

**Asrama Raya Sdn Bhd
(ARSB)**

**HIGH
CONSERVATION
VALUE (HCV)
MANAGEMENT
AND
MONITORING
PLAN**

HCV MANAGEMENT PLAN FOR ARSB HS PETUANG-TEMBAT CONCESSION

HCV Management Objectives

- To maintain biodiversity in ARSB HS Petuang-Tembat concession.
- To maintain population of the endangered animals and plant species in Asrama Raya Sdn Bhd (ARSB) HS Petuang-Tembat concession.
- To enhance collaboration with expert and local community for obtaining more information about ARSB HS Petuang-Tembat concession.

Preparation of HCV Management and Monitoring Plan

I. Identification of HCV in ARSB HS Petuang-Tembat concession

ARSB have identified the HCV in ARSB HS Petuang-Tembat concession based on field / ground survey, topography map, satellite images and consultation with stakeholder. Baseline data from Terengganu State Forestry Department (TSFD) and Department of Wildlife and National Parks of Peninsular Malaysia (PERHILITAN) Terengganu also referred before determining the HCV in ARSB HS Petuang-Tembat concession. The presence or absence of the HCVs are described in HCV assessment results.

II. Identification of threat to HCV

Identifying and determining the threat to HCV in ARSB HS Petuang-Tembat concession is important before preparing HCV management plan. Threat assessment have been carried out by referring to the IUCN Threats Classification Scheme and ground survey. Threats can be categorized into indirect or direct threats and internal or external threats. Once the threats to HCV are determined, further action and management is needed to be taken in order to reduce the threats in ARSB HS Petuang-Tembat concession.

III. Map preparation

The topography maps of ARSB HS Petuang-Tembat concession are obtained from JUPEM and TSFD. The topography, terrain, elevation, river / watercourses, road, land use pattern of ARSB HS Petuang-Tembat concession are observed, identified and categorized from the map using ArcGIS software. Once the HCV have been determined, the location of HCV area is marked in the map.

IV. Stakeholder consultation

ARSB consulted stakeholders for their management recommendations before planning for the HCV management. The stakeholders are TSFD, PERHILITAN, local community of Kampung Payong and biological and ecological expert from non-governmental organization (NGO) such as World Wide Fund for Nature (WWF) Malaysia and Malaysian Nature Society (MNS), Terengganu. ARSB have conducted HCV stakeholder meeting with the stakeholders to discuss about the HCV and HCV management in ARSB HS Petuang-Tembat concession.

Threat Assessment and HCV Management Practices

ARSB have conducted threat assessment of ARSB HS Petuang-Tembat concession based on IUCN threats classification scheme and ground survey.

Table 1. Threat and management practices for HCV in ARSB HS Petuang-Tembat concession.

Threat	Management Practices
Illegal hunting and poaching	• ‘No hunting’ signboard was put at the concession entrance to provide warning against illegal activities and hunting. • Collaborate with TSFD, Terengganu State PERHILITAN and WWF for wildlife management. • Invite PERHILITAN for conducting briefing of conservation and protection of wildlife to forest workers. • If any illegal hunting case is found by forest worker, the worker needs to report the case and submit the form ‘Borang Pelaporan Pencerobohan atau Aktiviti Haram dalam Konsesi ARSB’ (Appendix 1) to Forest Supervisor (Kepala Hutan). • ARSB Forest Manager need to report to PERHILITAN for further actions. - Terengganu State PERHILITAN will patrol the HS Petuang-Tembat concession for the encroachment and illegal hunting.

HCV Management Strategies Prior to Conduct Forest Harvesting Activities

i. Protection and conservation of wildlife (HCV 1)

- Before conducting forest harvesting activities, ARSB forest management team / workers set up several camera traps at the compartment area to detect the presence of the wildlife.
 - Find suitable location to set up the camera trap in ARSB HS Petuang-Tembat concession, e.g. forest areas with animal trails.
 - The camera traps are set up at pre-harvesting areas and post-harvesting areas based on accessibility of roads and times.
 - The camera is mounts on a tree with a rope, approximately 50 cm from the ground.
 - The GPS locations for all cameras are recorded along with the dates of placement at the area.
 - The SD cards of the camera are collected every four week and send to office for storing the captured images.
 - The SD cards are returned to the forest concession for reuse. The camera traps are maintained at the same location for one to three months or changed to new location if no wildlife is found at that area.

