gathering in the forest, cleaning sowing seeds and building additional nurseries. The national coordination team together with the expert who trained local technicians in the development of nurseries of Assamela in March 2010 are planning to visit all nurseries established by end of June 2010 for monitoring.

##### ***"Management of *Pericopsis elata* in forest plantations" (ANAFOR)***

This activity addresses the management of *Pericopsis elata* plantations in Cameroon to determine tools for enhancing its silviculture in the country. A total of five expected outputs were identified (i) the state-of-the-art of the plantation; (ii) zoning; (iii) protection of the plantation; (iv) research results; (v) capacity-building and dissemination of silviculture of *P. elata*. Results of different studies conducted within this activity were used to compile: (1) a training book on the silviculture of *P. elata*, the nursery stock production; and, (2) Simple management plan of the Bidou forest plantation.

#### Democratic Republic of Congo

##### ***"Training of different stakeholders in the verification of the CITES permits compliance and the use of "CITESWOOD ID" tool in the Democratic Republic of Congo" (OCC/OFIDA)***

The project is completed. The national training workshop was held in Kinshasa, Gombe in June 2009; more details are available on the program website.



Nursery of *Pericopsis elata*, Angola.  
Photo by: Jean Lagarde Betti.

##### ***"Dissemination of the CITES convention and its implementation texts within the distribution area of *Pericopsis elata* (Afrormosia/Assamela) in the Democratic Republic of Congo" (DRFC)***

This activity aims to disseminate the CITES and its implementation tools. Despite the delay in the implementation of this activity, important efforts were made by DRC authorities. The first dissemination workshop was organized in Kinshasa, Gombe on 3 – 5 February 2010. DRC authorities plan to organize two or three additional dissemination workshops in Matadi, Mbandaka, and Kisangani during the second semester of 2010. The funds necessary to organize these workshops have already been disbursed by ITTO, according to the terms of the MoU.

#### Republic of Congo

##### ***"Assessment of Afrormosia in a production forest to ensure its sustainable management in Congo-Brazzaville" (MINFE)***

Three reports on: i) the state-of-the art of Afrormosia; ii) the analysis on the gaps between the CITES and the national policy; and, iii) the simple management plan of Afrormosia in the Block A of the Tala Tala FMU, have been completed. Congolese authorities plan to organize an extraordinary meeting of the National Technical Committee which will decide on the settlement of a scientific committee in charge of addressing the Non-detriment findings report of Afrormosia for Congo. This NDF report is foreseen to be finalized by August 2010. The authorities of the Industrial and Forestry Society of Congo (SIFCO) signed a service note increasing the minimum exploitable diameter (MED) of *P. elata* from 60 to 70 cm, as one of the recommendations formulated by the ITTO-CITES program in Congo. At this moment, no difficulty is foreseen to delay the completion of this activity.

### Asia

#### Malaysia

##### ***"Non-detriment findings report on *Gonystylus bancanus* – a quantitative assessment of *G. bancanus* in two selected permanent forests of Sarawak" (FDS/SFC)***

The objective of the Activity in collecting data on the status and stocking of *G. bancanus* in the production forests of Sarawak, namely, the Kayangeran Forest Reserve in Lawas and the Saribas Lupar Protected Forest in Sri Aman, to elaborate further the status and stocking of *G. bancanus* in these two selected Permanent Forests in Sarawak and compute the sustainable harvest quota of *G. bancanus* is expected to be achieved at the latest in early July 2010. This is in view that all the field work involving data collection and an analysis on the stem structure and distribution of ramin in both the study areas had been completed. In fact, currently, 60 percent of the technical report on the computation of the sustainable level of harvest where the quota will be determined based on knowledge of the biology, life history, demographics and reproductive capacity of the species have been completed.

