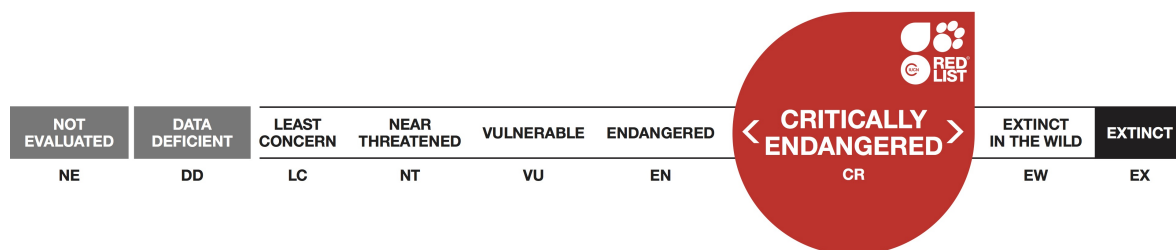


# *Pittosporum gatopense*

Assessment by: Gemmill, C. *et al.*



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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Rosales	Pittosporaceae

**Taxon Name:** *Pittosporum gatopense* 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:** Critically Endangered C2a(i,ii) [ver 3.1](#)

**Year Published:** 2017

**Date Assessed:** July 24, 2015

### Justification:

*Pittosporum gatopense* is an endemic tree of New Caledonia restricted to low altitude sclerophyllous coastal forest patches. Characterized by an area of occupancy of 70 km<sup>2</sup>, an extent of occurrence of 757 km<sup>2</sup>, a population size estimated to be fewer than 250 mature individuals, *P. gatopense* constitutes a rare species. Last census report of the population found fewer than 50 mature individuals in each subpopulation. Threats to the species include invasive species, bushfire, domestic animal husbandry and urban development, which are resulting in a continuous decline of *P. gatopense*. Using criteria C, *P. gatopense* qualifies for listing as Critically Endangered (CR) C2a(i,ii).

### Previously Published Red List Assessments

2010 – Vulnerable (VU)

<http://dx.doi.org/10.2305/IUCN.UK.2010-4.RLTS.T35266A9922819.en>

1998 – Endangered (EN)

1998 – Endangered (E)

## Geographic Range

### Range Description:

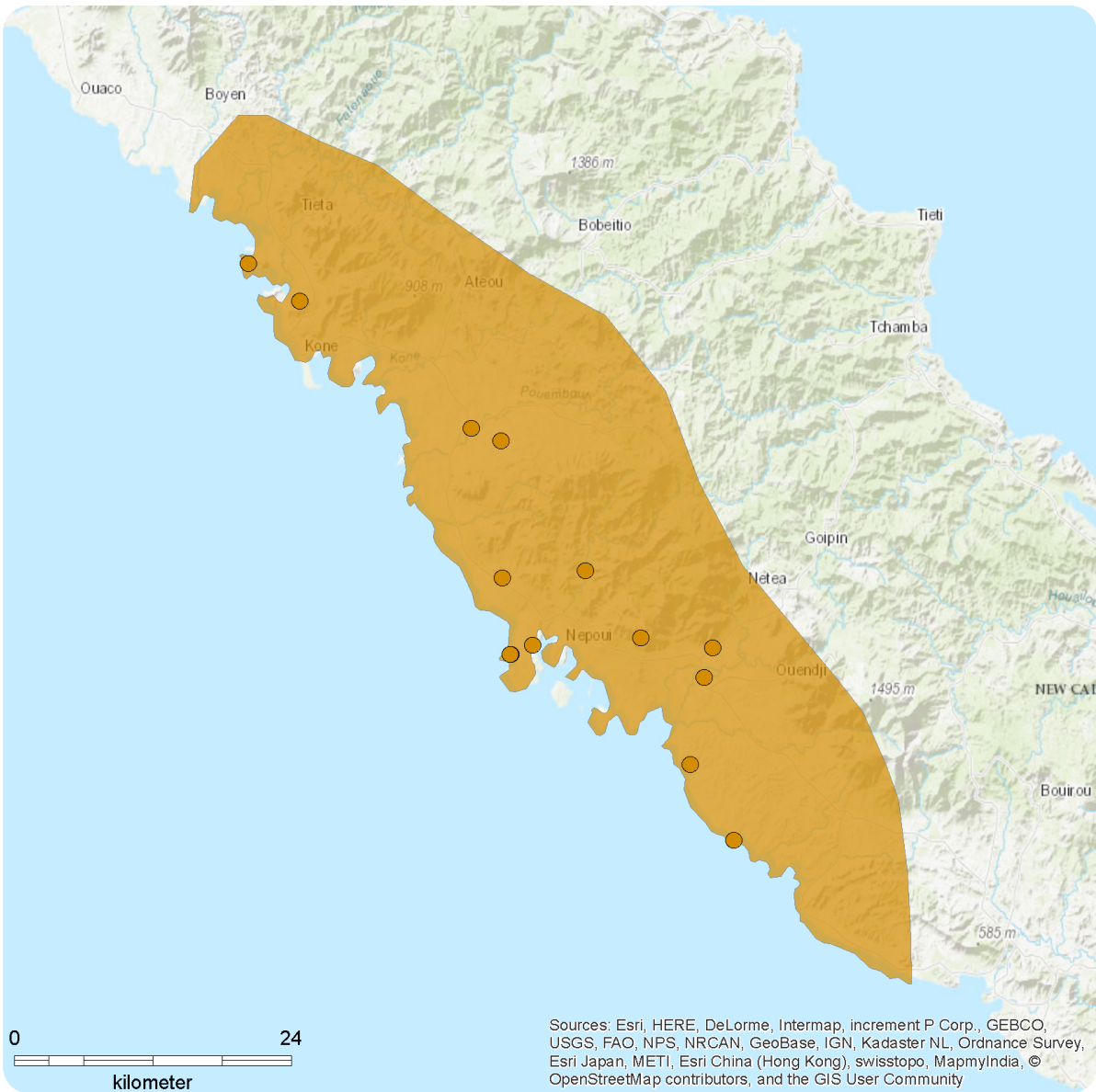
*Pittosporum gatopense* is an endemic tree of New Caledonia restricted to the area of Poya to Voh on the west coast.

