



CONSIDERATIONS OF MAKING NDF OF AGARWOOD IN INDONESIA

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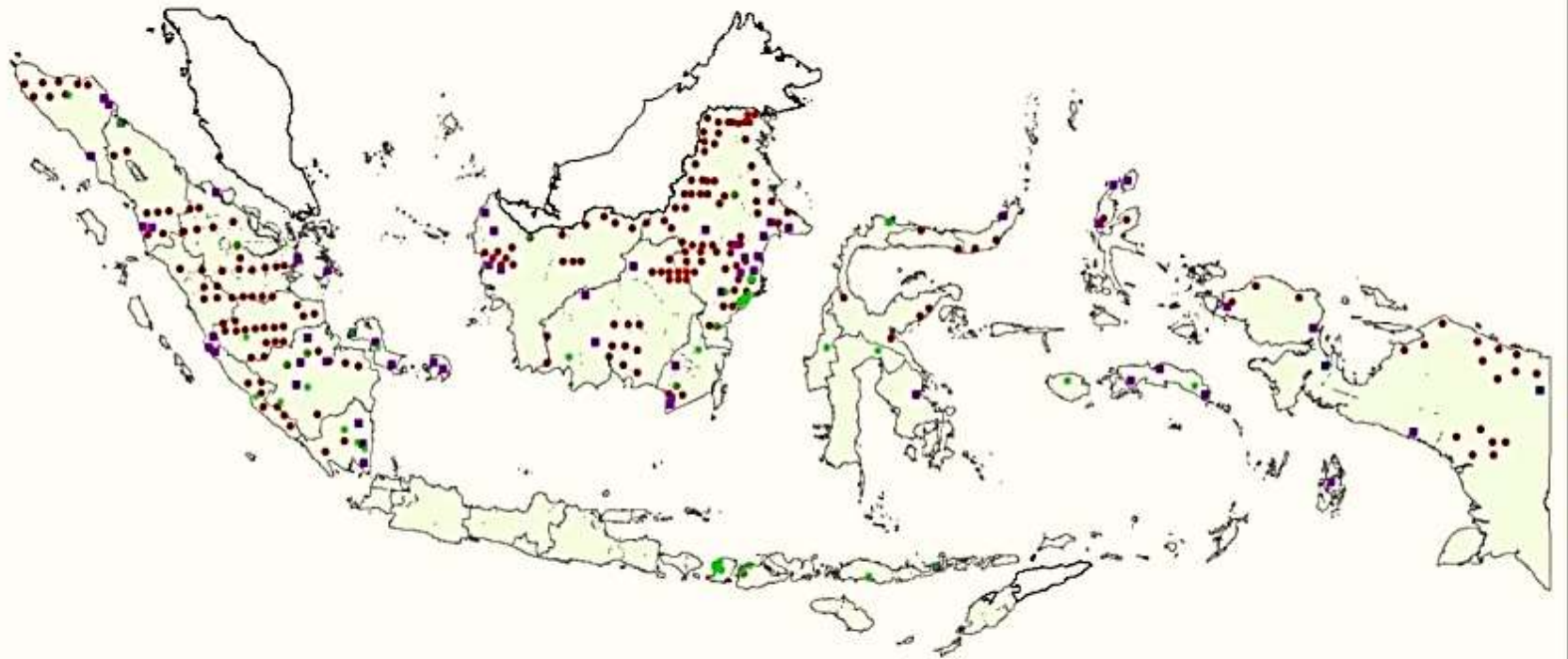


Some facts about agarwood in Indonesia

- Agarwood is produced from seven genera: *Aquilaria*, *Gyrinops*, *Aetoxylon*, *Gonystylus*, *Eukbia*, *Wikstroemia* and *Paleria*
- Four genera are naturally found in Indonesia: *Aquilaria*, *Gyrinops*, *Aetoxylon* and *Gonystylus*.
- Major tree species producing agarwood are *Aquilaria* and *Gyrinops*. Species from those genera are distributed in Sumatra, Kalimantan, Sulawesi and Papua and other small islands
- Habitat: widespread in lowland – hilly areas, primary forest, secondary forest and swamp areas
- As components second and third canopy, up to 40 m height
- Population 0-3 trees /ha, scattered
- Three species of *Aquilaria* observed by Newton and Soehartono (2001) indicated that those species are highly fecund (relatively high regeneration capacity).