***“Quantification of dry and wet inland *Gonystylus* spp. (ramin), *Aquilaria* spp. (agarwood) and *Intsia* spp. (merbau) in Peninsular Malaysia” (FDPM)***

The objective of the Activity in collecting information on the distribution, status and stocking of dry and wet inland *Gonystylus*, *Aquilaria* and *Intsia* species through the re-sampling of all the 59 sample plots containing *Gonystylus* species, 1 plot of *Aquilaria* and 7 plots of *Intsia* species, and the validation, processing and analysis of the data collected, including conducting a tree identification course for staff of the Forestry Department Peninsular Malaysia and workers of the contractor, as well as acquisition of inventory equipment and specimen identification had been attained. Presently, steps are being taken by the contractor, who was appointed in June 2010, to establish the 10 Permanent Sample Plots that have been identified based on the 59 sample plots containing *Gonystylus* species. This will contribute to the achievement of the other objective of the Activity in establishing 10 Permanent Sample Plots to monitor the growth, mortality and recruitment of *Gonystylus* species. The Activity, with the approval of ITTO, is now expected to be completed in October 2010.

***“Generation of spatial distribution maps of *Gonystylus bancanus* (ramin) using hyperspectral technology and determination of sustainable level of harvest of ramin in production forests of Peninsular Malaysia” (FRIM)***

The analysis of the different type of ramin spectral signatures from the airborne hyperspectral data (blooming, non-blooming, and semi-blooming) had achieved 95% of the required work, while post-processing of 50% of the data had been completed. Two classification methods, the unsupervised Iso-Data and K-Means method, had been tested and the best and most efficient method would be used to classify the ramin found in the study area, Compartment 77, Pekan Forest Reserve, Pahang. The production of ramin spatial distribution maps and data collection for the assessment of the growth projection model to be used for determining the sustainable level of harvest in Peninsular Malaysia had been completed. The draft report is expected to be completed at the conclusion of the Activity in September 2010.

***“The development of *Gonystylus* spp. (ramin) timber monitoring system using radio frequency identification (RFID) in Peninsular Malaysia” (FDPM)***

The activities required for achieving the objectives of the Activity of a customized cost-effective *Gonystylus* species timber monitoring system using radio frequency identification (RFID), and an automated detection and notification mechanism for tracing non-compliances using customized cost-effective handheld data logger and/or gentry (gate) are still being pursued. In this regard, the acquisition of computers, servers, printers and other related hardware, and RTRfid system peripherals, including satellite (VSAT) communication system and broadband, RFID tags (Signumat bar-coded) had been completed. The electronic marking and tagging of trees had also been completed. Forest Harvesting is now in progress where 50 percent of the tagged trees have been felled. This Activity is now expected to be completed in October 2010 with the recent approval by ITTO for its extension.

***“Developing DNA database for *Gonystylus bancanus* in Sarawak” (FDS/ SFC/ FRIM)***

The extraction and purification of DNA from leaves and bark samples, including microsatellite analysis using microsatellite markers developed from *Gonystylus bancanus* had been completed. Fragments analysis using the Applied Biosystem GeneMapper v.3.2 and population differentiation analysis using the Genepop were also completed. In this regard, the genotype data of each population

generated in the GeneMapper had been exported and stored in Microsoft Excel format consisting of samples number, population name, name of locus, and allele frequency. Currently, genetic diversity parameter is being conducted using FSTAT, Power marker, etc., while the generation and compilation of genotype profiles according to individual populations to create the DNA database is still being pursued. The Activity is expected to be completed at the latest in July 2010.

**Three new project activities recently started in Malaysia for 2010**

***“Sawn Timber and Plywood Recovery Study of Ramin (*Gonystylus bancanus*) in Peninsular Malaysia” (FDPM/MNRE)***

This project will assist Peninsular Malaysia to determine the recovery rate of ramin logs for the manufacture of sawn timber and plywood, as well as to develop a technique for quantifying wood waste from sawmilling and in plywood production. It is expected that this Activity will contribute to an improvement in the recovery rate and utilization of ramin timber and provide a better estimate of the quantum of wood waste generated from the production of sawn timber and plywood in Peninsular Malaysia. This Activity is expected to be completed in May 2011.