ii. Protection and conservation of plant (HCV 1)

- Protected trees include the tree act as animal habitat/nest, endemic or RTE trees (TSFD, 2025). These protected trees are surveyed and identified before harvesting through pre-felling survey.
- The information of the protected trees (Appendix 5) is recorded in 'Borang Penandaan, Pokok Tebangan, Pokok Ibu Dan Pokok Perlindungan'.
- The protected tree needs to be marked by painting one (1) ring of yellow paint on the tree trunk and affix a protected tree tag on the tree trunk.
- Terengganu State Forestry Department (TSFD) is consulted for the confirmation of the conservation status / identification of the HCV plant.
- ARSB also consult and discuss with stakeholders especially TSFD to decide whether to declare the protected tree / plant (tree act as animal habitat/nest, endemic or RTE tree/ plant) as HCV plant / tree or not.
- After discussed with TSFD, the endemic or RTE plant which have been declared as HCV plant need to be protected by make a protection zone from the plant and marked with ribbon.

Table 2. HCV management strategies prior to conduct forest harvesting activities

HCV	Management strategies
HCV 1: Species diversity	• Set up camera trapping • Conduct opportunistic sighting survey (every month) to detect the presence of wildlife at pre-harvested areas. • Conduct pre-felling survey. • Maintaining quality of animal habitat by conducting selective tree felling, not harvest protected trees, no hunting. • Conduct consultation with relevant stakeholders such as TSFD, PERHILITAN, WWF-Malaysia, MNS Terengganu.
HCV 2: Landscape-level ecosystems and mosaics	• Refer database, map and existing data from TSFD. • Conduct selective management system (SMS) and reduced impact logging (RIL) in ARSB HS Petuang-Tembat concession. • Create buffer zones along the river. • Monitor the pre-harvested areas of ARSB HS Petuang-Tembat concession and surrounding areas through satellite images before harvesting. • Conduct consultation with relevant stakeholders such as TSFD, PERHILITAN, WWF-Malaysia, MNS Terengganu.

HCV 3: Ecosystems and habitats	• Refer database, map and existing data from TSFD. • Conduct selective management system (SMS) and reduced impact logging (RIL) in ARSB HS Petuang-Tembat concession. • Create buffer zones along the river. • Monitor the pre-harvested areas of ARSB HS Petuang-Tembat concession and surrounding areas through satellite images before harvesting. • Conduct consultation with relevant stakeholders such as TSFD.
HCV 4: Ecosystem services	• Use topographic map to identify water catchment areas, vulnerable soils, and slopes, as well as to verify the presences of local communities or indigenous peoples residing within these areas. • Consultation with Terengganu State Forestry Department. • Meeting with local community (Kampung Payong).
HCV 5: Community Needs	• Meeting with local community (Kampung Payong) – twice per year. • Discussion and interview with local community / JPKK.
HCV 6: Cultural values	• Meeting with local community (Kampung Payong) – twice per year. • Discussion and interview with local community / JPKK. • Conduct social impact assessment.

HCV Management Plan for HCV Presences in ARSB HS Petuang-Tembat Concession

Protection and conservation of wildlife (HCV 1)

- Access to the ARSB concession is controlled by installing a boom gate at the main entrance to prevent poachers and unauthorized individuals from entering the HS Petuang-Tembat concession.
- ‘No Hunting’ signs have been installed within the operational areas to serve as warnings against illegal activities, particularly poaching.
- A ‘No Trespassing’ sign (*Dilarang Masuk Konsesi Hutan Asrama Raya Sdn Bhd Tanpa Kebenaran Jabatan Perhutanan Negeri Terengganu*) has been installed at the main entrance to prevent unauthorized access to the ARSB HS Petuang-Tembat concession, especially for activities such as poaching and encroachment.
- ARSB has installed camera traps at selected locations within the concession before and after harvesting activities to detect the presence of wildlife.
- ARSB conducts opportunistic wildlife surveys through direct sightings and identification of signs such as footprints (WWF, 2009), nests, etc. (Appendix 3 and 4).
- If any salt lick is identified within the concession, ARSB will ensure its protection from human disturbance or activities.
- ARSB collaborates with the local community of Kampung Petuang to assist in monitoring the concession area for signs of encroachment and illegal hunting.
 - If residents of Kampung Payong detect any signs of encroachment or illegal hunting, they are required to report the incident to the Village Development and Security Committee (JPKK). The JPKK must then complete and submit the report form “*Borang Pelaporan Pencerobohan atau Aktiviti Haram dalam Konsesi ARSB (Kg. Payong)*” (Appendix 2) to Forest Supervisor (*Kepala Hutan*) or Forest Manager.
- ARSB also collaborates with PERHILITAN Terengganu, WWF, and MNS Terengganu for wildlife conservation and management.
 - Briefings on wildlife conservation and protection are conducted for relevant stakeholders.
 - Forest workers must immediately inform the Forest Supervisor (*Kepala Hutan*) if any illegal hunting activities are observed within the ARSB HS Petuang-Tembat concession. The Forest Manager will then report the case to PERHILITAN Terengganu for further action.
- A wildlife biologist and PERHILITAN officers are consulted for the identification and verification of wildlife species observed in the area.