**THE SPECIES OF AGAR WOOD PRODUCING TREES IN INDONESIA
LISTED IN THE APPENDIX II CITES**

No.	Aquilaria	Gyrinops
1.	A. malaccensis	G. versteegii
2.	A. beccariana	G. landermanii
3.	A. microcarpa	G. caudate
4.	A. hirta	G. decipiens
5.	A. crassna	G. acuminate
6.	A. cumingiana	G. urdanentensis
7.	A. filaria	G. citrinaecarpa
8.	A. tomentosa	G. pubifolia
9.	A. audate	G. cumingiana
10.	A. brachyantha	G. decemcostata
11.	A. moszkowskii	G. salicifolia
12.	A. borne	G. Podocarpus
13.		<i>G. moluccana</i>



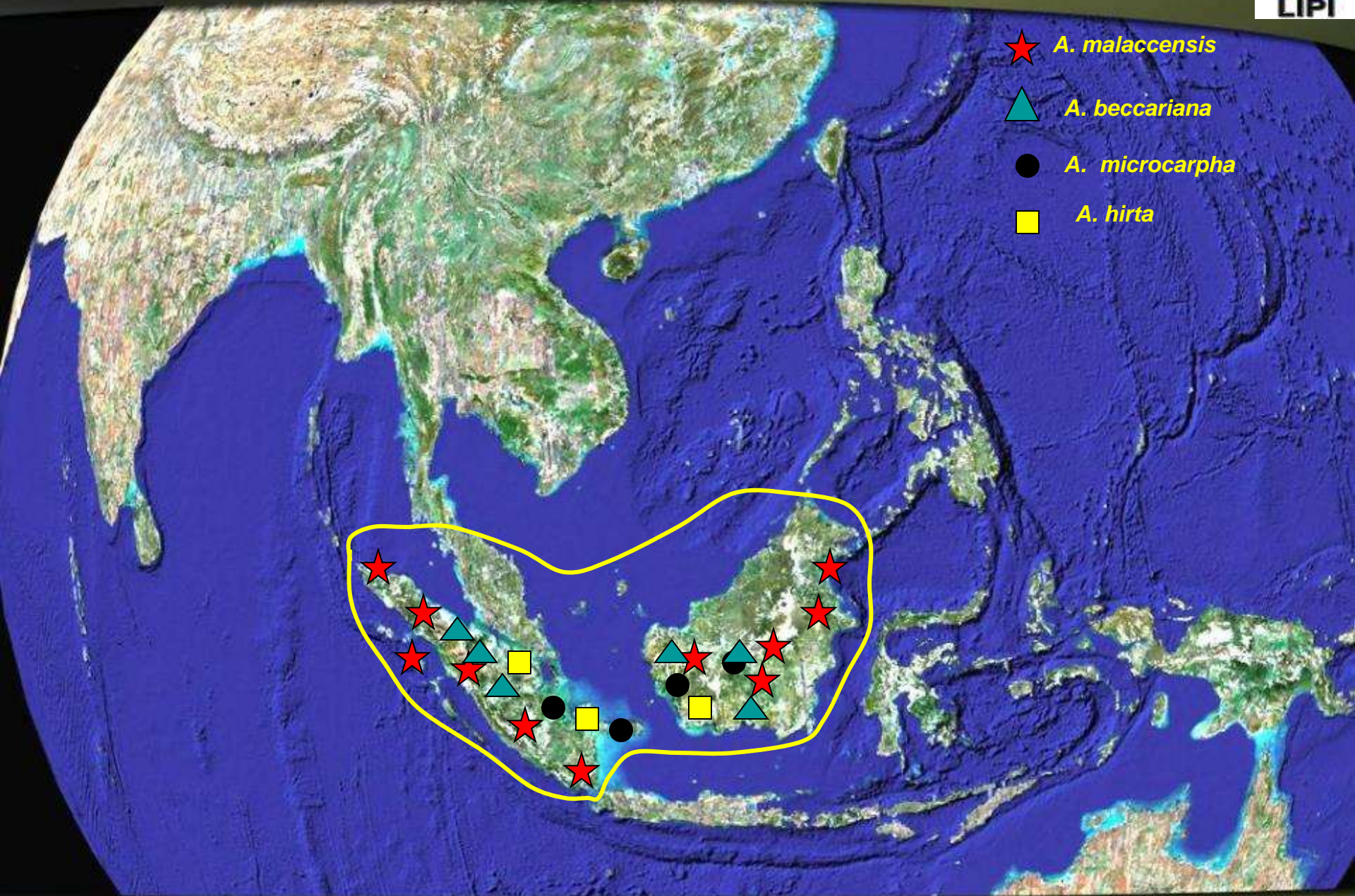
Distribution map of Aquilaria and Gyrinops in Indonesia