### Country Occurrence:

**Native:** New Caledonia

# Distribution Map

*Pittosporum gatopense*



- Range
- Extant (resident)
  - Extant (resident)

Compiled by:  
PCFS



## Population

On the basis of seven known subpopulations and last observations, population size is estimated to be fewer than 250 mature individuals and the largest subpopulation size is estimated to be fewer than 50 mature individuals.

**Current Population Trend:** Decreasing

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

*Pittosporum gatopense* is restricted to low altitude sclerophyllous forest patches along the coastline on shallow soil calcareous soils and deeper black tropical clay soils.

**Systems:** Terrestrial

## Threats (see Appendix for additional information)

The main threats are linked to damage and loss of habitat. Sclerophyllous forest are subject to multiple threats such as bushfire, animal husbandry, urbanization and building construction related to the KNS mining project. Animal invasive species constitute a threat for natural regeneration (consumption of fruits by rats). Rusa Deer, now perfectly adapted to New Caledonian habitats, are affecting native plants directly (killing plants by eating bark and seedlings) and indirectly (through habitat degradation). According to the scientific community, dry forest represent only 1% of its original size in New Caledonia.

## Conservation Actions (see Appendix for additional information)

Protected by legislation in Province Nord and Province Sud, *Pittosporum gatopense* is monitored by Conservatoire des Espaces Naturels on fenced Népouiri area. A plot, called "zone Jaffré", has been fenced at the initiative of KNS. Field surveys are required at the Moindou locality to confirm if plants still survive here. In order to ensure longevity for this species, wildlife corridors should be maintained between subpopulations to avoid fragmentation. *In situ* reintroduction associated with monitoring is recommended to stop population decline.

## Credits

**Assessor(s):** Gemmill, C., Veillon, J.-M., Amice, R., Cazé, H., Dumontet, V., Fleurot, D., Garnier, D., Gâteblé, G., Letocart, I., Letocart, D., Maggia, L. & Pain, A.

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

**Contributor(s):** Hequet, V.

**Facilitators(s) and Compiler(s):** Chanfreau, S.

## Bibliography

Bouchet, P., Jaffré, T. and Veillon J.-M. 1995. Plant extinction in New Caledonia: protection of sclerophyll forest urgently needed. *Biodiversity & Conservation* 4: 415-428.

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

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

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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 -> 1.5. Forest - Subtropical/Tropical Dry	-	Suitable	-

## Threats

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

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.3. Indirect species effects -> 2.3.7. Reduced reproductive success		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Unspecified Rattus)	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.3. Indirect species effects -> 2.3.7. Reduced reproductive success		
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. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance 2. Species Stresses -> 2.3. Indirect species effects -> 2.3.7. Reduced reproductive success		

## Conservation Actions in Place

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

<b>Conservation Actions in Place</b>
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 benignly: No
Subject to ex-situ conservation: No

## Conservation Actions Needed

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

<b>Conservation Actions Needed</b>
1. Land/water protection -> 1.1. Site/area protection
3. Species management -> 3.3. Species re-introduction -> 3.3.1. Reintroduction

## Research Needed

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

<b>Research Needed</b>
1. Research -> 1.2. Population size, distribution & trends
3. Monitoring -> 3.1. Population trends

## Additional Data Fields

<b>Distribution</b>
Estimated area of occupancy (AOO) (km <sup>2</sup> ): 80
Continuing decline in area of occupancy (AOO): No
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 757
Continuing decline in extent of occurrence (EOO): No
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 3
Continuing decline in number of locations: No
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 1

<b>Distribution</b>
Upper elevation limit (m): 100
<b>Population</b>
Number of mature individuals: 50-249
Continuing decline of mature individuals: Yes
Extreme fluctuations: No
Population severely fragmented: Yes
No. of subpopulations: 7
Extreme fluctuations in subpopulations: No
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 0



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