FOREST DEPARTMENT SARAWAK

INTERNATIONAL TROPICAL TIMBER ORGANIZATION
(ITTO)

FIELD REPORT	:	TREE IDENTIFICATION TRAINING UNDER FOREST RESOURCES INVENTORY PROJECT PHASE III
EXECUTING AGENCY	:	FOREST DEPARTMENT SARAWAK
PROJECT CODE	:	PD902/19 REV.3(F)
TITLE	:	MANAGEMENT OF UPPER BARAM FOREST AREA FOR CONSERVATION AND SUSTAINABLE DEVELOPMENT WITH INVOLVEMENT OF LOCAL COMMUNITIES, UPPER BARAM, SARAWAK, MALAYSIA

30 November 2023
Kuching, Sarawak, Malaysia

1.0 SUMMARY

This tree identification training was held as part of the programme under ITTO Project PD902/19 Rev.3(F) and joined by two of the staff members from ITTO Project Management Team, Mdm Nur Afiqah binti Abdul Karim, ITTO Research Officer, and Mr. Rantai anak Jawa, ITTO Technical Assistant.

The training was held for the officers and staff of Forest Department Sarawak (FDS) who frequently work in identifying plants for various purposes, such as for inventory, resource survey, research, assessment, etc. A deeper understanding of forest resources, and plant taxonomy will help the participants to identify trees accurately and systematically. The five-day lessons were led by local botanist, Dr. Paul Chai Piang Kong and assisted by Mr. Rantai anak Jawa, and field assistant, Mr. Johnny Angkabau. A total of 41 participants from FDS headquarter and regional offices throughout Sarawak attended the training in Universiti Putra Malaysia (UPM) Bintulu.

The tree identification training included the following topics for discussion:

- Introduction to forest types in Sarawak & species diversity
- Economic importance & status of forest resources
- Nomenclature & taxonomy of species identification
- Key characteristics of plants for species identification

Participants were also exposed to practical training in the field, where plant samples from the jungle and roadside of UPM, were collected and identified. The participants also had a trip to Similajau National Park for practical. All the participants were able to apply the knowledge from theoretical class into the field, and the training was considered a success. It was hoped that a similar training course will be organized again in the future, as it was shown to have beneficial outcome to participants from FDS.

2.0 DURATION

5 – 11 November 2023 (6 days)

3.0 MODE OF TRANSPORTATION

i. Flight (AK6063, AK6055)
ii. Rental car (QTT5905)

4.0 OFFICERS & STAFF INVOLVED

No.	Name	Position	Designation
1.	Dr. Paul Chai P.K.	Consultant/Trainer	-
2.	Mohammad Nor Firdaus bin Haji Sariee	Executive Forester	PMD, HQ
3.	Nur Afiqah binti Abdul Karim	Research Officer	ITTO, IAD, HQ
4.	Rantai anak Jawa	Technical Assistant	ITTO, IAD, HQ
5.	Johnny Angkabau anak Mungu	Field Assistant	-
6.	Kajan Imang	Forest Ranger	RFO Miri
7.	Taha @ Syukery bin Amin	Forest Guard	PMD, HQ
8.	Mohd Izdihar bin Mohd Daud	Forest Guard	PMD, HQ
9.	Frescilia Ping Lah	Forest Guard	PMD, HQ
10.	Stephenus Spencer anak Bagie	Forest Guard	PMD, HQ
11.	Felyk Finder anak Freddie	Forest Guard	PMD, HQ
12.	Leon Narang anak Sanda	Forest Guard	PMD, HQ
13.	Sheldon anak Sani	Forest Guard	PMD, HQ
14.	Adif Adrzrif bin Abdul Latip	Forest Guard	HQ
15.	Rosima anak Elani	Forest Guard	HQ
16.	Muhamad Haikal bin Helli	Forest Guard	HQ
17.	Clarence Fabian Punan	Forest Guard	HQ
18.	Mohammad Ismailie bin Abdullah	Forest Guard	HQ
19.	Bryan Donnu anak Migon	Forest Guard	HQ
20.	Ismaily bin Rebi	Forest Guard	RFO Kuching
21.	Erickson Unchau anak Edward	Forest Guard	RFO Kuching
22.	Reemy anak Kumpu	Forest Guard	RFO Kuching
23.	Shapuan bin Sapiie	Forest Officer	RFO Sibu
24.	Japin bin James	Forest Guard	RFO Sibu
25.	Wikin bin Kaliew	Forest Guard	RFO Bintulu
26.	Andy Engan	Forest Guard	RFO Bintulu
27.	Edwin anak Lium	Forest Guard	RFO Bintulu
28.	Ahmad bin Alim	Forest Guard	RFO Miri
29.	Mohd Shafriq Aziz bin Yusof	Forest Guard	RFO Miri
30.	Ayub bin Ibrahim	Forest Guard	RFO Miri
31.	Anthony anak Sinju	Forest Guard	RFO Sri Aman
32.	Awang Haznally bin Awang Ros	Forest Guard	RFO Sri Aman
33.	Ismail bin Sapong	Forest Guard	RFO Sarikei
34.	Jason anak James	Forest Guard	RFO Sarikei
35.	Mohd Ridhwan bin Arbaen	Forest Guard	RFO Kapit
36.	Mohamad Fadzlan bin Zaini	Forest Guard	RFO Kapit
37.	John anak Hidap	Forest Guard	RFO Limbang
38.	Jackie Yohanes John	Forest Guard	RFO Limbang
39.	Dahlan bin Mohamad	Forest Guard	RFO Limbang

40.	Mohd Arib Asy'ari bin Ramli	Forest Guard	RFO Limbang
41.	Yakub bin Isa	Forest Guard	DFO Lawas
42.	Ruzy anak Marin	PSH	PMD, HQ
43.	Dayang Nursyafiqah binti Abg Muas	PSH	PMD, HQ
44.	Valerie Jude anak Nios	PSH	PMD, HQ