Some facts about agarwood in Indonesia (cont'd)

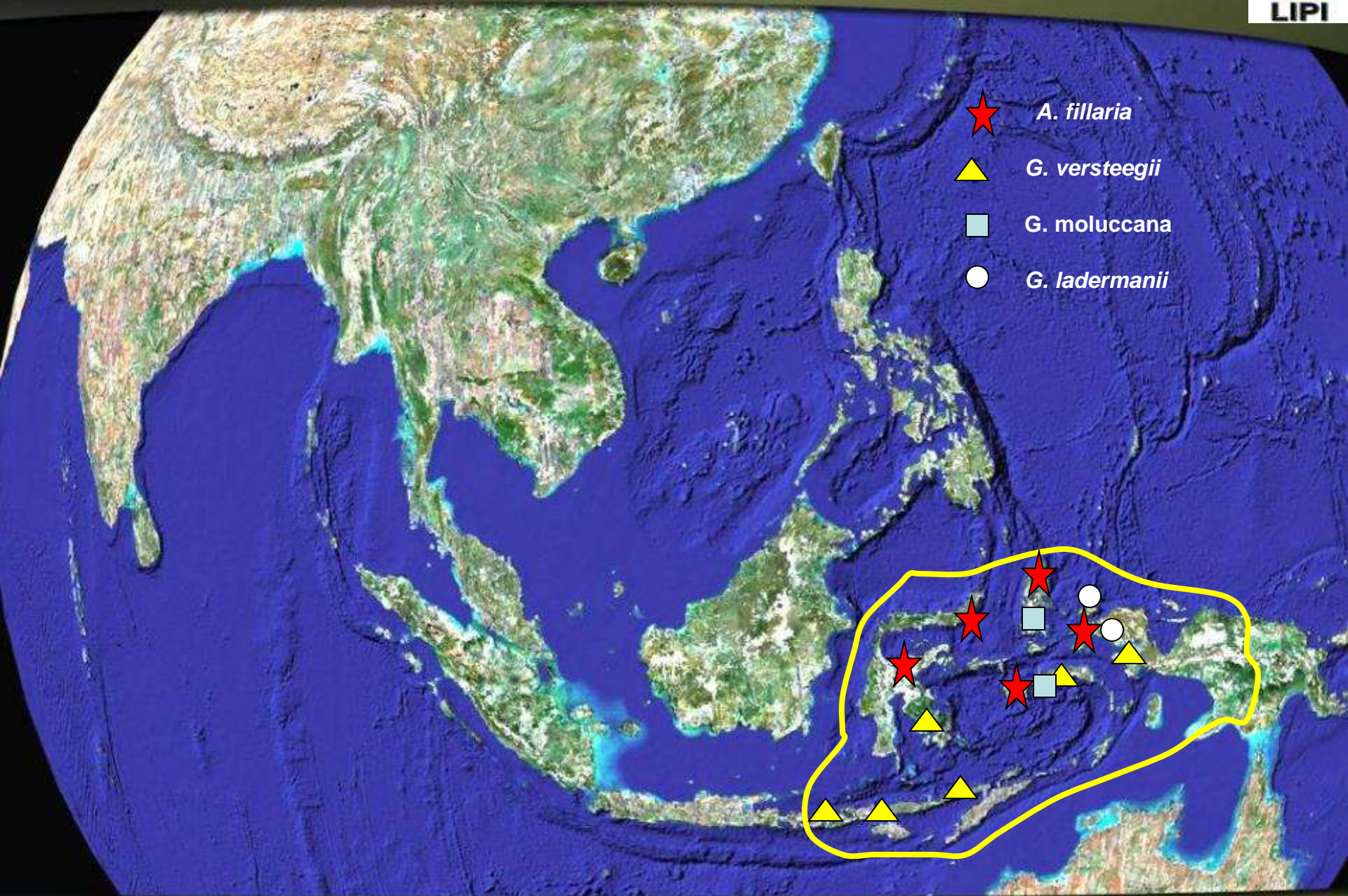
- In the market, since 1998 agarwood products are divided into two groups : malaccensis group and fillaria groups
- Malaccensis group represents western part of Indonesia and Fillaria group represents eastern part of Indonesia
- It is difficult to estimate the proportion of other species within these groups, and therefore almost impossible to show how much CITES-listed *A. malaccensis* has been harvested or exported since CITES Appendix II provisions came into force in 1995



