SSRS INABIODIV
SPECIES PROFILE AND INFORMATION
Data is from direct observation and review on recent research paper
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Online Profile

Etlingera elatior

(Torch Ginger, Torch Lily, Philippine Waxflower, Porcelein Rose)

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CONSERVATION STATUS

IUCN RedList
Data Deficient (2018)

CITES
This species is not listed in the CITES Appendices

Government of Indonesia
Not Protected (Regulation of the Minister of Environment and Forestry of the Republic of Indonesia No. P.106/MENLHK/SETJEN/KUM.1/12/2018)

OVERALL DISTRIBUTION

Indonesia (Sumatera, Java, Borneo, Celebes, Papua), Malaysia, Thailand

OVERVIEW

Etlingera elatior, known in Indonesia as kecombrang, belongs to the Zingiberaceae family. It is a perennial rhizome herb with brownish-green pseudostems and grows upright in clumps. The main characteristic of this plant is its red torch-shaped flowers. *Etlingera elatior* has many uses, and its parts are used by the community for food, medicine, and decoration.

Citation
Septianingrum D, Asy'Ari R, Pramulya R. 2026. Indonesia Species Profile of Etlingera elatior (Zingiberales: Zingiberaceae). *SSRS INABIODIV Species Profile and Information*. Vol.3: No. 0011. https://publishing.ssrs.or.id/ojs/index.php/ssrs-inabiodiv

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IDENTITY

Scientific Name
Etlingera elatior ((Jack) R.M.Sm., 1822)

Synonym
Homotypic Synonym
Alpinia elatior Jack
Nicolaia elatior (Jack) Horan

Heterotypic Synonym
Alpinia acrostachya Steud.
Alpinia diracodes Loes.
Alpinia javanica (Blume) D.Dietr.
Alpinia magnifica Roscoe
Alpinia speciosa (Blume) D.Dietr.
Amomum magnificum (Roscoe) Trimen
Amomum tridentatum (Kuntze) K.Schum.
Bojeria magnifica (Roscoe) Raf.
Cardamomum magnificum (Roscoe) Kuntze
Cardamomum speciosum (Blume) Kuntze
Cardamomum tridentatum Kuntze
Diracodes javanica Blume
Elettaria speciosa Blume
Etlingera elatior var. alba Todam & C.K.Lim
Etlingera elatior var. pileng Ongsakul & C.K.Lim
Geanthus speciosus Reinw. ex Blume
Hornstedtia imperialis (Lindl.) Ridl.
Nicolaia imperialis Horan.
Nicolaia intermedia Valeton
Nicolaia magnifica (Roscoe) K.Schum. ex Valeton
Nicolaia speciosa (Blume) Horan.
Phaeomeria imperialis Lindl.
Phaeomeria magnifica (Roscoe) K.Schum.
Phaeomeria speciosa (Blume) Koord.

Common Name (Indonesia)
Kecombrang

Indonesia Local Name
Bungongkala (Aceh), Asam cekala/cikala (Karo), Kencong atau Kincung (North Sumatera), Kecombrang or Bongkot (Java), Honje (Sundanese), Kecicang (Bali), Sambuang (West Sumatera), Puwa Kijung (Minangkabau), Katinbung (Makassar), Petikala (Ternate), Bunga Rias (Tapanuli), Kumbang sekala (Lampung), Wulae (Southeast Sulawesi).

CLASSIFICATION

Kingdom	:	Plantae
Division	:	Tracheophyta
Class	:	Liliopsida
Order	:	Zingiberales
Family	:	Zingiberaceae
Genus	:	*Etlingera*
Species	:	*Etlingera elatior*

DESCRIPTION

Terrestrial, perennial herbs with tuberous rhizomes, height up to 5 m. The stem is a rhizome with a pseudostem that can reach 5–6 m. Leaves are simple, lanceolate (Linnaeus); base oblique; apex acuminate; margin sinuate, repand; leaf attachment subsessile, sheathing; leaf arrangement alternate; texture pubescent; lamina color adaxial moderate olive green, abaxial strong yellow green. Lamina length 68–98 cm, width 18.5–20 cm. Petiole pubescent. Petiole length 3–3.5 cm. Venation pinnately veined/penninerved. Inflorescence capitulum, pink cream to white. Inflorescence length 29 cm. Flower color light red and orange at the margin. Flower length 12 cm. Peduncle type basal, cream to dark brown. Bract type petaloid, involuclar, red with white margins. Infructescence type syncarp. Fruit type capsule, red to pink. Root system fibrous.

ECOLOGY AND HABITAT

Etlingera elatior is commonly found in lowland forest ecosystems and humid forests (in Sumatra) (Novitasari 2023). This species generally grows at an altitude of 200–500 meters above sea level with an average optimal rainfall of moderate to high (1,500–2,500 mm/year), an average daily temperature of 22.9–32.5°C, and relative humidity of 70–80% (Choon and Ding 2016). *Etlingera elatior* can grow optimally at a pH ranging from 5.5 to 6.5, with high carbon content (±2%), and with the presence of lime in the soil. These abiotic factors, such as elevation, rainfall, temperature, humidity, pH, carbon content, and soil texture, greatly affect the growth of Etlingera elatior and also influence its bioactive compound content (Tee *et al*. 2025).

DISTRIBUTION

Distribution Region
Regional Distribution in Indonesia (Record)
Sumatera, Java, Borneo, Celebes, Papua

Distribution Type
Global

Distribution Map

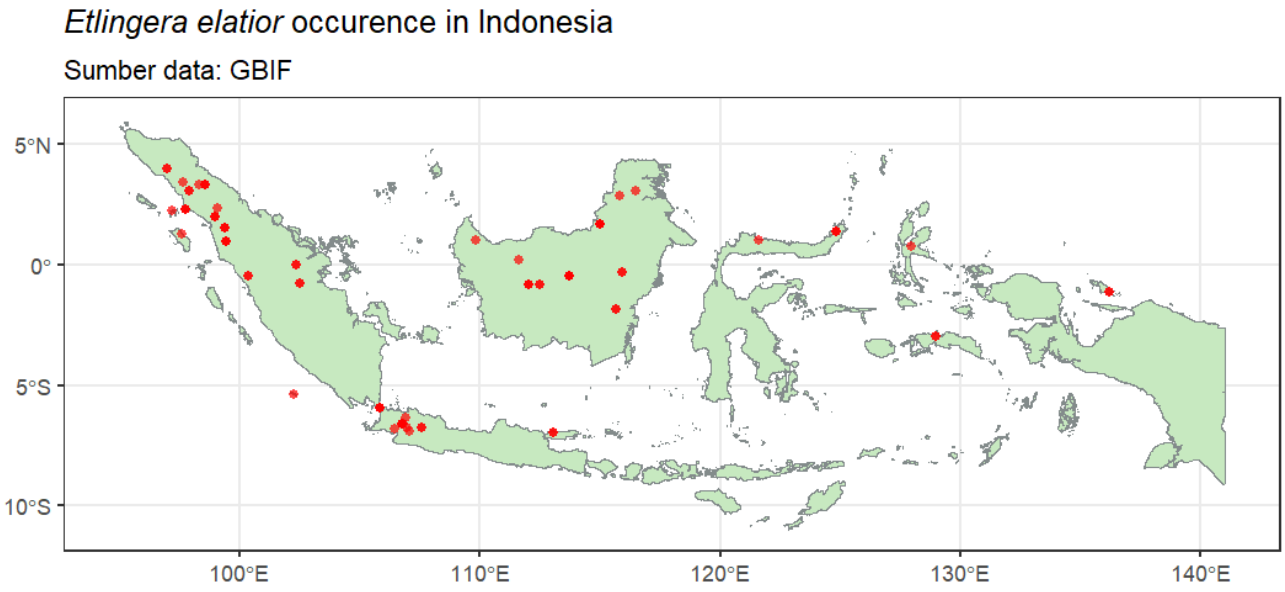


Figure 1. Distribution map *Etlingera elatior* in Indonesia by GBIF 2025

Statistical Overview of Distribution

Indicator	Bioregion	Value (total, mean ± SD, range)	Unit
Distribution (GBIF on 2025)	Jawa	46	Record
	Sumatera	53	Record
	Borneo	30	Record
	Celebes	4	Record
	Maluku	4	Record
	Papua	5	Record
Bioclimatic – Elevation (DEM SRTM)	Jawa	521,30 ± 548,45 (9 – 2981)	Mean Sea Level (m)
	Sumatera	516,94 ± 483,75 (13 – 1577)	Mean Sea Level (m)
	Borneo	469,94 ± 301,07 (4 – 860)	Mean Sea Level (m)
	Celebes	544 ± 336 (40 – 712)	Mean Sea Level (m)
	Maluku	554,75 ± 380,39 (58 – 985)	Mean Sea Level (m)
	Papua	93,6 ± 36,06 (34 – 122)	Mean Sea Level (m)
Bioclimatic – Precipitation (CHIRPS UCSB) (2015-2025)	Jawa	3428,56 ± 825,89 (1880,71 – 4836,48)	mm / years
	Sumatera	2484,36 ± 582,37 (1369,32 – 4044,13)	mm / years
	Borneo	3791,29 ± 562,39 (2188,29 – 4298,88)	mm / years
	Celebes	2481,67 ± 71,17 (2368,93 – 2519,26)	mm / years

	Maluku	2851,32 ± 531,54 (2093,59 – 3337,77)	mm / years
	Papua	4033,95 ± 1272,63 (2640,71 – 5031,50)	mm / years
Bioclimatic – Temperature (CHIRTS UCSB) (2015-2025)	Jawa	28,63 ± 3,14 (19,65 – 32,38)	Mean Tmax (°C)
	Sumatera	29,41 ± 2,75 (24,75 – 33,57)	Mean Tmax (°C)
	Borneo	28,17 ± 2,13 (25,86 – 32,39)	Mean Tmax (°C)
	Celebes	30,16 ± 0,74 (29,79 – 31,27)	Mean Tmax (°C)
	Maluku	30,06 ± 0,58 (29,23 – 30,60)	Mean Tmax (°C)
	Papua	30,19 ± 0,90 (29,11 – 31,07)	Mean Tmax (°C)