HCV MONITORING PLAN FOR ARSB HS PETUANG-TEMBAT CONCESSION

Wildlife Monitoring (HCV 1)

Regular monitoring is conducted throughout the ARSB HS Petuang-Tembat concession to detect and prevent encroachment, illegal hunting, and poaching activities.

- **Wildlife presence** is monitored periodically through the following methods:
 - **Camera trapping:** Motion-activated camera traps are strategically installed in selected areas to record wildlife activity and identify species present within the concession.
 - **Opportunistic sightings:** Observations of wildlife and indirect signs such as tracks, footprint, droppings and nests are recorded during routine patrols and forest operations.
- **Collaboration with the Terengganu State Forestry Department (TSFD) and the Department of Wildlife and National Parks (PERHILITAN) Terengganu** is established to enhance enforcement and effectiveness of wildlife protection efforts, particularly in addressing illegal hunting and encroachment.
- **Engagement with the local community of Kampung Petuang** is established to support monitoring efforts. Local community members assist by reporting suspicious activities such as trespassing and hunting, thereby strengthening surveillance through community-based monitoring.

REFERENCES

TSFD (2025). List of the fundamentals of fruits and fundamentals of food sources in particular avian fauna (which are not harvestable). https://trgforestry.terengganu.gov.my/index.php?option=com_content&view=article&id=81&Itemid=337&lang=en.

WWF (2009). High Conservation Value Forest (HCVF) Toolkit for Malaysia: A national guide for identifying, managing and monitoring High Conservation Value Forests. Selangor: WWF-Malaysia.

Appendix 1. Borang Pelaporan Pencerobohan atau Aktiviti Haram dalam Konsesi ARSB

Borang Pelaporan Pencerobohan atau Aktiviti Haram dalam Konsesi ARSB

Borang 1

ASRAMA RAYA SDN BHD

1. Pekerja hutan perlu melapor kepada Kepala Hutan jika menemui kesan sebarang pencerobohan, kesan impak terhadap hutan simpan atau aktiviti haram yang ditemui di dalam Konsesi Hutan ARSB;
2. Kepala Hutan perlu mengisi borang pelaporan ini setelah menerima aduan daripada pekerja hutan;
3. Borang ini perlu dihantar kepada Pengurus Hutan dalam tempoh 24 jam samada melalui *Whatsapp* atau serahan tangan.
4. Pengurus Hutan/ Pemegang Lesen perlu usulkan borang yang telah disahkan kepada Pejabat Hutan Daerah Trg Barat/JPNT/badan berkuasa tempatan dalam tempoh 48 jam, samada melalui email, *Whatsapp* atau serahan tangan.

A. Butiran Pengadu

Pemberi Maklumat	Saksi (Jika ada)		
Nama Pekerja		Nama Pekerja	
Jawatan/Unit		Jawatan/Unit	
No. K/P		No. K/P	
T/Tangan		T/Tangan	
Tarikh		Tarikh	

B. Laporan Aduan

Jenis Kesalahan ditemui (Sila jelaskan secara ringkas) : <i>*Pencerobohan/ Aktiviti Haram/ Kesan Impak Terhadap Hutan Simpan</i>	
Lokasi dikenalpasti/ GPS koordinat/ Kompartmen	
Tarikh ditemui	
Lampiran yang berkaitan	<i>*Sila lampirkan bersama gambar/ pelan lokasi jika ada</i>