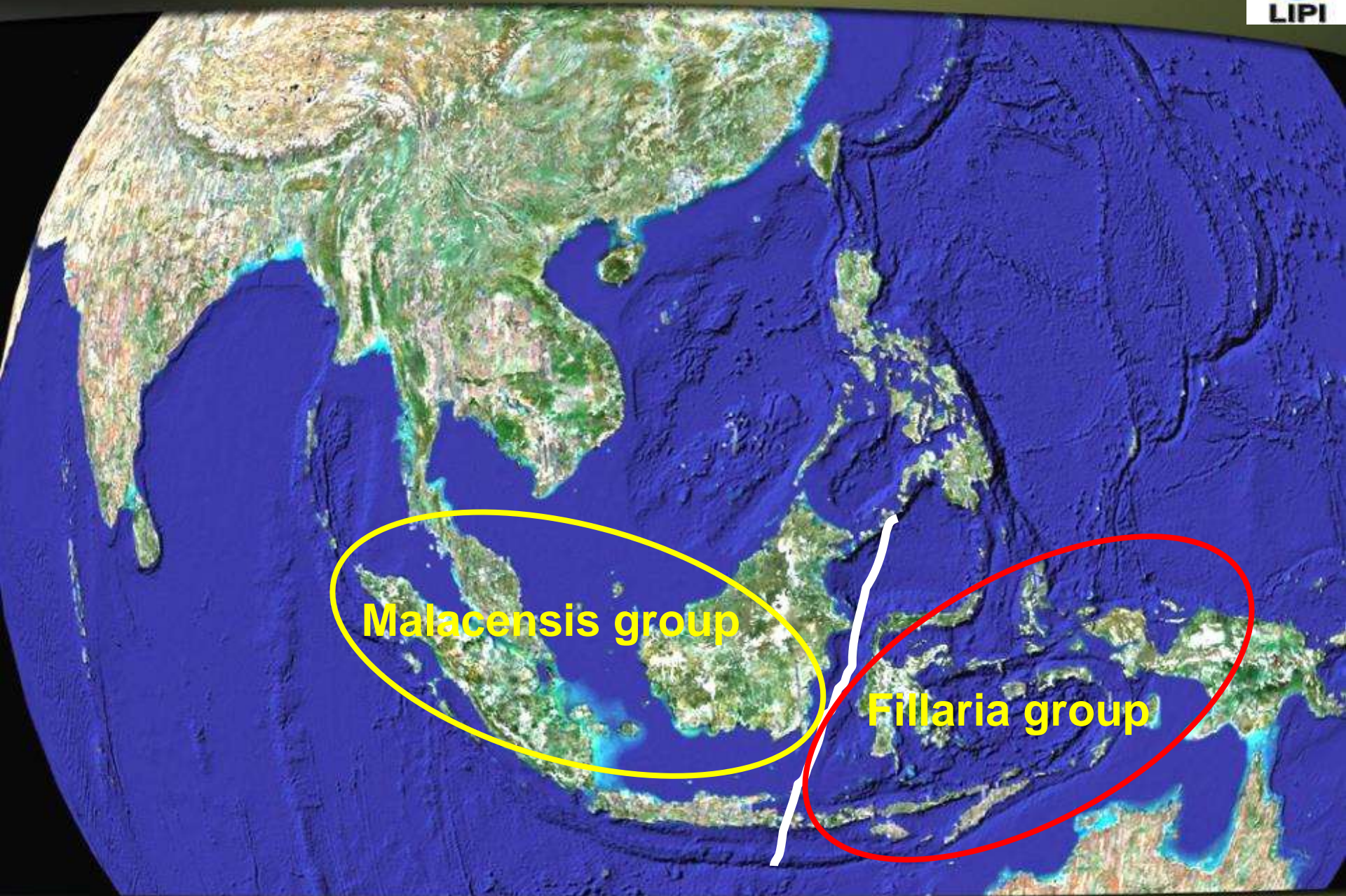
Distribution of malaccensis group



Ditribution of fillaria group



Agar wood quota setting area in Indonesia



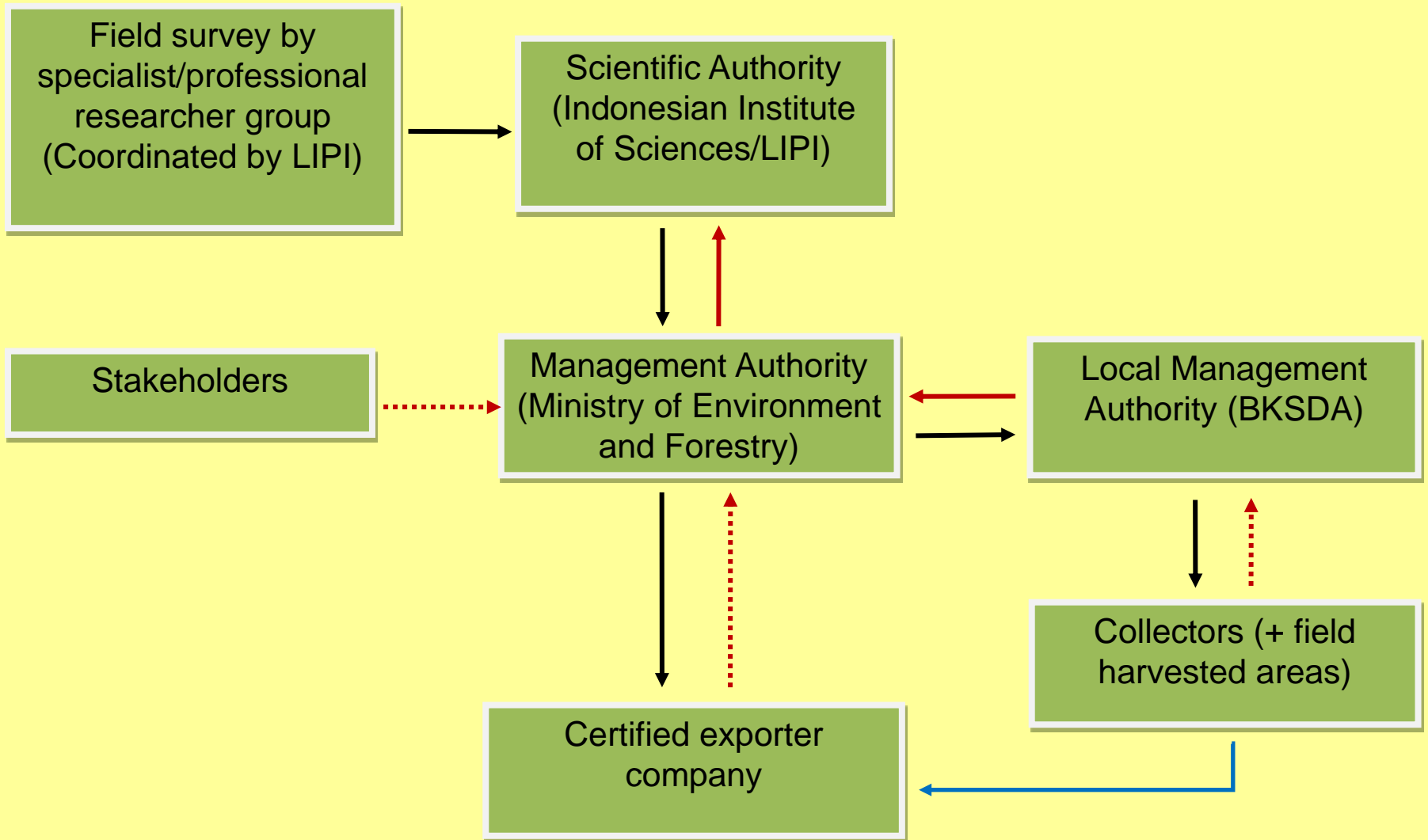
Malacensis group

Filaria group

Some facts about agarwood in Indonesia (cont'd)

- Production of agarwood from cultured plantation (cultured agarwood) has gradually increased since last 3-4 years
- Current production is still insignificant to reduce pressure on agarwood collection from natural population
- Community are encourage to trade of agarwood from cultured plantation. At present, the CITES authorities continue **registering the agarwood from cultured plantation**
