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# Pittosporum kaalense

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## **Taxonomy**

Kingdom	Phylum	Class	Order	Family	
Plantae	Tracheophyta	Magnoliopsida	Rosales	Pittosporaceae	

Taxon Name: Pittosporum kaalense Guillaumin

### **Taxonomic Source(s):**

Tirel, Ch. and Veillon, J.-M. 2002. Flore de la Nouvelle-Calédonie, tome 24. Pittosporaceae. Museum d'Histoire Naturelle, Paris.

### **Assessment Information**

Red List Category & Criteria: Vulnerable B1ab(ii,iii)+2ab(ii,iii) ver 3.1

Year Published: 2017

Date Assessed: July 23, 2015

#### **Justification:**

Pittosporum kaalense is an endemic shrub of New Caledonia restricted to the west coast of Grande Terre, with the Baraoua river as the southern border and Mount Kaala as the northern one. This species occurs in dense humid forest and on forest edges between 100 and 900 m asl. Its area of occupancy and extent of occurrence are respectively 128 and 1,746 km². With a total of six locations of which four are affected by mining activities, the area of occupancy and quality of habitat of *P. kaalense* are considered to be in a state of continuous decline. The population size of *P. kaalense* is unknown but subpopulations seem quite dense. Using criterion B, *P. kaalense* qualifies for listing as Vulnerable (VU) B1ab(ii,iii)+2ab(ii,iii).

# **Geographic Range**

### **Range Description:**

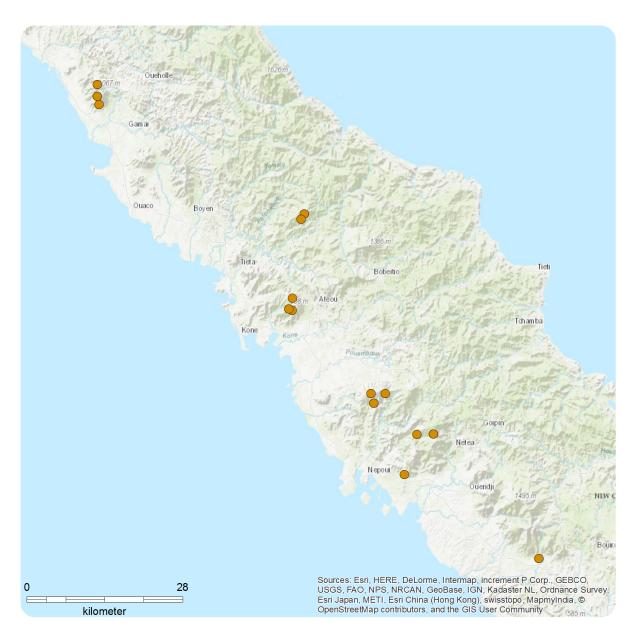
*Pittosporum kaalense* is an endemic shrub of New Caledonia restricted to the west coast of Grande Terre, with the Baraoua River as the southern border and Mount Kaala as northern border.

### **Country Occurrence:**

Native: New Caledonia

# **Distribution Map**

### Pittosporum kaalense





### Compiled by: IUCN SSC New Caledonia Plants RLA



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



# **Population**

Population size is not precisely known, but *Pittosporum kaalense* seems to form quite dense subpopulations.

**Current Population Trend:** Decreasing

## Habitat and Ecology (see Appendix for additional information)

Pittosporum kaalense is found in dense humid forest and on forest edges between 100 and 900 m asl.

Systems: Terrestrial

## Threats (see Appendix for additional information)

Due to its predominance on ultramafic massifs, *Pittosporum kaalense* is highly impacted by past, currently ongoing and future mining activities. New Caledonia contains between 20 - 30% of the world's nickel resources. Intense mining activities since the late 19th century has generated soil erosion (1.2% of bare ground mapped by SPOT5 in 2007). Damage to habitat caused by Rusa Deer (*Rusa timorensis*) and feral pigs, invasive species in New Caledonia, also constitute major threats.

## **Conservation Actions** (see Appendix for additional information)

*Pittosporum kaalense* is not protected by any legislation nor does it occur in any protected areas. Due to its predominance on ultramafic massifs, it should be necessary that some conservation measures and management policies be established on mines to prevent the extinction of this, and other similar, species.

### **Credits**

Assessor(s): Gemmill, C., Veillon, J.-M., Amice, R., Cazé, H., Dumontet, V., Fleurot, D., Garnier,

3

D., Gâteblé, G. & Maggia, L.

**Reviewer(s):** Tanguy, V.

Facilitators(s) and Chanfreau, S.

Compiler(s):

# **Bibliography**

Endemia.nc. 2016. Faune et Flore de Nouvelle-Calédonie. Available at: http://www.endemia.nc.

IUCN. 2017. The IUCN Red List of Threatened Species. Version 2017-3. Available at: <a href="www.iucnredlist.org">www.iucnredlist.org</a>. (Accessed: 7 December 2017).

L'Huillier, L., Jaffré, T. and Wulff, A. 2010. *Mines et Environnement en Nouvelle-Calédonie: les milieux sur substrats ultramafiques et leur restauration*. IAC, Nouméa.

Tirel, Ch. and Veillon, J.-M. 2002. *Flore de la Nouvelle-Calédonie, tome 24. Pittosporaceae*. Museum d'Histoire Naturelle, Paris.

### Citation

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### **External Resources**

For Images and External Links to Additional Information, please see the Red List website.

# **Appendix**

# **Habitats**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	-

## **Threats**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
3. Energy production & mining -> 3.2. Mining & quarrying	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Sus domesticus)	Ongoing	-	-	-
	Stresses:	1. Ecosystem	stresses -> 1.2. Ecosy	ystem degradation
		2. Species St	resses -> 2.2. Species	disturbance
		•	resses -> 2.3. Indirected reproductive succe	•
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Rusa timorensis)	Ongoing	-	-	-
	Stresses:	1. Ecosystem	stresses -> 1.2. Ecos	ystem degradation
		•	resses -> 2.1. Species	
		2. Species St	resses -> 2.2. Species	disturbance
		•	resses -> 2.3. Indirected reproductive succe	•

# **Conservation Actions in Place**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place		
In-Place Land/Water Protection and Management		
Occur in at least one PA: No		
Invasive species control or prevention: No		
In-Place Species Management		
Successfully reintroduced or introduced beningly: No		

#### **Conservation Actions in Place**

Subject to ex-situ conservation: No

## **Conservation Actions Needed**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

#### **Conservation Actions Needed**

2. Land/water management -> 2.1. Site/area management

## **Additional Data Fields**

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Estimated area of occupancy (AOO) (km<sup>2</sup>): 128

Continuing decline in area of occupancy (AOO): Yes

Extreme fluctuations in area of occupancy (AOO): No

Estimated extent of occurrence (EOO) (km<sup>2</sup>): 1746

Continuing decline in extent of occurrence (EOO): No

Extreme fluctuations in extent of occurrence (EOO): No

Number of Locations: 6

Continuing decline in number of locations: No

Extreme fluctuations in the number of locations: No

Lower elevation limit (m): 100

Upper elevation limit (m): 900

#### **Population**

Number of mature individuals: 10000-100000

Continuing decline of mature individuals: No

Extreme fluctuations: No

Population severely fragmented: No

No. of subpopulations: 6

Extreme fluctuations in subpopulations: No

#### **Habitats and Ecology**

Continuing decline in area, extent and/or quality of habitat: Yes

Generation Length (years): 0

# The IUCN Red List Partnership



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<u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

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