5.0 PROGRAMME

Tarikh	Masa	Aktiviti	Catatan
05.11.2023 (Sun)	1310	Kuching – Bintulu	AK6063
06.11.2023 (Mon)	0800-1700	• History of forestry • Forest resources • Plant identification	Led by Dr. Paul Chai
07.11.2023 (Tue)	0800-1700	• Keys in plant identification • 14 species of leaf samples taken for participants to identify based on their plant taxonomy; Tembusu, Seladah, Empili, Medang, Kopi hutan, Nyatoh, Puloh, Medang tija, Mertama, Medang, Semukau, Kayu masam, Kapur padi, and Biansu.	
08.11.2023 (Wed)	0800	• Tree Identification Training (practical) in Hutan Analog, UPM Bintulu – 9 tree samples were identified by participants during the field work	Led by Dr. Paul Chai & Mr. Rantai Jawa
	1400	• Review of field work from Hutan Analog, UPM	
09.11.2023 (Thu)	0800-1400	Tree Identification Training (practical) at Similajau NP	
10.11.2023 (Fri)	0800-1100	Lesson on the family Dipterocarpaceae, and its genera: • Anisoptera • Cotylelobium • Dipterocarpus • Dryobalanops • Hopea • Parashorea • Shorea • Upuna • Vatica	
	1400-1700	Quiz on plant identification • 5 leaf samples were given to each participant to identify: Nyatoh, Semukau, Kumpang, Rambutan hutan, and Ubah	
11.11.2023 (Sat)	1200	Bintulu - Kuching	AK6055

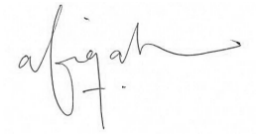
6.0 PHOTOS

Additional Note:

This tree identification training course fully utilized the funds from the Forest Department Sarawak under the Forest Resources Inventory Project. However, for the two (2) staff members from ITTO Project Management Team attending the training which are Mdm Nur Afiqah and Mr. Rantai anak Jawa, their travel costs as well as the daily subsistence allowances during the training were claimed under the fund of ITTO Project P902/19 Rev.3(F).

Thank you.

Report by:



Nur Afiqah binti Abdul Karim

30 November 2023

Group 1	
Simple Opposite leaves With stipules	
Rubiaceae	Inter-petiolar stipules – Empitap, Bunga siantan, Kopi, Mengkudu
	Stipules fused into a tube – *Gaertnera* & *Psychotria*
Gentianaceae (Loganiaceae)	Inter-petiolar short and fused to leaf stalks
	Tembusu, Empaling (*Norrisia malaccensis*), Akar kayas climber (*Strychnos*) [poisonous]
Rhizophoraceae	Inter-petiolar stipules falling off early, except the terminal pair (Note: scars of fallen stipules)
	a) Mangrove forest – Bakau, Berus (*Rhizophora*, *Bruguiera*) b) Hill forest – Rabong • Twig solid, leaf margin not toothed – *Carallia* • Twig hollow, leaf margin finely toothed; (i) under leaf veins prominent, young parts not hairy (*Gynotroches*) (ii) under leaf veins not prominent, young parts usually hairy (*Pellacalyx*)

Group 2	
Simple Opposite leaves No stipules	
Myrtaceae	Leaf with marginal veins – Ubah, Jambu (*Syzygium*)
	Spiral leaves – Selunsor/Belaban (*Tristaniopsis*), and Kawi (*Whiteodendron*)
Melastomaceae	Leaf with 3 – 5 main veins
	Eg: Kemunting/Engkodok (*Melastoma*), Puloh (*Pternandra*)
Lamiaceae (Verbenaceae)	Leaves opposite, often trifoliate, or palmate (compound), young twigs 4-angled
	• Leban (*Vitex*) – leaves generally soft • Entabuloh (*Teijsmanniodendron*) – leaves stiff & rough to touch Pipanggil (Clerodendrum) – leaves heart-shaped or oblong, flowers pagoda-like
Memecylonaceae	• No marginal veins, leaf veins fine & faint
	• Eg: Nipis kulit (*Memecylon*)

Group 3	
Simple Opposite leaves No stipules Coloured sap/latex present	
Apocynaceae	White latex free-flowing, lateral veins mostly at right angle to midrib
	• Opposite leaves – Pelai uchong (*Kibatalia*), buah pelir kambing (*Tabernaemontana*), climber Buah Kubal (*Willughbeia*) Whorled leaves – Pelai (*Alstonia*) & Jelutong (*Dyera*)
Clusiaceae	Latex yellow, light yellow, cream, or red, coming out slowly
	• Bintangor (*Calophyllum*) – closely parallel lateral veins • Kandis & Manggis hutan (*Garcinia*) – black wavy lines on lower leaf surface (more clearly seen on dry leaves) Geronggang (*Cratoxylum*) has red sticky sap/latex

Group 4	
Simple Alternate/Spiral leaves With stipules	
Euphorbiaceae	Stipules big and/or small, leaf stalk long and kneed or short, sometimes with white latex
	Split to 5 families, 36 genera. Highly diverse. Eg: Benuah/Purang, Merbulan, Buta-buta
Phyllanthaceae	Eg: Tampoi, Berenai, Cangkok manis, Menyam
	15 genera
Peraceae	Eg: Tor (*Chaetocarpus castanocarpus*), Kayu sedi (*Trigonopleura malayana*)
	2 genera
Picrodendraceae	Ubah banir (*Austrobuxus nitidus*)
	1 species
Putanjivaceae	Melinkat (*Drypetes*)
	1 genus, 14 species