C. Pengesahan Penerimaan Laporan oleh Pengurus Hutan/ Pemegang Lesen

Nama		Ulasan (Jika ada):
Cop & Jawatan		
No. K/P		
T/Tangan		
Tarikh		

D. Pengesahan Penerimaan Laporan Aduan oleh PHDTB/ JPNT/Jabatan Perhilitan/ Pihak Berkuasa Tempatan Yang Berkaitan

Nama		Ulasan & Tindakan Susulan :
Cop & Jawatan		
No. K/P		
T/Tangan		
Tarikh		

- Form 1/SOP 1/Resource Protection/V3 -

Appendix 2. Borang Pelaporan Penceroohan atau Aktiviti Haram dalam Konsesi ARSB (Kg. Payong)

Borang Pelaporan Penceroohan atau Aktiviti Haram dalam Konsesi ARSB (Kg. Payong) Borang 2

ASRAMA RAYA SDN BHD (Kerjasama Penduduk Komuniti Kg. Payong)

1. Komuniti Kg. Payong boleh melaporkan kepada MPKK Kg Payong jika menemui sebarang penceroohan masuk ke kawasan hutan, atau sebarang aktiviti haram seperti pemburuan haram/ tebangan haram yang ditemui berdekatan dengan Konsesi Hutan ARSB;
2. Pihak MPKK perlu mengisi borang pelaporan ini setelah menerima aduan daripada komuniti/penduduk kampung;
3. Borang ini perlu dihantar kepada Pengurus ARSB dalam tempoh 24 jam samada melalui *Whatsapp* atau serahan tangan.
4. Pengurus ARSB perlu usulkan borang yang telah disahkan kepada Pejabat Hutan Daerah Trg Barat/JPNT/badan berkuasa tempatan dalam tempoh 48 jam, samada melalui email, *Whatsapp* atau serahan tangan.

A. Butiran Pengadu

Pemberi Maklumat		Saksi (Jika ada)	
Nama		Nama	
Alamat		Alamat	
No. K/P		No. K/P	
T/Tangan		T/Tangan	
Tarikh		Tarikh	

B. Laporan Aduan

Jenis Kesalahan ditemui (Sila jelaskan secara ringkas) : <i>*Penceroohan/ Sebarang Aktiviti Haram/ Pemburuan Haram/Tebangan Haram</i>	
Lokasi dikenalpasti/ GPS koordinat (jika ada)	
Tarikh ditemui	
Lampiran yang berkaitan	<i>*Sila lampirkan bersama gambar/ pelan lokasi jika ada</i>