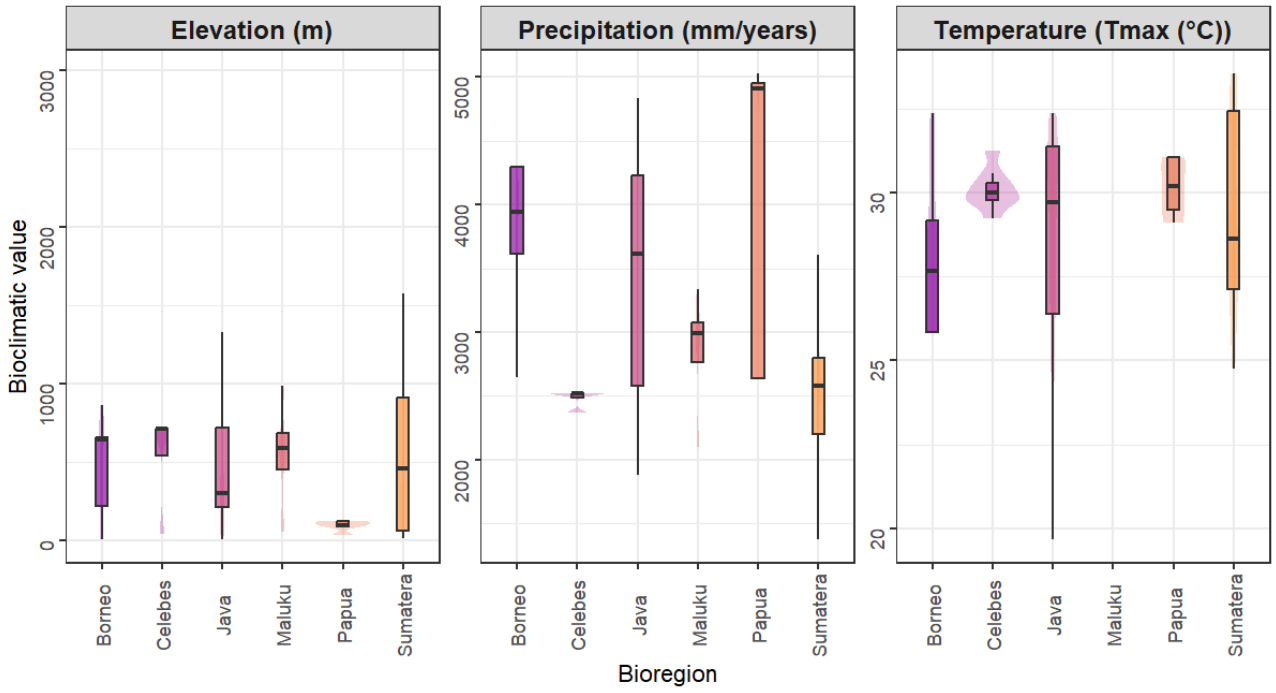


Figure 2. Statistical of bioclimatic characteristic

Distribution Map Based on Indonesia Bioregion – Java

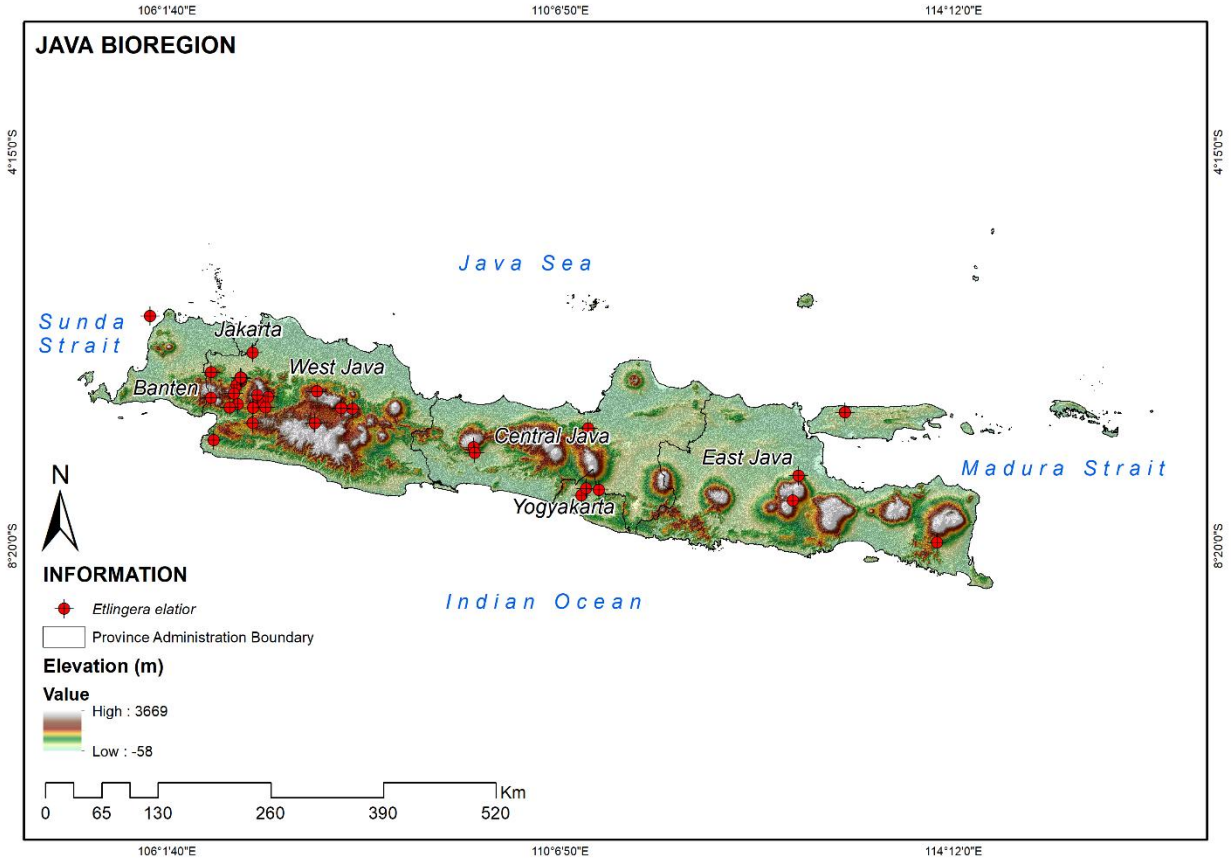


Figure 3. Distribution map of *Etlingera elatior* in Java bioregion by elevation gradient

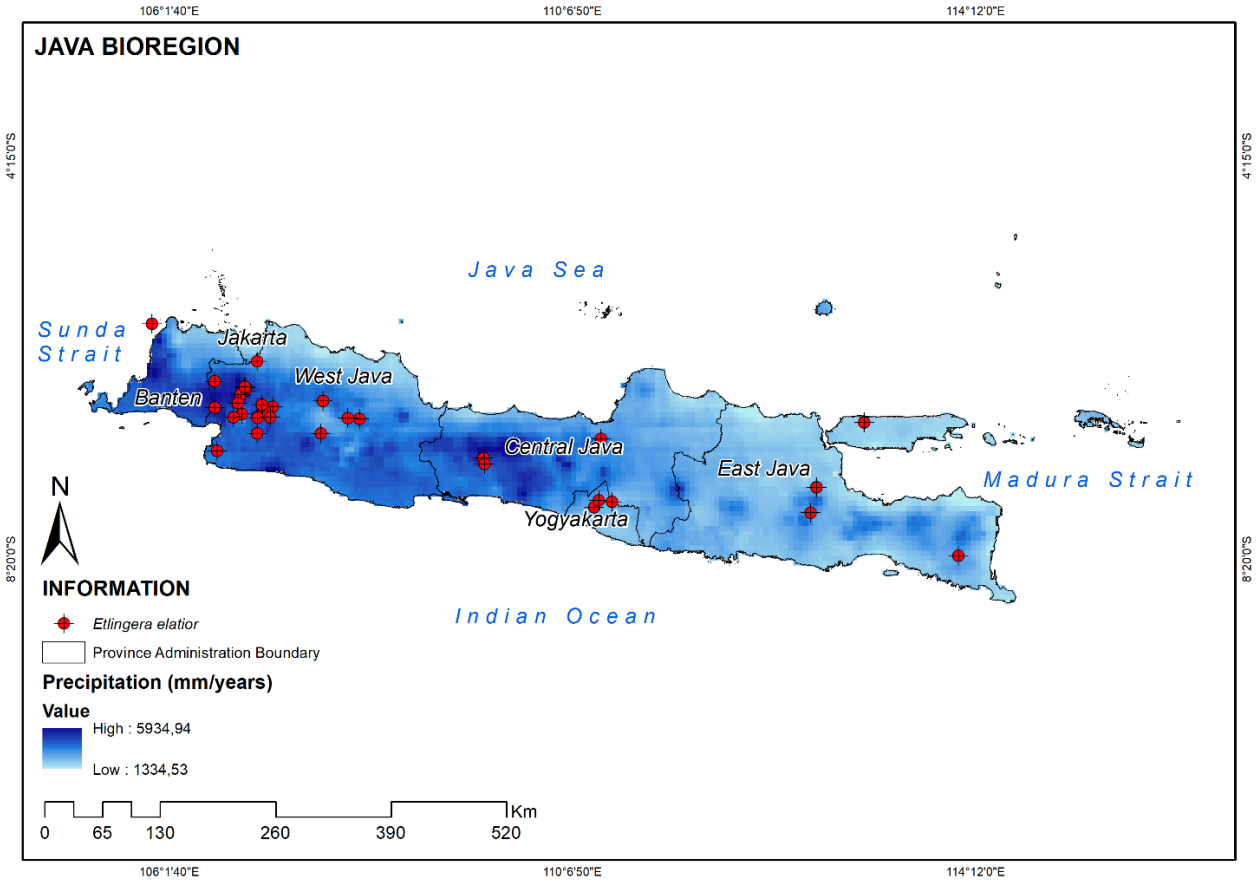


Figure 4. Distribution map of *Etlingera elatior* in Java bioregion by precipitation gradient

