

**PENYEDIAAN INFORMASI DIGITAL YANG
MENGHUBUNGKAN MASYARAKAT DENGAN
IDENTITAS LOCAL PADA KAWASAN
KALDERA TOBA GEOPARK**

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INDONESIA ADALAH NEGARA MEGA KERAGAMAN HAYATI

Indonesia

- 40000 spesis tubuhan bunga.
- 5000 spesis angrek.
- Lebih 3000 spesis pokok.

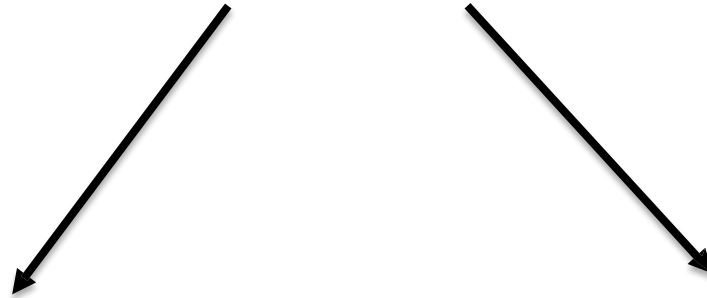
Belanda

- 78 spesis pokok.

Inggris

- 32 spesis pokok.

KERAGAMAN HAYATI



Stabilitas ekologi

- Struktur dan kesuburan tanah
- Kelestarian keragaman hayati

Identitas Budaya

- Bahan pangan
- Obat-obatan
- Literatur
- “Sense of belonging”

**KRITERIA KELESTARIAN HAYATI HARUS
DIRUMUSKAN MENURUT DAERAH**

BAGAIMANA MELAKUKANNYA?

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Menyediakan data digital yang menghubungkan masyarakat dengan kenyataan biofisika dan budaya setempat:

- Proyek-proyek diadaptasikan kepada situasi setempat
- Keikutsertaan multi-stakeholder
- Open-data
- Interoperabilitas

1. Case study: Integrasi data pokok pada Majelis Perbandaran Ampang Jaya

1.1 Public data

1.2 Profesional data

1.3 Sustainabilitas sebagai proses
pembelajaran

1.1 Public data



1.1 Public data

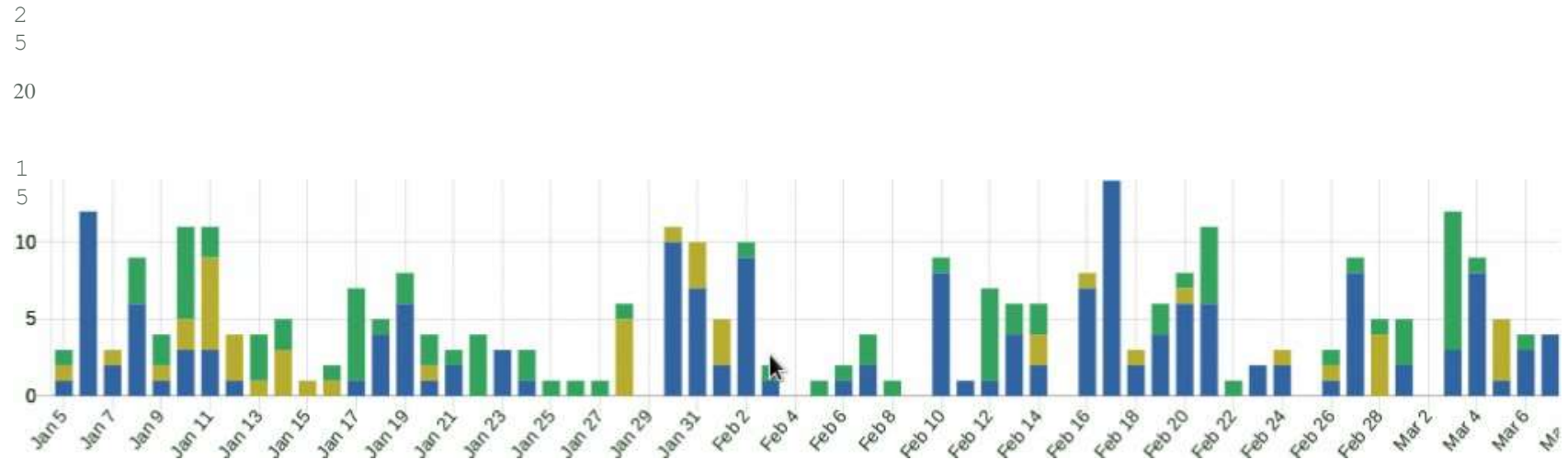


Taman Botany Ampang trees online



1.1 Public data

User statistics



Web application downloads per day

- Taman Botani Ampang
- Municipal Public Park
- Town Park Pandan Indah



590 downloads in 156 days

"Web application download" represents a connection to a webpage containing information for all trees species. Seeking information from tag numbers does not require internet connection and is not counted.

The webpage does not install any "cookie" nor collect information from the public users.