C. Pengesahan Penerimaan Laporan oleh MPKK Kg. Payong

Nama		Ulasan (Jika ada):
Cop & Jawatan		
No. K/P		
T/Tangan		
Tarikh		

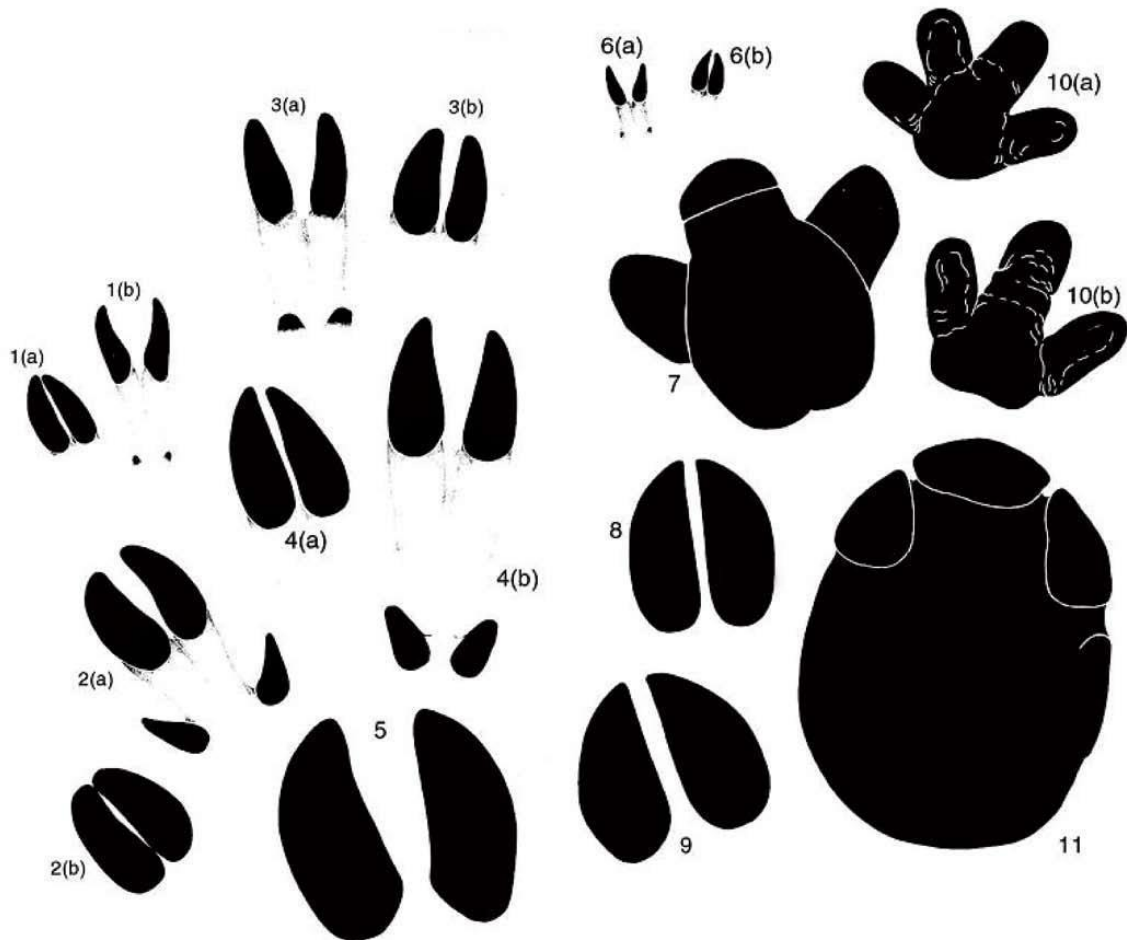
D. Pengesahan Penerimaan Laporan Aduan oleh Pengurus ARSB

Nama		Ulasan & Tindakan Susulan :
Cop & Jawatan		
No. K/P		
T/Tangan		
Tarikh		

E. Pengesahan Penerimaan Laporan Aduan oleh PHDTB/ Jabatan Perhutanan Negeri Terengganu/Pihak Berkuasa Tempatan Yang Berkaitan

Nama		Ulasan & Tindakan Susulan :
Cop & Jawatan		
No. K/P		
T/Tangan		
Tarikh		

Appendix 3. Pictorial references to footprints of hoofed animal (WWF, 2009)



Pictorial reference to tracks of pawed animals (Not to scale)

List of animal names based on the footprints pictures of Appendix 3 (WWF, 2009)

No.	Name of animal (English / scientific / Malay)
1(a) & (b)	Common barking deer / <i>Muntiacus muntjak</i> / Kijang
2 (a) & (b)	Common wild pig / <i>Sus scrofa</i> / Babi hutan
3 (a) & (b)	Serow / <i>Capricornis sumatraensis</i> / Kambing gurun
4 (a) & (b)	Sambar deer / <i>Cervus unicolor</i> / Rusa
5	Water buffalo / <i>Bubalus bubalis</i> / Kerbau
6 (a) & (b)	Lesser mouse deer / <i>Tingulus javanicus</i> / Kancil
7 (a) & (b)	Sumatran rhinoceros / <i>Dicerorhinus sumatrensis</i> / Badak sumbu
8	Banteng / <i>Bos javanicus</i> / Banteng
9	Gaur / <i>Bos gaurus</i> / Seladang
10 (a) & (b)	Tapir / <i>Tapirus indicus</i> / Tenuk atau Cipan
11 (a) & (b)	Elephant / <i>Elephas maximus</i> / Gajah

Appendix 4. Pictorial references to footprints of pawed animal (WWF, 2009)



List of animal names based on the footprints pictures of Appendix 4 (WWF, 2009)