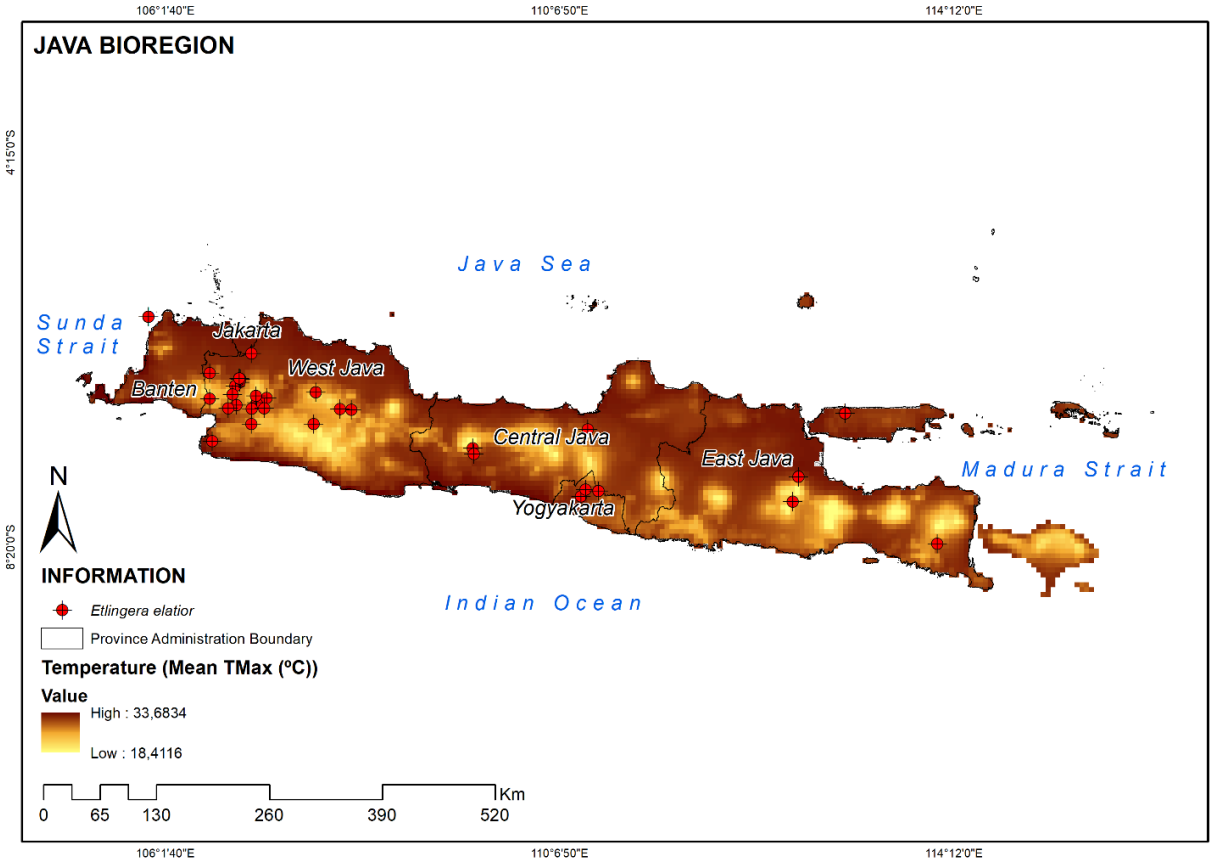


Figure 5. Distribution map of *Etlingera elatior* in Java bioregion by temperature gradient

Distribution Map Based on Indonesia Bioregion – Sumatera

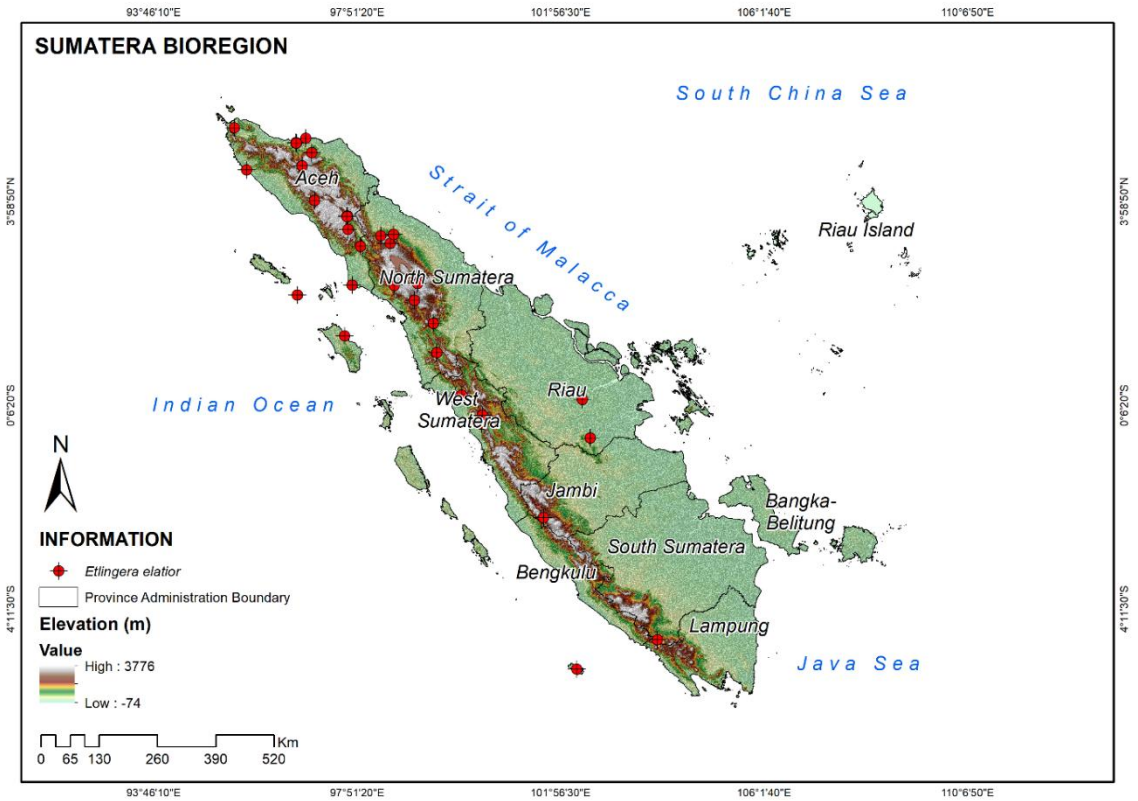


Figure 6. Distribution map of *Etlingera elatior* in Sumatera bioregion by elevation gradient

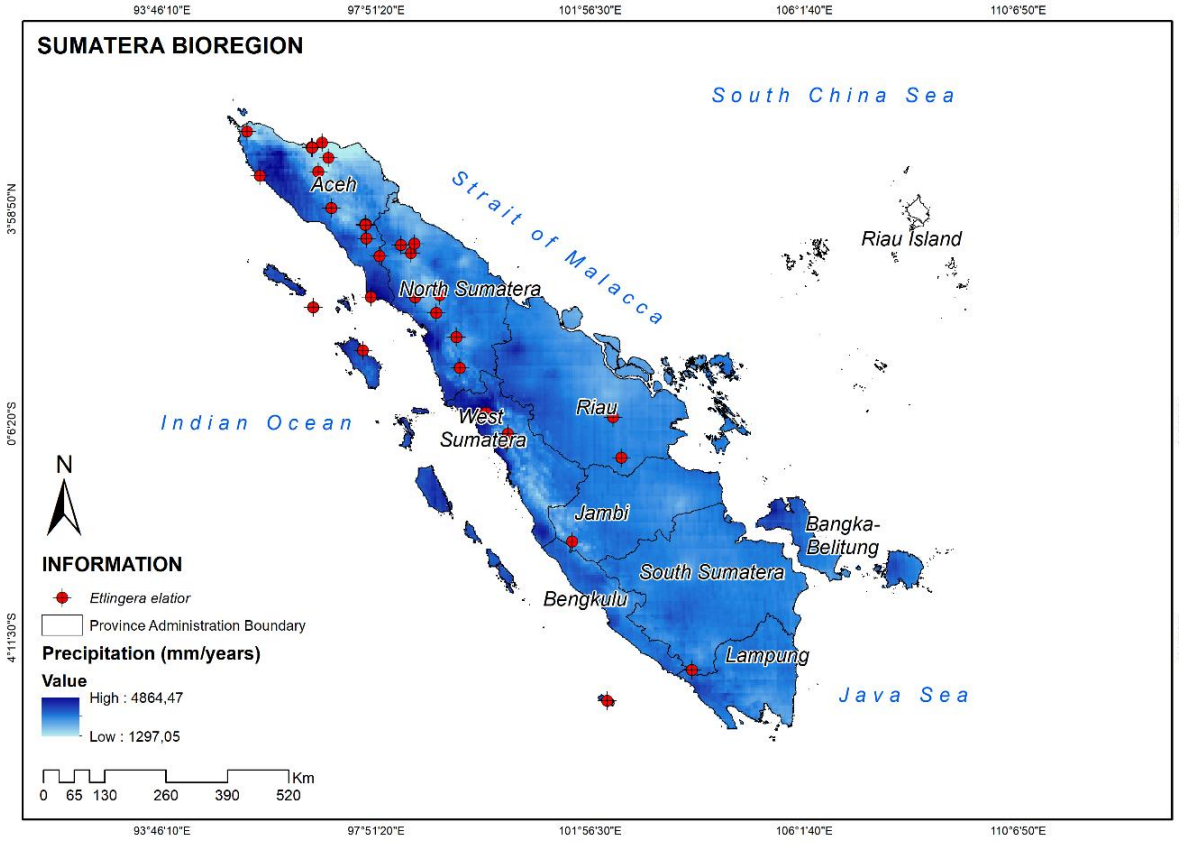


Figure 7. Distribution map of *Etlingera elatior* in Sumatera bioregion by precipitation gradient