- The current protocol for establishing annual quotas is now more precautionary
- Monitoring : In accordance with the Ministerial Decree (No. 447 of 2003)
- Trade chain of custody : the specimens must be covered by permits issued

Procedure for determining quota of agarwood based on Non-Detriment Finding



Quota and Associated Export until 2013

Year	Exported (kg)							
	Aquilaria filaria			Aquilaria malaccensis			Gyrinops sp.	
	Chips		Plantation/ Artificial Propagation	Chips		Plantation/ Artificial Propagation	Chips	
	Quota	Actual Export		Quota	Actual Export		Quota	Actual Export
2003	125,000	125,000	-	50,000	50,000	-	-	-
2004	125,000	125,000	-	50,000	50,000	-	-	-
2005	120,000	120,000	-	50,000	49,919	-	5,000	1,505
2006	100,000	100,000	-	50,000	48,944	-	25,000	24,965
2007	76,000	76,000	-	30,000	23,709	-	24,000	8,000
2008	65,000	65,000	-	30,000	30,000	-	25,000	25,000
2009	455,000	432,938	-	173,250	89,079	-	-	-
2010	427,000	427,000	-	146,250	146,250	-	-	-
2011	473,400	473,400	68,500	162,256	161,516	-	-	-
2012	520,740	516,715	119,200	178,482	177,482	5,000	-	-
2013	515,800	515,800	136,200	178,500	177,512	26,493	-	-

List of registered traders of agarwood (CITES MA)