***“National Workshop on Enforcement Compliance for Trade in Ramin (*Gonystylus* species)” (Malaysian Timber Industry Board (MTIB), Ministry of Plantation Industries and Commodities)***

This project will conduct a four-day national workshop to enable the enforcement agencies staff in Malaysia directly or indirectly involved in ramin trade to further enhance their knowledge on ramin enforcement and implementation mechanisms under CITES, develop common understanding and practices related to trade control for ramin and related timber/plant species listed under CITES, establish a Task Force to coordinate effective implementation of CITES regulations, and provide effective networking and communication channel within the enforcement agencies in Malaysia.

***“Regional Workshop on the Sharing of Findings from the Activities Implemented in Indonesia and Malaysia under the ITTO-CITES Project on Ensuring International Trade in CITES-listed Timber species is Consistent with their Sustainable Management and Conservation” (FRIM/MNRE)***

This project which will conduct a three-day Workshop to share, learn and discuss the findings of each Activity implemented in Indonesia and Malaysia under the ITTO-CITES Program, including identifying and adapting relevant findings from the Indonesian Activities by Malaysia and vice-versa. The Workshop will also endeavor to identify potential ramin related projects and activities in Indonesia and Malaysia to further ensure that the international trade in ramin is consistent with their sustainable management and conservation.

**Indonesia**

***“Improving inventory design to estimate growing stock of ramin (*Gonystylus bancanus*) in Indonesia” (SEAMEO/BIOTROP)***

The original objective of the Activity in developing an inventory design using satellite technology for estimating the standing stock of ramin, as well as the other species found growing in peat swamp forests through a review of the existing methods for ramin inventory, acquisition and interpretation of satellite imageries, ground check in selected sites in Sumatra and Kalimantan, application of the cost-



effective inventory method to estimate ramin standing stock, and the holding of a stakeholder consultation on the estimated standing stock of ramin had been attained. Hence, the original expected outputs of the Activity in the development of an inventory design to estimate standing stock of species in peat swamp forests and an estimate of the standing stock of ramin had been achieved.

Currently, the Activity is implementing the two additional activities that were approved by ITTO in January 2010, that is, to develop guidelines for ramin inventory and Non-detriment Findings (NDF) assessment on ramin, and to conduct a short training workshop on the inventory method for ramin and NDF assessment. Final drafts of the guideline for ramin inventory and that for NDF assessment had been prepared which would be presented at the short training workshop scheduled to be held in early July 2010.

***“Assessing silvicultural system on ramin: review on the current practice and re-vitalization of existing permanent sample plots” (CFNCRD)***

The original objective in conducting a review on the current practice through a detailed examination of existing rules, regulations and concepts underlying the practice of the current silvicultural system, including interviews, stakeholders consultation and field visits, was attained. The revised silvicultural system to be applied in peat swamp forests, with specific reference to ramin and the other species found in such forest will be published once comments from the Directorate General Forest Production are received and taken into account in the document. The other original objective of the Activity in the revitalization of existing Permanent Sample Plots is still being implemented. Currently, an estimated 90% of the work had been completed while its full completion is expected in July 2010.

The Activity is also implementing three additional activities approved by ITTO in January 2010, in developing guidelines for monitoring fruiting-flowering and ramin seed handling, a manual on vegetative propagation techniques, and to conduct a short training workshop on the manual for monitoring fruiting-flowering and ramin seed handling, as well as on vegetative propagation techniques. In this context, 90% of the guidelines for monitoring fruiting-flowering and ramin seed handling, and that of the manual on vegetative propagation techniques had been completed, while the short training workshop will be conducted in the next two months.

***“Exploratory assessment on the population distribution and potential uses of non-Gonystylus bancanus species in Indonesia” (CFNCRD/FORDA)***

The original objective of the Activity to explore the current status of *Gonystylus* species (non-*Gonystylus bancanus*) in Indonesia through literature review and field survey that were aimed at identifying and collecting current information on the ecological distribution, population, management and conservation of the targeted non-*G. bancanus* species at several chosen sites, as well as an assessment of the current growing stock, population distribution and habitats of non-*G. bancanus* species have been attained. In addition, a stakeholders' consultation on the findings involving participants from research institutions, universities and the scientific authority of CITES and non-governmental organizations have also been conducted.