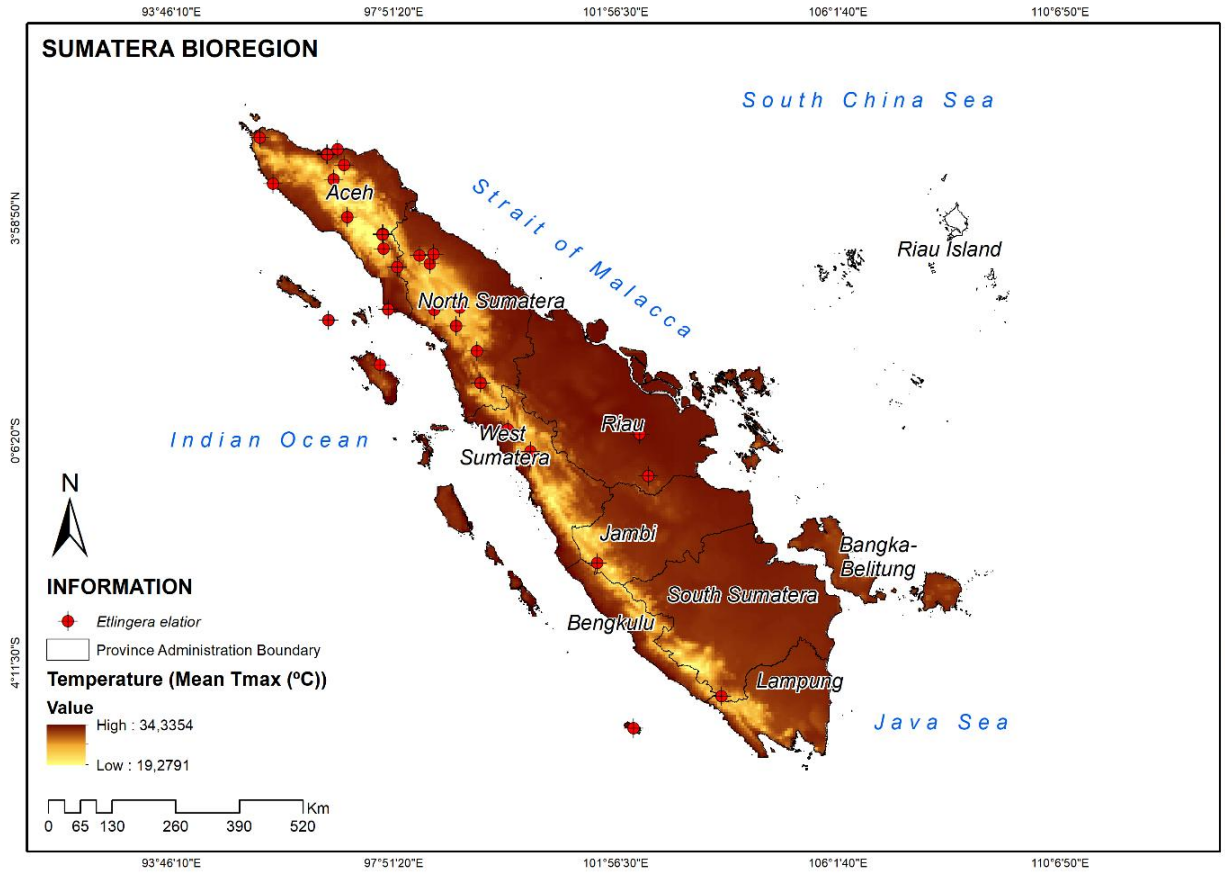


Figure 8. Distribution map of *Etlingera elatior* in Sumatera bioregion by temperature gradient

Distribution Map Based on Indonesia Bioregion – Borneo

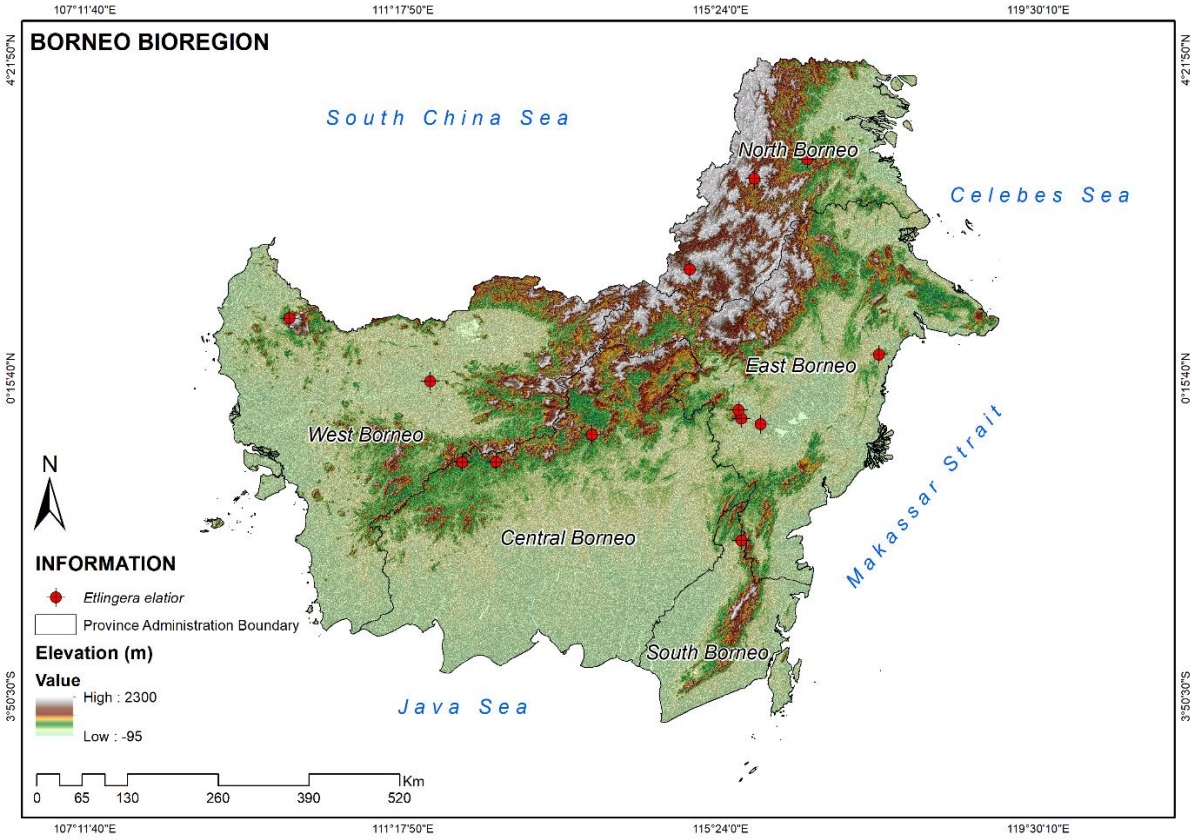


Figure 9. Distribution map of *Etlingera elatior* in Borneo bioregion by elevation gradient

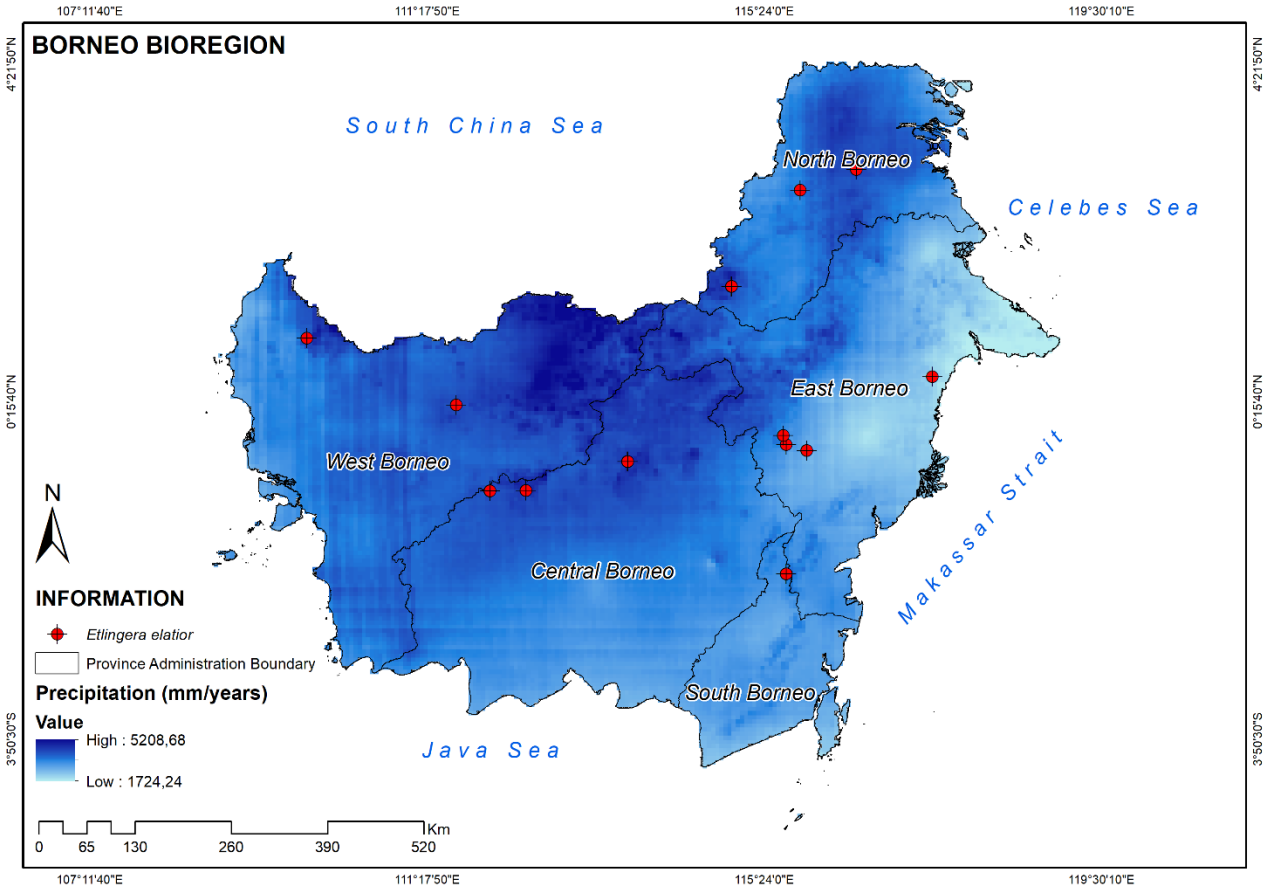


Figure 10. Distribution map of *Etlingera elatior* in Borneo bioregion by precipitation gradient