No	Name of Companies	Locations
1.	CV. Agung Perdana	Ampenan, West Nusa Tenggara
2.	CV. Aroma	Pekanbaru, Riau
3.	CV. Aromindo	Bogor, West Java
4.	CV. Bumi Kencana	Demak, Central Java
5.	CV. Cikira Ilhamida	Jakarta
6.	CV. Impar Mas	Tangerang
7.	CV. Indoseri Pratama	Jakarta
8.	CV. Kalimas	Pekanbaru, Riau
9.	CV. Lautan Mas	Surabaya
10.	CV. Mega Aroma Utomo	Pekanbaru, Riau
11.	CV. Rajawali Sakti	Probolinggo, East Java
12.	CV. Sekawan Rimba Lestari	Jakarta
13.	CV. Sinar Timor 59	Jakarta
14.	CV. Subur Raya	Pekanbaru, Riau
15.	CV. Sumber Bumi	Samarinda, East Kalimantan
16.	PT. Ama Ina Rua	Jakarta
17.	PT. Berkah Nuansa Jaya	Jakarta
18.	PT. Budidaya Perkasa	Pekanbaru, Riau
19.	PT. Burnanindo International Trd	Jakarta
20.	PT. Cahaya Tiga Dara	Jakarta
21.	PT. Citra Samindo Raya	Surabaya
22.	PT. Gaharu Alam Lestari Abadi	Jakarta
23.	PT. Nusa Ama Kabaresi Hanu	Jakarta
24.	PT. Panutan Jaya Utama	Jakarta
25.	PT. Sarana Hartadinaka Tamas	Jakarta
26.	PT. Sumber Alam Jaya Mandiri	Pontianak, West Kalimantan
27.	PT. Super Cahaya Raya	Surabaya
28.	PT. Tanjung Batu Wana Perkasa	Jakarta
29.	PT. Wirasatya Abdinusa	Jakarta
30.	UD. Cipta Dupa Tama	Pasuruan, East Java

**Quota 2013
Filaria Grup**

B. Filaria	Quota(Kg)
1. North Sulawesi	1.000
2. South Sulawesi	4.800
3. Central Sulawesi	2.500
4. Maluku	5.000
5. Papua	50.000
6. West Papua	52.500

TOTAL → 515.800 Kg

Decaying wood

- This name is called for the Agar Wood dead trees found burying in the swamps in the southern coastal area of Papua. The species are not identified and have been under the swamp for a long time.
- The mother trees were partially infected by the fungus and the color of the wood changed to dark color, while the color of the non-infected portion still faded and whitish. When these trees sunk in the mud, the non-infected portion decomposed leaving the infected portion unchanged, hence by the time passed agar wood in different degrees of infection can be collected from the mud.
- The heavily infected tree can be classified as a high quality agar wood, used for high quality incense, while the less infected portion may be used for oil distillation, resin extraction or may be used for making incense sticks, incense cones or incense powder.
- Most oil from Papua agar wood may be distilled from this type of the agar wood. The yield of the oil in these decaying logs ranged 0.1-0.2 %.

- Although decaying wood are derived from dead trees, it is included in quota system
- Including decaying wood in quota system, has positive impact on raising its economic value
- Extracting decaying wood, in some extend, has no detrimental effect on the sustainability of agarwood producing trees in the wild



C. Decaying Logs Quota (Kg)

2010	1.067.000
2011	1.200.000
2012	1.500.000
2013	1.500.000

challenges

- Data collection for NDF could not be carried out in one research package as the complexity of the compiled parameters. Focused research for merely the sake of NDF of each species is rarely been carried out (more interest on population and habitat studies)
- There is changed in extracting agarwood from only extracting high class agarwood to extract the whole tree, as all parts of tree are now have economics value. Therefore, the high number of quota is not necessarily something to do with the missing of agarwood producing trees in the wild
- Need international cooperation to combat illegal trade of agarwood (or trade of illegal agarwood). Each country need to appreciate other country for not accepting illegal agarwood and re-exporting as accepting country's product

THANK YOU