The Activity is also implementing three additional activities approved by ITTO in January 2010 to: i) conduct further analyses of genetic relationship between species and *in vitro* propagation of *Gonystylus* species; ii) develop a guidebook for species identification and holding a training workshop on species identification for field staff; and, iii) undertake initial establishment of ramin gene pool in Merang Kepahyang (Sembilang National Park, South Sumatra) and the Sebangau National Park, Central Kalimantan. Currently, 90% of the report on the first activity, and 80% of the guidebook for species identification have been prepared. However, the establishment of ramin gene pools which started in March 2010 had encountered some

delay due to high water level in the peat swamp forests. Nevertheless, all the activities are expected to be completed in August 2010.

***“National Workshop on the Identification of Information Gaps Towards the SFM of Ramin and Thematic Programs to be Included in the 2009 and 2010 Work Program of the ITTO-CITES Project - Ensuring International Trade in CITES-listed Timber species is Consistent with their Sustainable Management and Conservation” (CFNCRD/FORDA)***

The project is completed. The workshop was held in Bogor, Indonesia from 21-22 January 2009; more details are available on the program website.

**New project activity recently started in Indonesia for 2010.**

***“Review on Ramin Harvest and Trade: CITES Compliance, Tri-National Task Force on Trade in Ramin, Trade Control and Monitoring” (Forest Protection and Nature Conservation, Indonesia Ministry of Forestry)***

This Activity contributes to the sustainable management and conservation of ramin through the improvement of CITES implementation, and enhances regional cooperation and improvement in trade data monitoring. A Team Leader and a Secretary to the Activity have been appointed in June 2010. It is expected that the outputs of a roadmap for sustainable management and conservation of ramin, a CITES trade compliance system, a review on the effectiveness of regional forum to combat illegal trade, including ramin, and improved trade data collection, monitoring and trade control will be achieved according to the planned schedule of the Activity.

## Latin America

### Brazil

***“Bigleaf mahogany (Swietenia macrophylla) in the Brazilian Amazon: long-term studies of population dynamics and regeneration ecology towards sustainable forest management” (IFT/J. Grogan)***

This project's objective is to establish a biological foundation for sustainable forest management systems for mahogany based on long-term studies of survival, growth, reproduction, and regeneration by natural populations in primary and logged forests. Project activities during the second quarter of 2010 focused on data management, analysis, and synthesis for publication. Preparations were begun for the 2010 field season in southeast Pará, which will take place during August to November.

A manuscript by Grogan, Schulze, and J. Galvão, titled 'Survival, growth and reproduction by big-leaf mahogany in open clearing vs. forested conditions in Brazil', was accepted and published on-line by the scientific journal *New Forests*. This article reports on long-term survival, growth, and fruit production by mahogany trees at the Agua Azul site in southeast Pará.

Work continued with Middlebury College colleague R. Matthew Landis on manuscripts using a population modeling framework based on 1995–2009 demographic data collected at the Marajoara, Corral Redondo, and Acre-Sena Madureira sites to address

basic and applied questions about mahogany population dynamics. The first of these manuscripts is currently being revised for submission to a scientific journal, the Proceedings of the National Academy of Sciences (PNAS). A second manuscript is in preparation for submission to Journal of Applied Ecology during the fall of 2010.

***“Ecology and silviculture of mahogany (*Swietenia macrophylla* King) in the western Brazilian Amazon” (UFRA/FUNPEA)***

According to the forest management plan, 1 ha of permanent sample plots (4 PSPs of 1/4 ha) were installed for every 1,000 ha of Managed Areas of Production Unit. Consequently, eight PSPs with size 250m long x 10m wide (1/4ha) proportional to the size of the UPA-1R area were established. Following the Guidelines for Implementation of Permanent Plots (Silva et al. 2005), each PSP was divided into 25 sub-parcels of 10m x 10m, where individuals with DBH  $\geq$  10 cm were measured. In five of these 25 sub-parcels, randomly selected, individuals of size at 5 cm  $\leq$  DBH <10 cm were measured. In these same five sub-parcels (10m x 10m) randomly selected, sub-parcels of 5m x 5m were established, in which all individuals with 2.5 cm  $\leq$  DBH <5cm were measured; Within these 5m x 5m sub-parcels, smaller parcels 1m x 5m were established, on the left side of the pathway, which will be checked (counted) the seedlings of DBH <2.5 cm and height greater than 30 cm.