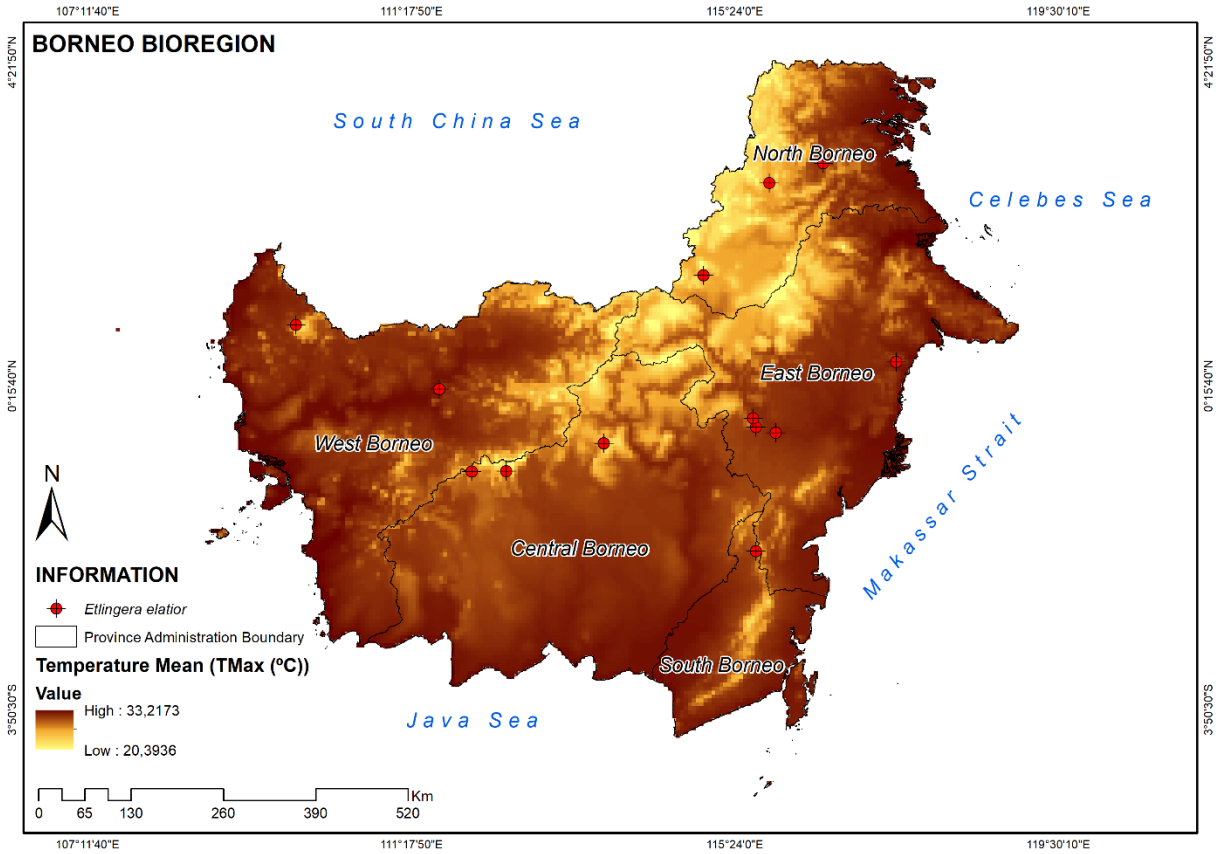


Figure 11. Distribution map of *Etlingera elatior* in Borneo bioregion by temperature gradient

Distribution Map Based on Indonesia Bioregion – Celebes

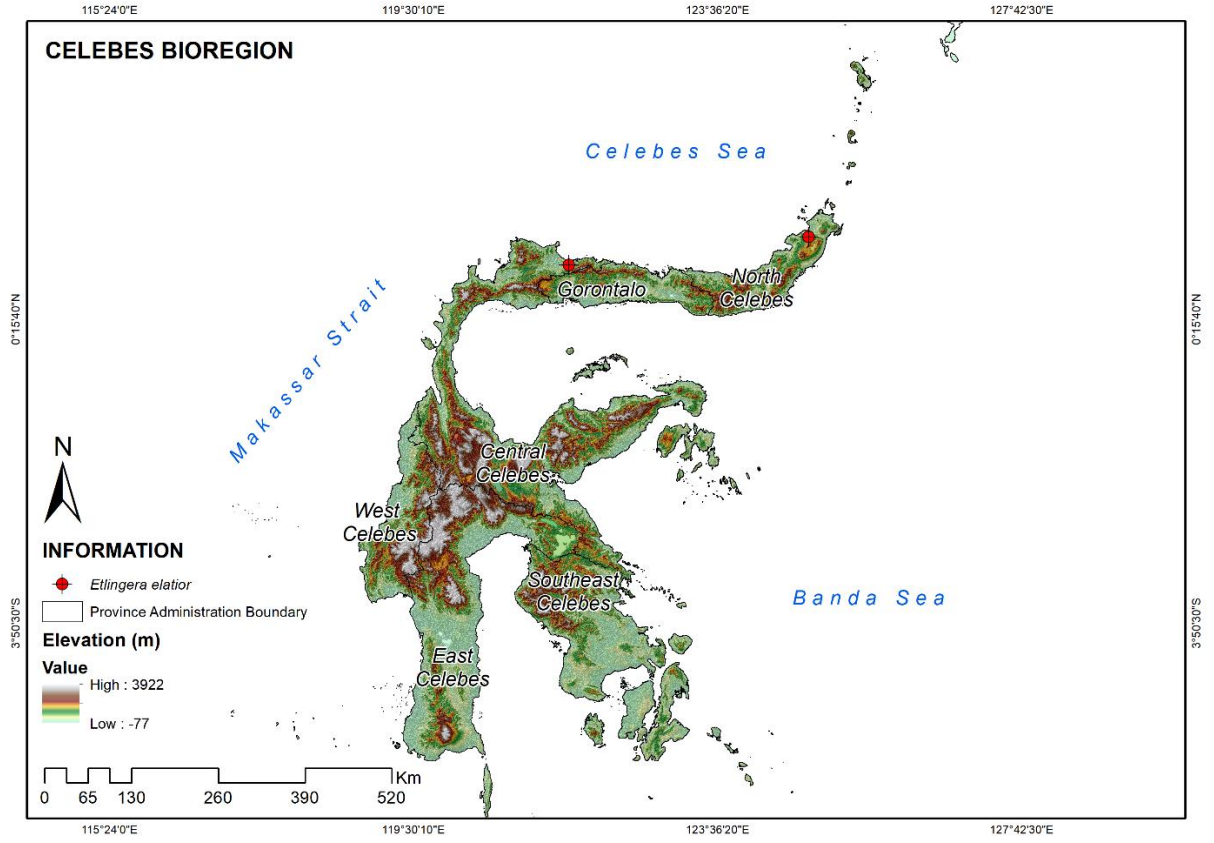


Figure 12. Distribution map of *Etlingera elatior* in Celebes bioregion by elevation gradient

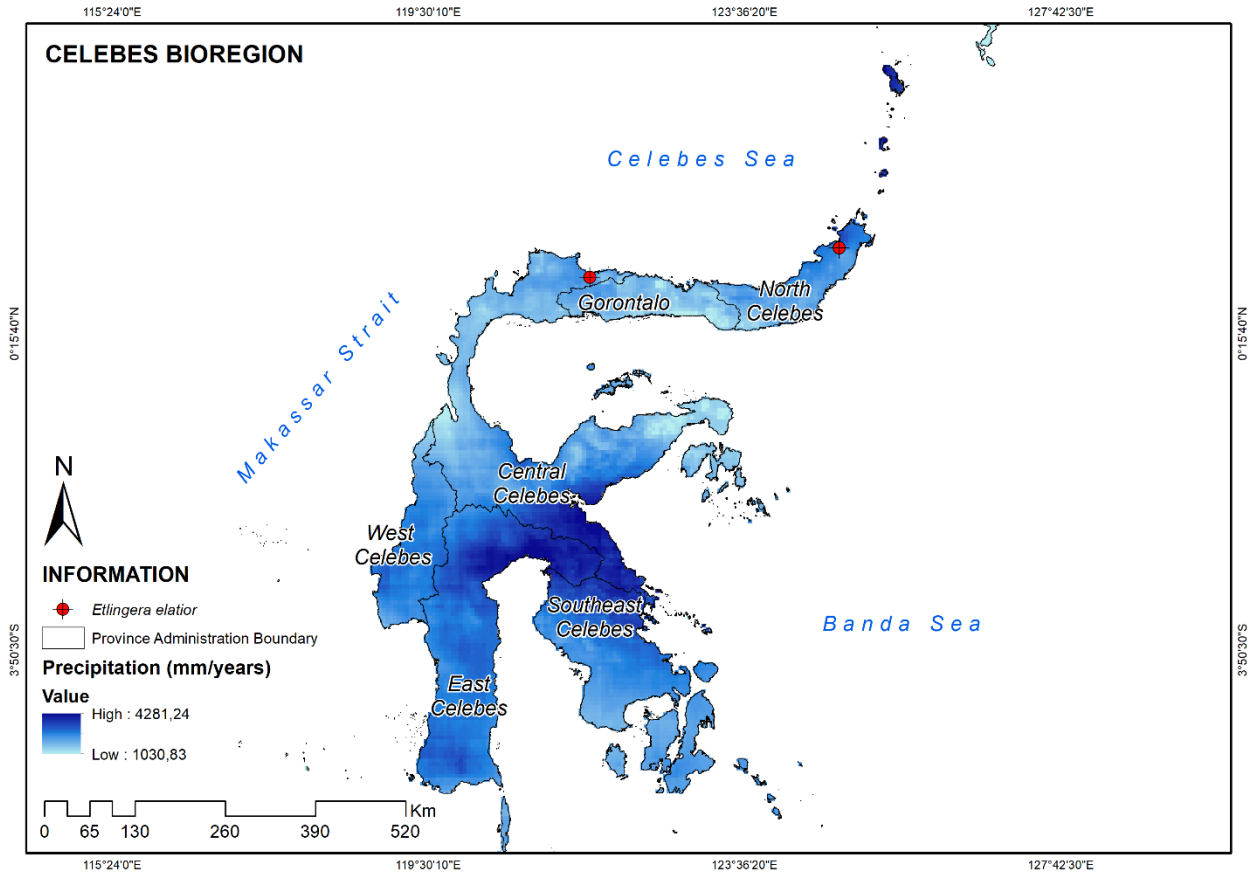


Figure 13. Distribution map of *Etlingera elatior* in Celebes bioregion by precipitation gradient