No.	Name of animal (English / scientific / Malay)
1 (a) & (b)	Yellow-throated marten / <i>Martes flavigula</i> / Pulasan
2 (a) & (b)	Malayan porcupine / <i>Hystrix brachyura</i> / Landak raya
3	Eurasian otter / <i>Lutra lutra</i> / Memerang
4	Smooth-coated otter / <i>Lutra perspicillata</i> / Memerang
5 (a) & (b)	Burmese ferret badger / <i>Melogale personata</i>
6 (a) & (b)	Hare / <i>Lepus</i> sp. / Arnab
7 (a) & (b)	Malayan pangolin / <i>Manis javanica</i> / Tenggiling
8	Small-clawed otter / <i>Aonyx cinerea</i> / Memerang
9	Long-tailed macaque / <i>Macaca fascicularis</i> / Kera
10 (a) & (b)	Large bamboo rat / <i>Rhizomys sumatrensis</i> / Dekan Brush-tailed porcupine / <i>Atherurus macrourus</i> / Landak
11 (a) & (b)	batu
12 (a) & (b)	Bay bamboo rat / <i>Cannomys badius</i> / Dekan
13	Rat / <i>Rattus</i> sp. / Tikus
14 (a) & (b)	Large Indian civet / <i>Viverra zibetha</i> / Musang Jebat
15	Masked palm civet / <i>Paguma larvata</i> / Musang
16	Hog badger / <i>Arctonyx collaris</i>
17	Javan mongoose / <i>Herpestes javanicus</i> / Tikus mondok
18	Moonrat / <i>Echinosorex gymnurus</i> / Tikus bulan
19	Otter civet / <i>Cynogale benetti</i> / Musang Common palm civet / <i>Paradoxurus hermaphroditus</i> /
20	Musang
21	Small Indian civet / <i>Viverricula indica</i> / Musang
22	Binturong / <i>Arctictis binturong</i> / Binturong
23	Asiatic wild dog / <i>Cuon alpinus</i> / Anjing hutan
24	Three-striped ground squirrel / <i>Lariscus insignis</i> / Tupai
25	Malayan weasel / <i>Mustela nudipes</i> / Jelu
26	Fishing cat / <i>Prionailurus viverrinus</i> / Kucing hutan
27	Tiger / <i>Panthera tigris</i> / Harimau
28	Asiatic black bear / <i>Ursus thibetanus</i> / Beruang

Appendix 5. List of fruit trees and trees act as food sources for fauna especially birds (not allow to be harvested)

BIL	NAMA SAINTIFIK	NAMA TEMPATAN
1	<i>Ficus</i> spp.	Ara
2	<i>Archidendron bubalinum</i>	Kerdas
3	<i>Archidendron jiringa</i>	Jering
4	<i>Parkia</i> spp.	Petai
5	<i>Baccaurea maingayi</i>	Tampoi
6	<i>Baccaurea sumatrana</i>	Tampoi
7	<i>Artocarpus rigidus</i>	Keledang Temponek
8	<i>Nephelium lappaceum</i>	Rambutan Hutan
9	<i>Garcinia artoviridis</i>	Kandis Gelugor
10	<i>Bouea macrophylla</i>	Kundang Hutan
11	<i>Barringtonia</i> spp.	Putat
12	<i>Podocarpus</i> spp.	Podo
13	<i>Mangifera longipetiolata</i>	Macamng Hutan
14	<i>Dialium</i> spp.	KerANJI
15	<i>Sandoricum koetjapi</i>	Sentul
16	<i>Durio zibethinus</i>	Durian Kampung
17	<i>Knema</i> spp.	Basong
18	<i>Myristica</i> spp.	Basong
19	<i>Ardisia</i> spp.	Mata Pelanduk
20	<i>Artocarpus heterophyllus</i>	Nangka
21	<i>Artocarpus integer</i>	Cempedak (Keledang Bangkok)
22	<i>Eugenia</i> sp. (<i>Syzygium</i> sp.)	Kelat Jambu Laut
23	<i>Mangifera indica</i>	Mangga
24	<i>Castanopsis</i> spp.	Berangan
25	<i>Sterculia foetida</i>	Kelumpang Jari
26	<i>Sterculia parvifolia</i>	Kelumpang Burung
27	<i>Santiria laevigata</i>	Kedondong Kerantai Licin
28	<i>Irvingia malayana</i>	Pauh Kijang
29	<i>Koompassia excels</i>	Tualang
30	<i>Aglaia</i> spp.	Bekak
31	<i>Dysoxylum</i> spp.	Mersindok
32	<i>Lithocarpus cyclophorus</i>	Mempening Gajah