***“Management of *Hypsipyla grandella* in *Swietenia macrophylla* King Plantations in Pará and São Paulo States, Brazil” (UFRA/FUNPEA)***

The management of mahogany drill insect has advanced through the field and greenhouse experiments. In three field experiments, positive results were observed; in the Igarapé-Açu municipality, the Colacid formulations 3 and 4 have shown a high control during the period September 2009 - May 2010, reaching 100% of mahogany drill insect control in a few months. In order to facilitate the applications of these treatments, lifting platform has been used since May 2010 to improve the application of treatments and pruning of branches to encourage erect growth.

Similarly, the mahogany drill insect control experiment in Aurora do Pará showed positive results. Considering that in January 2010, before starting the treatments, 15% to 40% of the experimental area was infected by the insect, and after the colacid application the insect's attack decreased sharply, especially with the T3 and T4 treatments, resulting in 100% control.

In São José do Rio Preto (SP), most mahogany trees already reached a height of 7m, which makes the application of Colacid difficult at the Mr. Nelcindo's plantation area, even using the lifting platform. In May 2010, the first attacks of the drill were registered, the average attack ranged from 10% to 12.5% in T1, T2 and T4 treatments and only T3 was not attacked. As the average mahogany tree height of the experimental area has reached 8.08 m, the project team decided to apply the Colacid spray formulation to make the treatment application easier. Thus, it is expected that the Colacid spray would control the insect drill attack effectively.

The greenhouse experiment began in June 2010 at the UFRA campus, the evaluation of different levels of calcium and boron was applied in yellow latsol, which shows mahogany plants with new shoots inoculated with *Hypsipyla grandella*'s fertile eggs reared in the laboratory.

## Peru

***“Evaluation of commercial stocks and strategy for the sustainable management of mahogany/cedar in Peru” (UNALM)***

Project final report completed in November 2009 and available on ITTO website.

***“Design, validation and adjustment of the methodology for monitoring and periodic evaluation of the plots for characterization of mahogany and cedar populations in Peru”***

All activities ended in May this year. The results have allowed to keep the database updated and systematized information on annual operational plan (POAs) and some updates on General Forest Management Plans collected in Madre de Dios, Ucayali and Loreto.

Parameters needed to obtain the expected results of CITES-ITTO project are: understanding the recovery of population dynamics of mahogany and cedar, and the influence of related species. It is necessary to know how their ecosystems work, where they develop and how they respond to silvicultural treatments and harvesting; to this end, there is a need to have periodic assessments of soil fertility, nutrient and water availability, rainfall, incidence of sunlight, rotation period, recruitment rates, growth and annual mortality, forest management expenses, and environmental damages.

The results have allowed knowing the populations size of these two species, allowing the establishment of annual quota for mahogany; for this year less than 831 trees were recommended, decreasing in relation to the last year's quota. So there is a need to propose logging activities taking into account phenological calendar of the species, and silvicultural plan for management, on which should be organized next year's logging activities.

In case of cedar, its behavior is similar to mahogany, but it is a more aggressive species; the cedar population size is estimated at about one million trees, including protected natural areas, with forest stand characteristics that about 70% are below the minimum cutting diameter (65 cm DBH) and 30% over that diameter.

## Bolivia

***“Population density and forest harvesting impact on natural regeneration and diameter growth of mara (*Swietenia macrophylla*)” (MEBCC)***

This project aims to: a) strengthen the CITES Scientific Authority in Bolivia, b) know the current status of mahogany populations in Bolivia; and, c) determine harvest levels based on the results of this project complemented with the existing data. The Directorate General of Forest Management and Development, the Directorate General of Biodiversity and Protected Areas (DGBAP), the National Institute of Agricultural, Livestock and Forestry Innovation (INIAF) carried out the first monitoring of ecoregions for the implementation of the mahogany project, in the subtropical forest areas of Guarayos and Bajo Paragua (TCO Guarayos and Cururu Community); mahogany trees with silvicultural treatments have been identified within these areas.