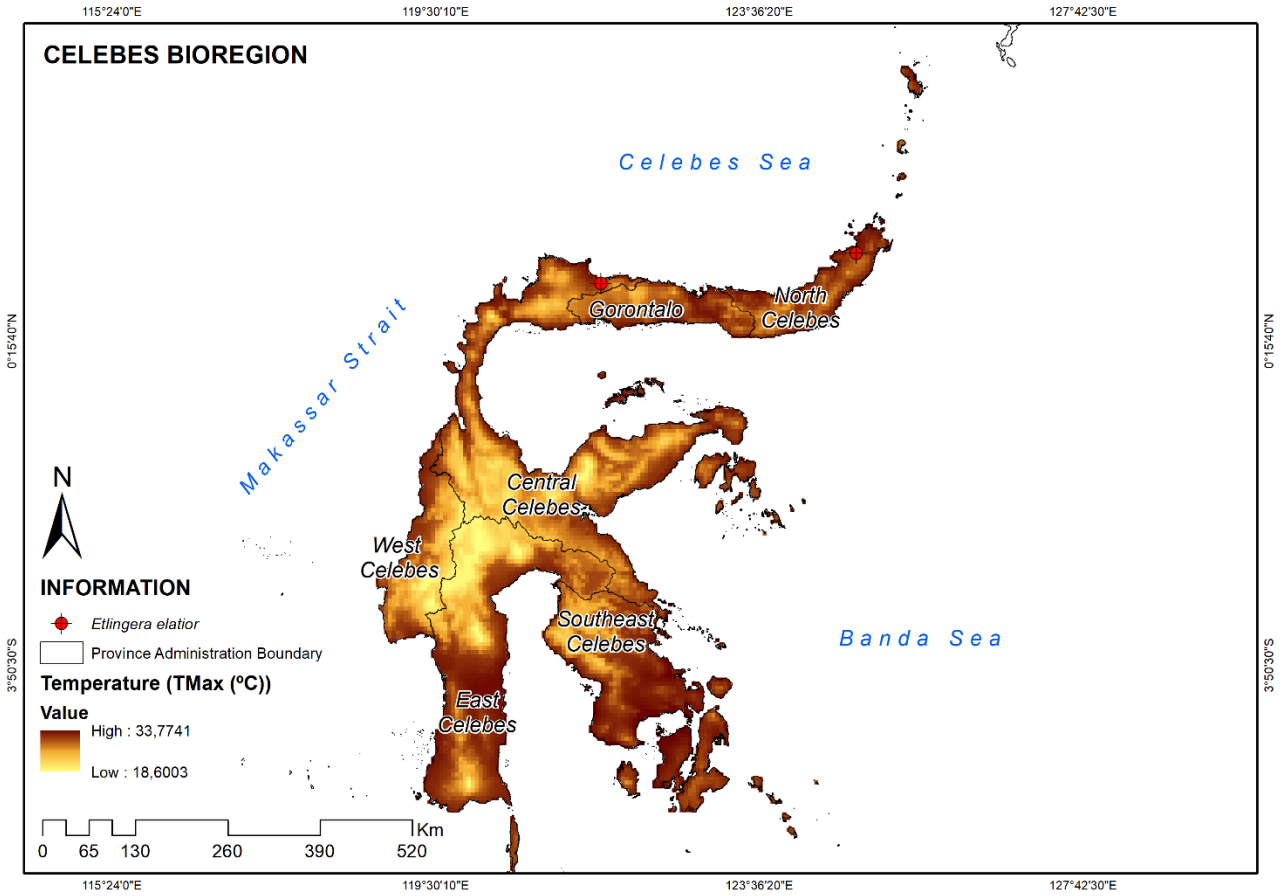


Figure 14. Distribution map of *Etlingera elatior* in Celebes bioregion by temperature gradient

Distribution Map Based on Indonesia Bioregion – Maluku

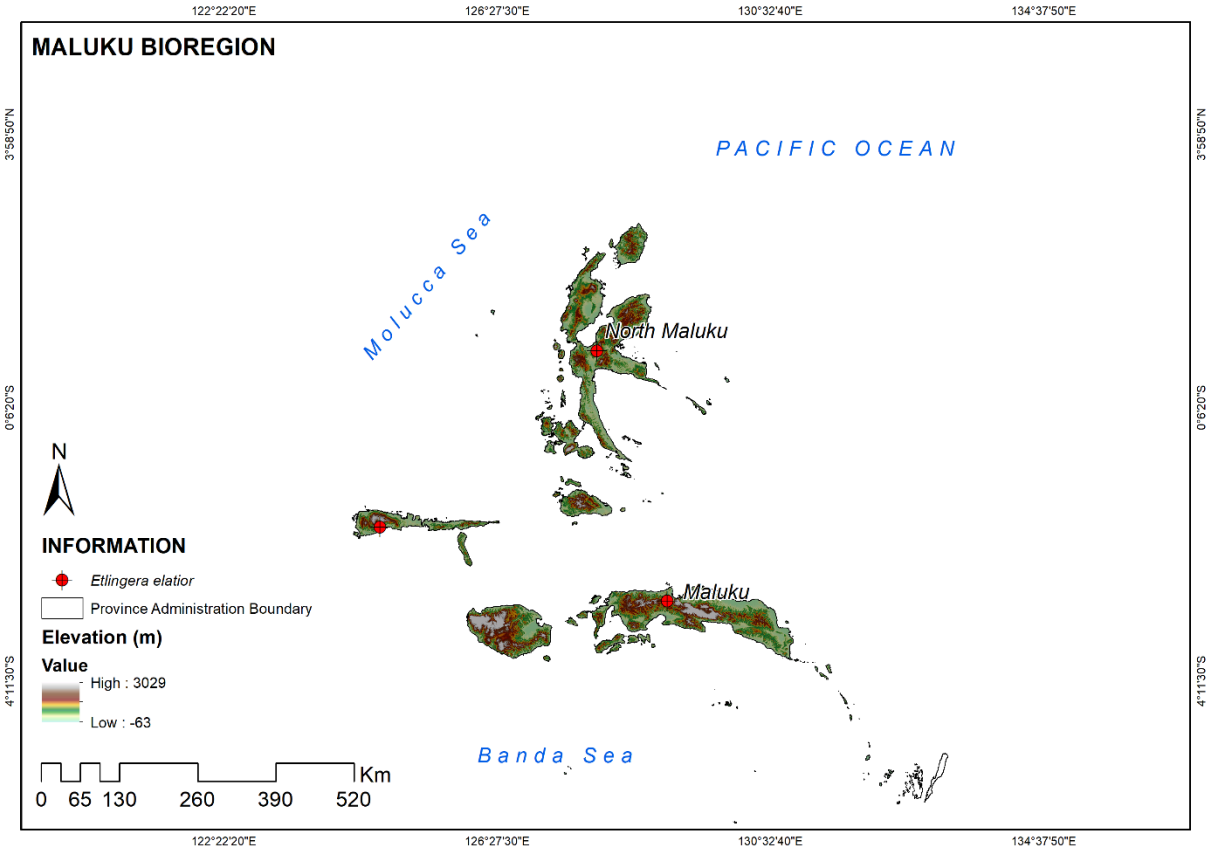


Figure 15. Distribution map of *Etlingera elatior* in Maluku bioregion by elevation gradient