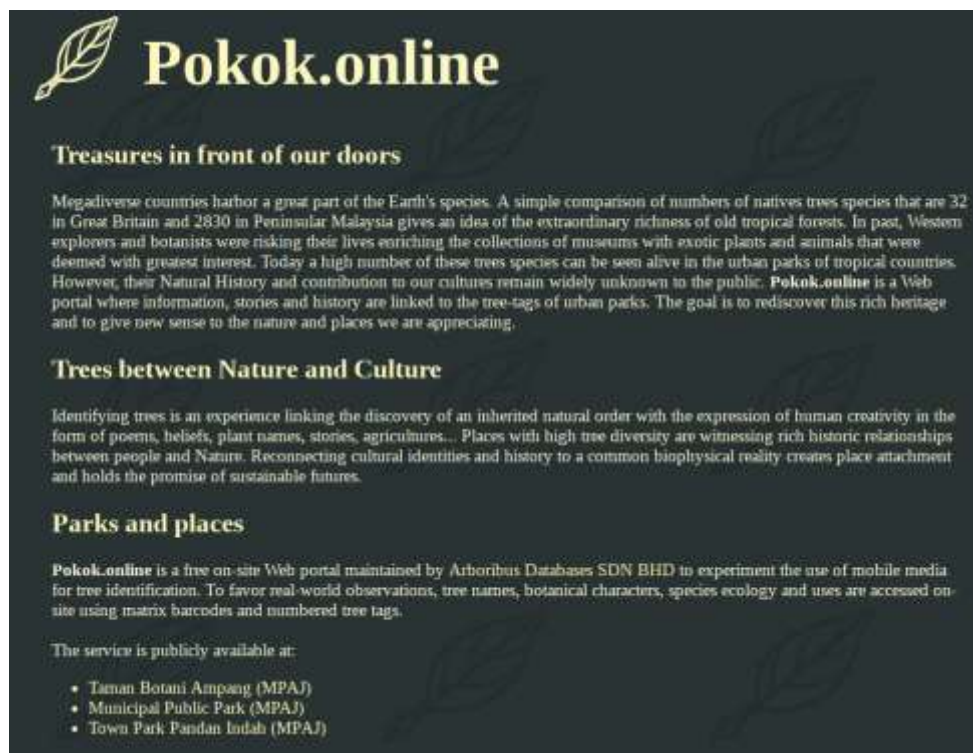
1.2 Profesional data




- Jadwal pemangkasan pokok
- Sensus pokok
- Laporan tahap kesehatan pokok
-

1.3 Sustainability sebagai proses pembelajaran

Open-data web-platforms enabling public and professional participation to social and ecological tree diversity integration



 **Pokok.online**

Treasures in front of our doors

Megadiverse countries harbor a great part of the Earth's species. A simple comparison of numbers of natives trees species that are 32 in Great Britain and 2830 in Peninsular Malaysia gives an idea of the extraordinary richness of old tropical forests. In past, Western explorers and botanists were risking their lives enriching the collections of museums with exotic plants and animals that were deemed with greatest interest. Today a high number of these trees species can be seen alive in the urban parks of tropical countries. However, their Natural History and contribution to our cultures remain widely unknown to the public. **Pokok.online** is a Web portal where information, stories and history are linked to the tree-tags of urban parks. The goal is to rediscover this rich heritage and to give new sense to the nature and places we are appreciating.

Trees between Nature and Culture

Identifying trees is an experience linking the discovery of an inherited natural order with the expression of human creativity in the form of poems, beliefs, plant names, stories, agricultures... Places with high tree diversity are witnessing rich historic relationships between people and Nature. Reconnecting cultural identities and history to a common biophysical reality creates place attachment and holds the promise of sustainable futures.

Parks and places

Pokok.online is a free on-site Web portal maintained by Arboribus Databases SDN BHD to experiment the use of mobile media for tree identification. To favor real-world observations, tree names, botanical characters, species ecology and uses are accessed on-site using matrix barcodes and numbered tree tags.

The service is publicly available at:

- Taman Botani Ampang (MPAJ)
- Municipal Public Park (MPAJ)
- Town Park Pandan Indah (MPAJ)

Open-data for public awareness and cultural production



 **Pokok.pro**

In cities, tree species are shaping places of cultural and natural belonging. **Pokok.pro** is a Web portal for the development of tree monitoring and diversity planning. It is the professional complement of [pokok.online](#) dedicated to public information about urban tree species.

Capacities for urban tree diversity planning

Diversity planning as a learning process

Diversity planning relies on the production, analysis and integration of ecological and social data. It relies on tree monitoring across censuses and maintenance practices as well as an exchange of information between collaborating stakeholders.

On-site tree data access

Connecting field operators with relevant tree information relies on dedicated web applications and human-readable tree tags. Identifying trees over long periods of time requires lasting tree tags as well as facilitated maintenance procedures enabling references of ancient and new tags to be linked on-site.

Testing data integration

Sandboxing new ways of data integration and stakeholder collaboration prevents possible conflicts with existing data systems and regulatory processes. Once benefits of tested solutions are demonstrated and understood by each party they can be integrated by the regulators for improved decision making.

Current users

- Majlis Perbandaran Ampang Jaya (MPAJ)

[MPAJ access](#) [Public access](#)

Open-data for professional participation to tree diversity planning

2. Contoh Untuk Kaldera Toba Geopark

2.1 Landscape interpretation and natural history

2.2 Living natural museum

2.3 Local products, architecture ...

2.1 Landscape interpretation and natural history



(AFP/Goh Chai Hin)

2.2 Living natural museum

**GEOSITE SIPINSUR
TREE ONLINE**

Tree no. 2374

Species information

Myaleuca cajuputi (Myrtaceae)

In large part of Indonesia, *Myaleuca cajuputi* is called Kayu putih, referred to the light color of peeled bark. In Borneo, the tree is called Kayu Raga or Kayu Tembaga, referred to its fragrant sap "Tembaga" and the resprout "Tembaga" color of bark. It is also called

Toba-GS
0986

2.3 Local products, architecture ...



Stories related to local products



RANGKUMAN

“Digital is less a thing than a way of doing things”

Open-data

for bottom-up public and stakeholders participation to sustainable development

Scaling what works

Sandbox to test digital innovations

Transformational change

Reality fit

- dibaca oleh pengunjung (metadata)
- Memenuhi sustainability goal
- Informasi terpercaya

Approval for use of logo



TERIMA KASIH