A project committee was established to coordinate the implementation of the project, such as exchange of information, project monitoring, data analyze, development of guidelines for the Conservation and Monitoring Strategy for Mahogany. The committee involves the participation of both governmental and nongovernmental institutions (Authority for Control and Social surveillance of Forests and Lands ABT - former Forestry Superintendency, the Directorate of Management and Forest Development, DGBAP as CITES Management Authority, INIAF as CITES Scientific Authority, scientific institutions, and non governmental organizations).

The selection process of a consultant or institution with experience in research on population ecology of forest species and proven experience in developing, implementing and monitoring of research projects in forestry is underway.

## Other ITTO-CITES Program Studies

***“Market Study of *Cedrela odorata* in Bolivia, Brazil and Peru”***

*Cedrela odorata*, along with other African and Asian wood and after *S. macrophylla*, is the second most valuable tropical timber species in the world. The inclusion of mahogany in CITES Appendix II has significantly influenced cedar international trade.

The United States, the major importer of mahogany in the world, showed a drastic decline in consumption during the period 1999-2008. Four years prior to the inclusion of mahogany in Appendix II, the average annual sawnwood import was 79 thousand m<sup>3</sup>, which reduced to 47.1 thousand m<sup>3</sup> for the period 2003-2006, and 18.1 thousand m<sup>3</sup> for 2007-2008. However, annual cedar import for the same periods was 3,500 m<sup>3</sup> prior to the inclusion, and 18,200 and 19,800 m<sup>3</sup>, respectively, exceeding mahogany import in the last period.

About 99% of the United States imports of cedar come from Peru and Bolivia, which exported 86,000 m<sup>3</sup> and 37,000 m<sup>3</sup>, respectively, between 2001 and 2008. It is estimated that these additional volumes have reduced the deficit of mahogany sawnwood products by half; and great demand for cedar has significantly increased export prices in both countries. Between 2003 and 2007, FOB value Callao-Peru rose from \$600/m<sup>3</sup> to \$1000/m<sup>3</sup>; and FOB value Bolivia for timber products increased from \$760/m<sup>3</sup> to \$528/m<sup>3</sup>.

***“Support Compliance of CITES Convention in Guatemala and Peru: In-country Technical Assistance for the Development of the National Timber Yield Tables for Mahogany (*Swietenia macrophylla*) Standing Volume & Export Grade Sawnwood”***

The National Timber Yield tables of volume conversion from log to sawnwood according to international rules of wood classification (NHLA) for mahogany (*Swietenia macrophylla*) in Guatemala and Peru is a useful tool for calculating trade volumes for timber companies and for government’s forest control. This initiative is carried out through a partnership between the INTERCOOPERATION in Switzerland, the World Bank’s FLEG program funded by the EU and DFID, and with ITTO support.

In the Guatemala case, samples of the field study were taken in five forest management units (Laborates, Suchitecos, Afisap Carmelita y Custosel) according to a strategic planning with the leadership of the National Institute of Forests (INAB) and the National Council of Protected Areas (CONAP) with the support of forest concessionaires in the Peten area; mahogany trees that timber companies had planned to harvest, were logged and measured in accordance with the approved methodology. The harvested wood has been sawn and graded. From this information, the statistical models that best fit the data will be evidenced and tables will be compiled. The study is expected to finish in August 2010.

In the Peruvian case, under the leadership of the Directorate General of Forestry and Wildlife Fauna (DGFFS) of the Ministry of Agriculture – MINAG (CITES Management authority) and with the support of the Ministry of the Environment – MINAM (CITES Scientific Authority), the Forest Concessions Monitoring Office (OSINFOR), the National Agrarian University la Molina (UNALM), the U.S. Forest Service, a detailed planning has been completed and the Madre de Dios and Ucayali regions were selected for field work. 162 trees were measured according to the methodology adopted by Jefatural Resolution n° 159-2008-INRENA; this part of the study is expected to finish in October 2010.



Mahogany tree, Guatemala.  
Photo by: Wilsson Martínez.