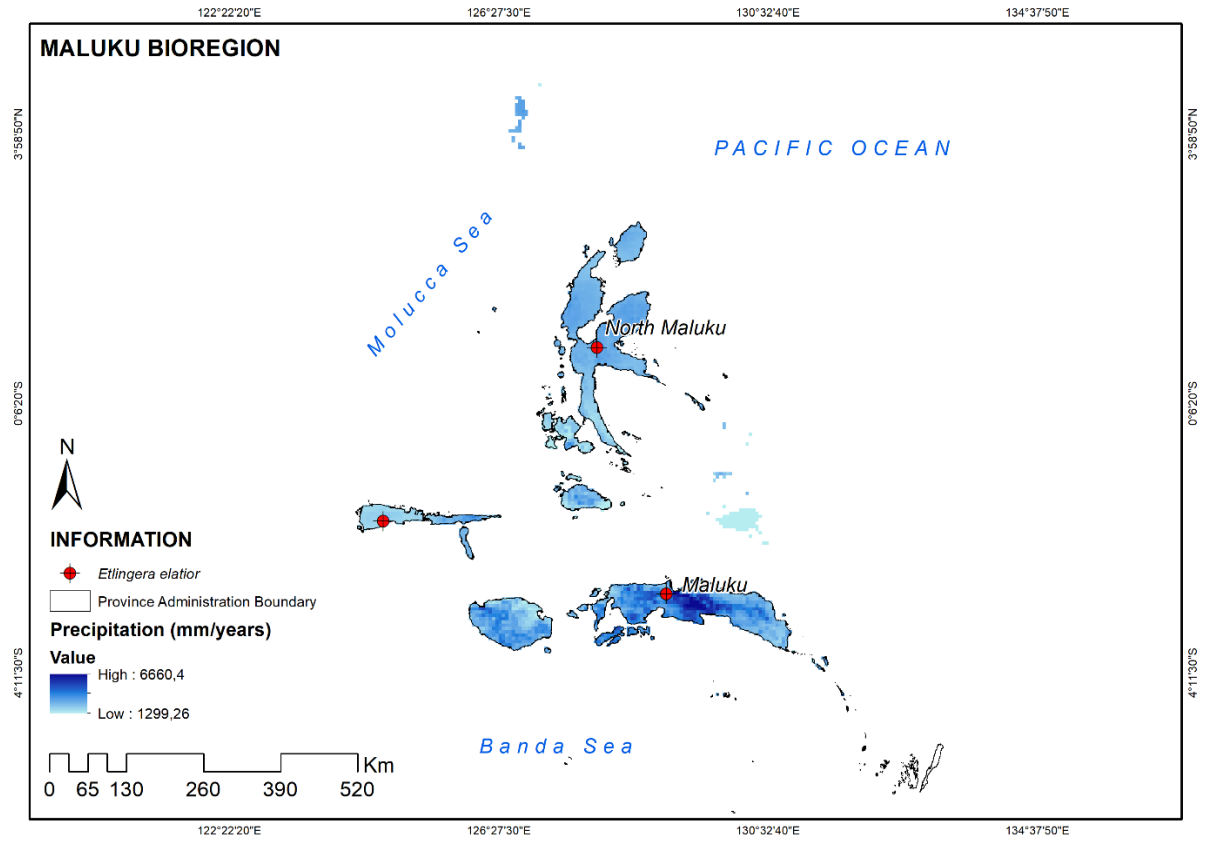


Figure 16. Distribution map of *Etlingera elatior* in Maluku bioregion by precipitation gradient

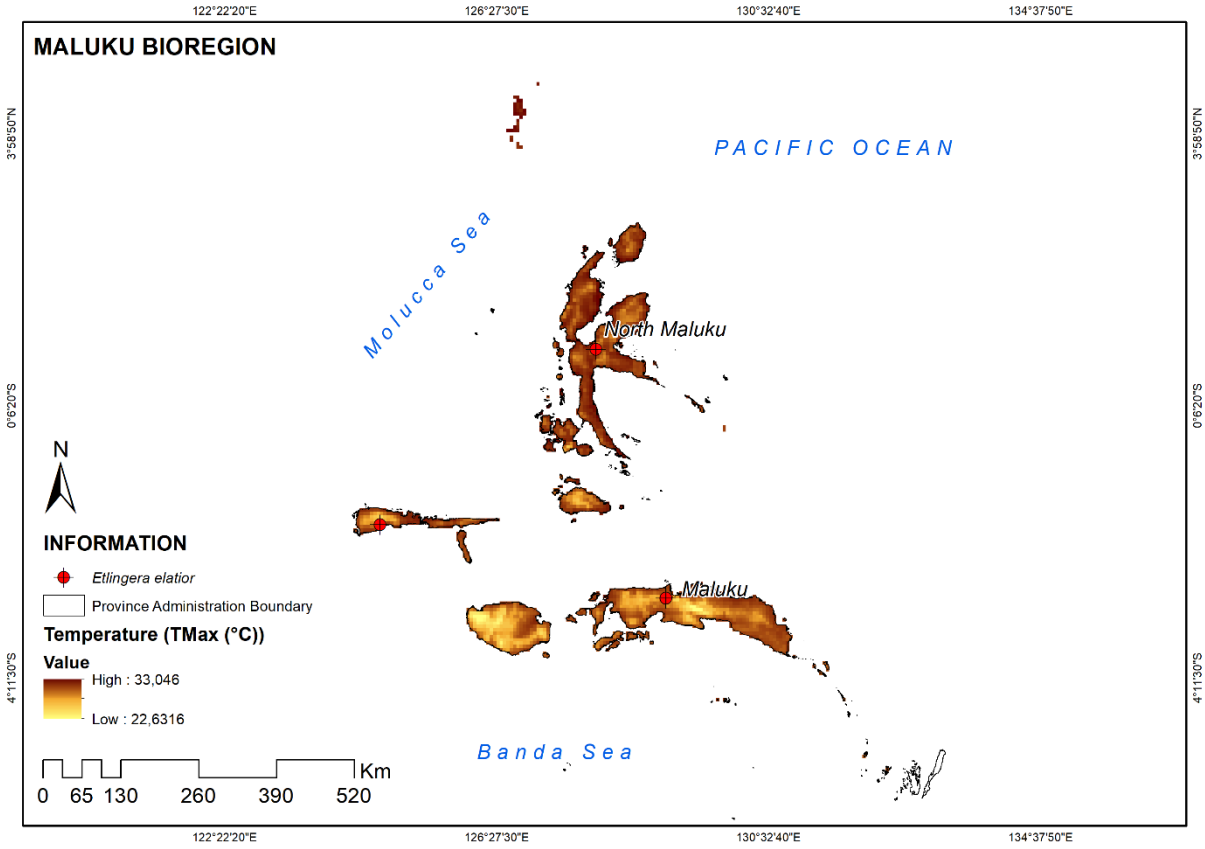


Figure 17. Distribution map of *Etlingera elatior* in Maluku bioregion by temperature gradient

Distribution Map Based on Indonesia Bioregion – Papua

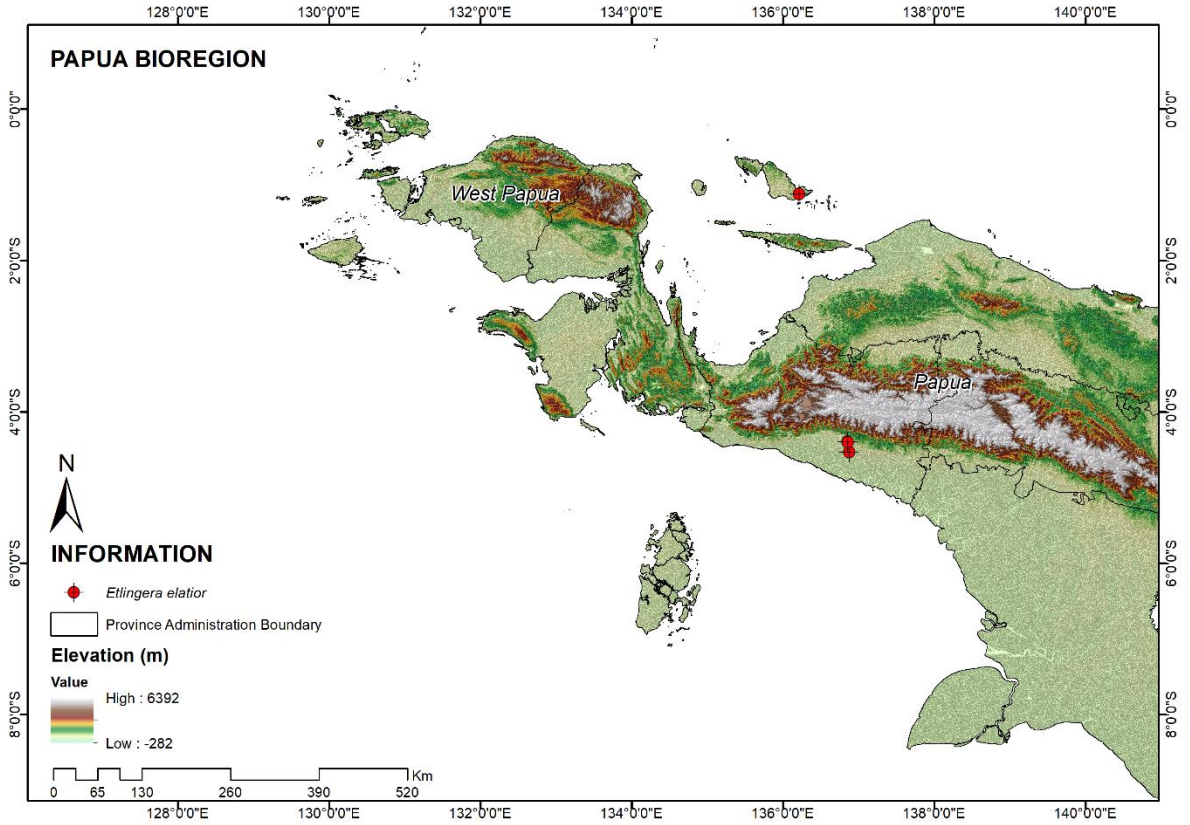


Figure 18. Distribution map of *Etlingera elatior* in Papua bioregion by elevation gradient

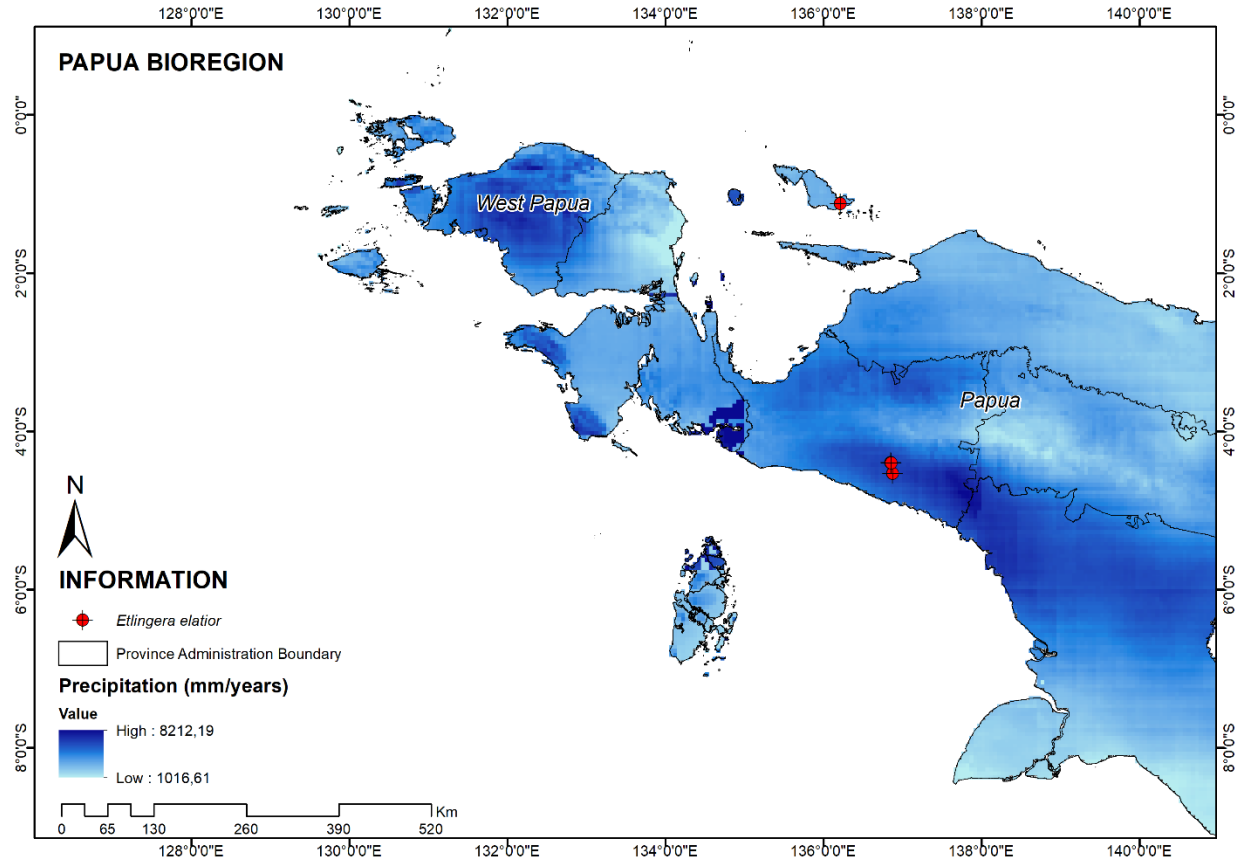


Figure 19. Distribution map of *Etlingera elatior* in Papua bioregion by precipitation gradient

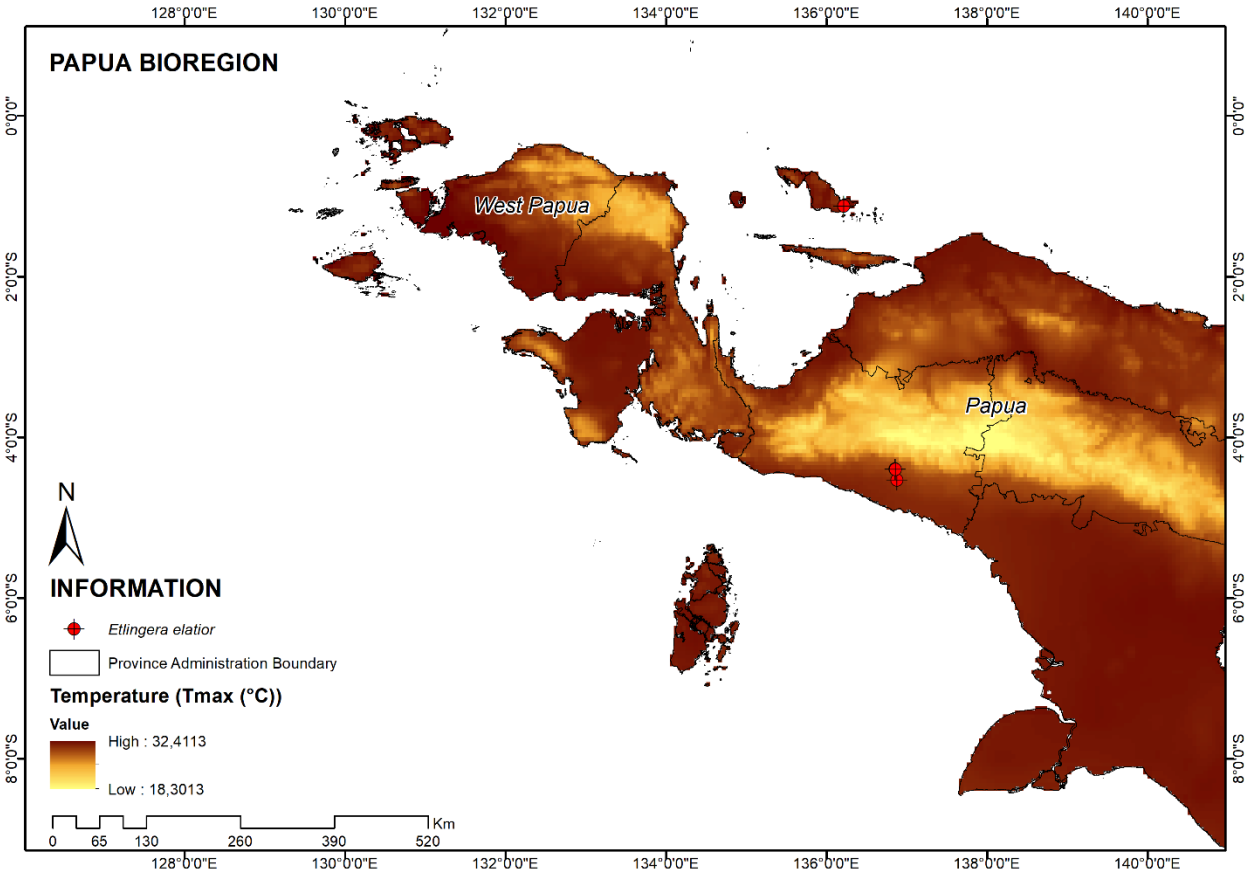


Figure 20. Distribution map of *Etlingera elatior* in Papua bioregion by temperature gradient

SPECIES VALUE

Ecological Value

Etlingera elatior has role as an environmental indicator, particularly as an indicator of the humidity of an area. This is because *Etlingera elatior* requires high humidity to survive, so when this species is found, it indicates that the area is sufficiently humid. In addition, the presence of this species also indicates that an area has a high lime content, as *Etlingera elatior* requires lime to stimulate the growth and development of its flowers and fruits (Laela and Ammurabi 2024).

Economic Value

Etlingera elatior has high economic value, based on the many uses of this species. *Etlingera elatior* is widely used as a flavor enhancer, culinary ingredient, and spice. Many people also use this plant (rhizome, stem, leaf, flower, fruit) for medicine, such as for earache, fever, eye pain, stomachache, jaundice, sore throat, rheumatic, and respiratory problems (Saudah *et al*. 2021; Shahid-Ud-Daula and Mohammad 2019). *Etlingera elatior* also has commercial potential as an ingredient in cosmetics, especially skin bleaches and anti-aging lipsticks. In addition, this plant is also used as an ingredient in soaps, shampoos, and perfumes. The bioactive compounds contained in *Etlingera elatior* are very diverse, including antioxidant, phenolic, and flavonoid activities (Aliaa *et al*. 2017). With its high economic value, this species must be cultivated and is now being developed through agroforestry systems. *Etlingera elatior* has many benefits and potential, so agroforestry systems with *Etlingera elatior* can be developed for the economic benefit of the community (Purwoko *et al*. 2019).

Socio-Cultural Value

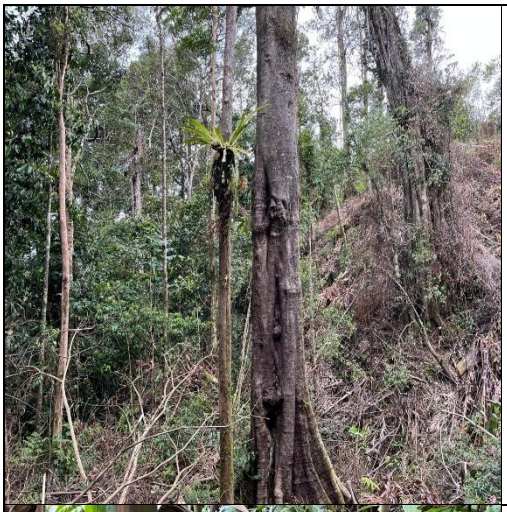
Etlingera elatior is a symbol of identity and local wisdom in Indonesian cuisine. Parts of this plant, such as flower buds, young pseudostems, inflorescences, and fruit, are used in traditional culinary preparations such as asam laksa, nasi kerabu, nasi ulam, arisk ikan mas, sayur asam, limbek, pliek u curry, lambai, and others. In addition, this species is widely used by the community as traditional medicine, such as in Aceh, namely pareng, lampok, makjun sejuk, and tapal. The flowers of this species are also very beautiful, so the community often uses them as decorations (Saudah *et al*. 2022).

THREATS

Deforestation from forest logging and agriculture

DOCUMENTATION

Picture	Title	Caption
	Habitat	*Etlingera elatior*, Mumuger Social Forestry Area (SFA), Kekuyang Village, Ketol District, Central Aceh Regency, Province of Aceh, Indonesia

	Habitat threat (deforestation)	*Etlingera elatior*, Mumuger Social Forestry Area (SFA), Kekuyang Village, Ketol District, Central Aceh Regency, Province of Aceh, Indonesia. 28th August 2025.
	Population of *Etlingera elatior*	*Etlingera elatior*, Mumuger Social Forestry Area (SFA), Kekuyang Village, Ketol District, Central Aceh Regency, Province of Aceh, Indonesia. 28th August 2025.
	Inflorescence	*Etlingera elatior*, Mumuger Social Forestry Area (SFA), Kekuyang Village, Ketol District, Central Aceh Regency, Province of Aceh, Indonesia. 28th August 2025.

	Leaves	*Etlingera elatior*, Mumuger Social Forestry Area (SFA), Kekuyang Village, Ketol District, Central Aceh Regency, Province of Aceh, Indonesia. 28th August 2025.
	Adaxial and abaxial leaf, inflorescence	*Etlingera elatior*, Mumuger Social Forestry Area (SFA), Kekuyang Village, Ketol District, Central Aceh Regency, Province of Aceh, Indonesia. 28th August 2025.

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