## RECENT EVENTS

### XIX AETFAT Congress

The Regional Coordinator for Africa participated in the XIX Association for Taxonomic Study of Flora of Tropical Africa" (AETFAT) Congress held in Antananarivo, Madagascar on 25 April – 1 May 2010. It is the main congress on vegetation and taxonomy of wild plant and fungal species of Tropical Africa; the congress is held every 3 years; over 250 participants from different countries attended the meeting. The RC for Africa presented five papers, including one presentation and four posters, in the section entitled "Ethnobotany and conservation of African plants"; three papers dealt with the ITTO – CITES program activities in the Congo basin.

## UP COMING EVENTS

### Cameroon

The Deputy General Director of ANAFOR is planning to go to Kribi in the coming months to distribute Assamela seedlings to local communities settled in the the Bidou forest plantation area. This is to encourage the agroforestry of *Pericopsis elata*.

### DRC

DRC authorities plan to organize three additional dissemination workshops in Matadi (early July 2010), in Mbandaka and Kisangani have yet to be defined.

## PROGRAM MONITORING

In order to increase the transparency of the ITTO-CITES Program, external monitoring has been regularly conducted, including independent European Commission monitoring carried out in mid-2008 and 2009, and an ITTO-funded External Monitoring Review/ Evaluation of the Program in late 2009-early 2010. In addition, regular monitoring of field implementation is conducted in Africa, Asia and Latin America by respective regional coordinators.

## ARTICLE

### Training to Promote the Provision of Ramin Planting Materials

*by Tajudin Edy Komar, Evalin SS. Sumbayak, Dian Tita Rosita and Siti Nurjanah*

#### Background

Scarcity of planting materials for ramin (*G. bancanus*) in Indonesia has become a primary barrier. In 2007, all potential seed sources of ramin both in Sumatra and Kalimantan had been identified and some of them had been field visited. From the identification, it was revealed that the existing sources were insufficient to produce a large quantity of seeds, primarily due to population depletion and degraded habitats. In addition, threat to be illegally logged remained significant for some areas, except in conservation-protection areas. According to the monitoring from both islands since 2005, ramin has produced very limited quantity of flowers and fruits and mostly they were attacked by various predators; bird, bat and other animals.

To provide planting materials regularly (annually) to support rehabilitation and plantation programs, alternative sources of planting material should be explored. ITTO Project has successfully developed ramin propagation using shoot stem- cuttings, which has been initiated by Komatsu-FORDA Fogging Cooling Nursery (KOFFCO) early 2000. In order to expand and widely distribute the technique, a short training course was organized and conducted at the Regional Research Center (RRC), Banjarbaru-South Kalimantan from 3<sup>rd</sup> – 5<sup>th</sup> May 2010.



**Purposes:** The training was intended (i) to introduce the propagation techniques for ramin; (ii) to enhance capacity of relevant stakeholders in vegetative propagation, especially ramin; and (iii) to promote rehabilitation and plantation of ramin in its natural habitats both in the production forests and conservation areas.

**Content:** This 3-day training involved both theory and practical exercise. The theory comprised a brief introduction on the method for monitoring flowering and fruiting on ramin, the introduction of principles for vegetative propagation (controlling temperature, humidity, light, and the choices of soil media) and the environmental condition required under KOFFCO (Komatsu FORDA Fogging Cooling) technique. The practical exercise, which formed the most part of the training, was on method for soil media preparation, demonstration and practices on how ramin shoot-stem are cut and planted into the media. In the last 2 days, each participant was asked to prepare 15-20 shoot-stem cuttings to be planted into the media. These planted shoot-stem cutting would be kept and observed for their survival, new bud formation and rooting as indicators for successful vegetative propagation technique.

**Participants:** The training workshop was attended by 8 participants consisting of practitioners in forestry plantation and nursery management, and nursery technician and university lecturers. They were from Sebangau National Park (2), Regional Research Center-Banjarbaru (1), District Forest Services (3) and Universities (2).

**Instructors:** The instructors for this training workshop were senior scientists from the Seed Technology Center (Bogor), senior experts of KOFFCO (Bogor), senior Researchers for ramin vegetative propagation and nursery technicians.

**Feedback:** All the participants showed great enthusiasm in taking part in this short training course and are expected to be able to assist in the provision of ramin planting materials in their own places. However, limited stockplant (hedge orchard) to be sourced for vegetative cuttings may be another barrier in mass propagation of ramin. This is because the propagation using shoot or cutting collected from mature trees are not successful.



Vegetative Training Workshop, Indonesia.  
Photo by: Tajudin E. Komar.

## NEWS

### Cameroon

The Minister of Forestry and Wildlife, Prof. Dr. Elvis Ngolle Ngolle signed a decision reducing the minimum exploitable diameter (MED) of *P. elata* from 100 to 90 cm, as one of the recommendations formulated by the joint ITTO - CITES program in forest concessions in Cameroon.

### Congo

SIFCO authorities signed a service note increasing the minimum exploitable diameter (MED) of *P. elata* from 60 to 70 cm, as one of the recommendations formulated by the joint ITTO - CITES program in Congo.

### Working Group on the Bigleaf Mahogany and Other Neotropical Timber Species

At its 15th meeting (CoP15, Doha, 2010), the Conference of the Parties adopted a Decision that establishes a Working Group on the Bigleaf Mahogany and Other Neotropical Timber Species and a related Annex that specifies the terms of reference and membership of this group. Paragraph 2. f) of that Annex specifies the following:

*The chairmanship and vice-chairmanship of the working group shall be undertaken by people from the range States who will be selected by the Plants Committee on the basis of their curricula within a period of one month after the entry into force of the Decision...*

As Decisions adopted at CoP15 will come into force on 23 June 2010, the chair and vice-chair of the group should be nominated by 23 July. At the request of the Chair of the Plants Committee, the Secretariat therefore invites the range States concerned to communicate the curricula vitae of their candidates for these positions by 8 July 2010. The Plants Committee will then review the candidatures in compliance with the above-mentioned Decision.

### CBOL in Barcoding Science: Barcoding Endangered Species using Character Analysis

There is an effort of an organization trying to have DNA info for all organisms to aid identification. The article talks about biodiversity loss as one of the most pressing issues in science policy today and an important application of DNA barcoding is crucial. This kind of barcoding study could be also applied to forest products. For details see <http://barcoding.si.edu/Newsletter/newslettersourceb.html#1>

### Protest at Trade Me HQ Against Sales of Kwila

Human rights and rainforest activists took their campaign against the import of kwila/merbau (*Intsia* spp.) to the Trade Me Headquarters: 11 Cable St, Wellington on Thursday 27 May. The campaigners marched to the Trade Me office with a letter for the CEO. Several major New Zealand companies including The Warehouse, The BBQ Factory and Harvey Norman have now stopped stocking kwila. But every day on Trade Me upwards of 200 products made from kwila are listed for sale by auction.

Spokesperson Maire Leadbeater said "Trade Me prides itself on its ethical reputation and recently put in place procedures to restrict the trade in ivory because elephants are listed with the CITES convention as endangered. But the ethical issues are just as serious with kwila the species faces extinction in less than 35 years if logging continues. Each kwila tree takes 75 years to grow to maturity, and it has already been logged out of most of its former Asia-Pacific range. Almost all of the kwila outdoor furniture and decking on sale in New Zealand is made from wood sourced from the rainforests of Indonesian-occupied West Papua, where illegal logging is the norm."

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#### Contacts:

ITTO - **Steven Johnson**, ITTO Coordinator - johnson@itto.int  
**Pei Sin Tong**, Programme Assistant - tong@itto.int  
 CITES - **Milena Sosa Schmidt**, CITES Coordinator - milena.schmidt@cites.org  
 Regional Coord. for L.A. & General Coordinator - **Ivan Tomaselli** - itomaselli@stcp.com.br  
 Regional Coordinator for Africa - **Jean Lagarde Betti** - lagardebetti@yahoo.fr  
 Regional Coordinator for Asia - **Thang Hooi Chiew** - hcthang@streamyx.com  
 Deputy Regional Coordinator for Latin America - **Sofia R. Hirakuri** - sofia@stcp.com.br