



WWF New Caledonia

# **Conservation of New Caledonian flora: when Science optimizes decision and action...**

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Workshop « Conservation of floristic  
diversity in New Caledonia », IAC-UNC-IRD

## PLAN:

### Introduction

**1) Supporting research and acting to conserve NC Flora**

**2) Research and Conservation : observations & propositions**

### Conclusion

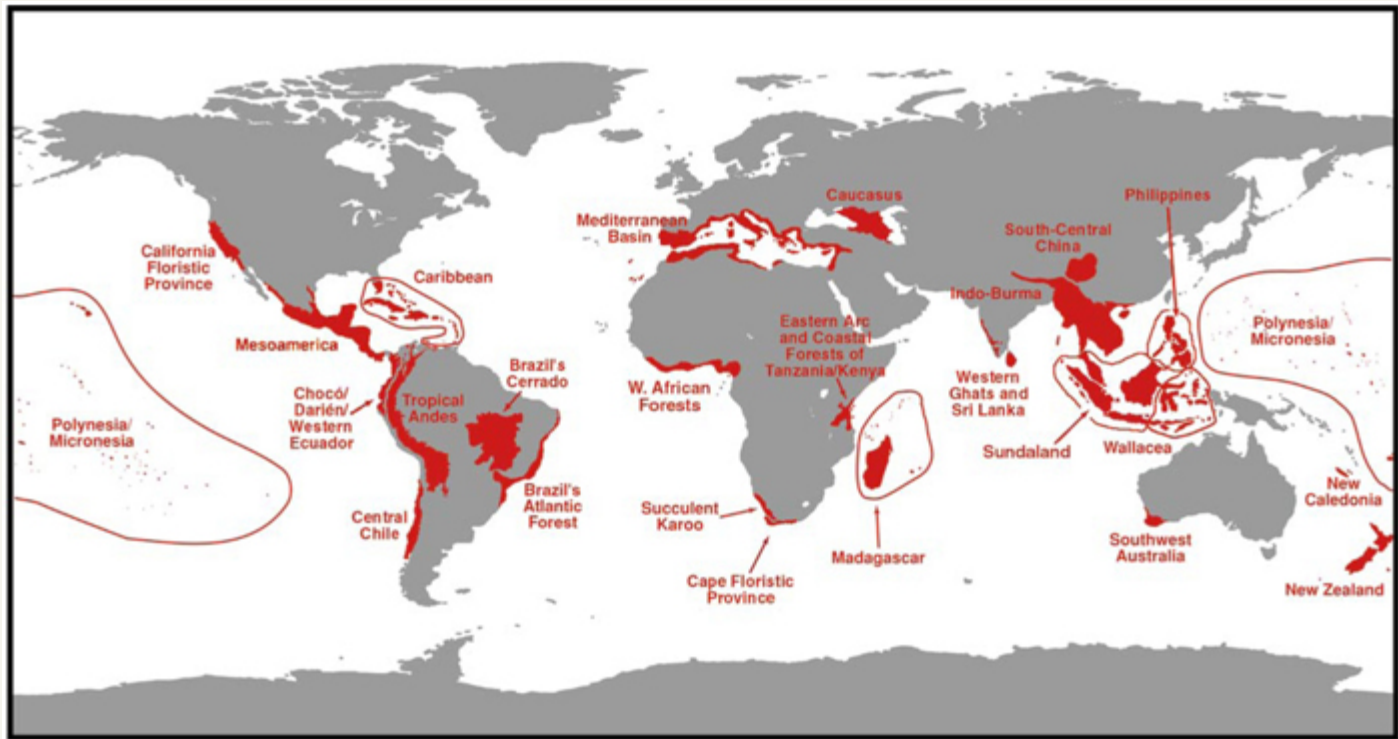


# Conservation of New Caledonian flora: when Science optimizes decision & action...

# 1

## Introduction

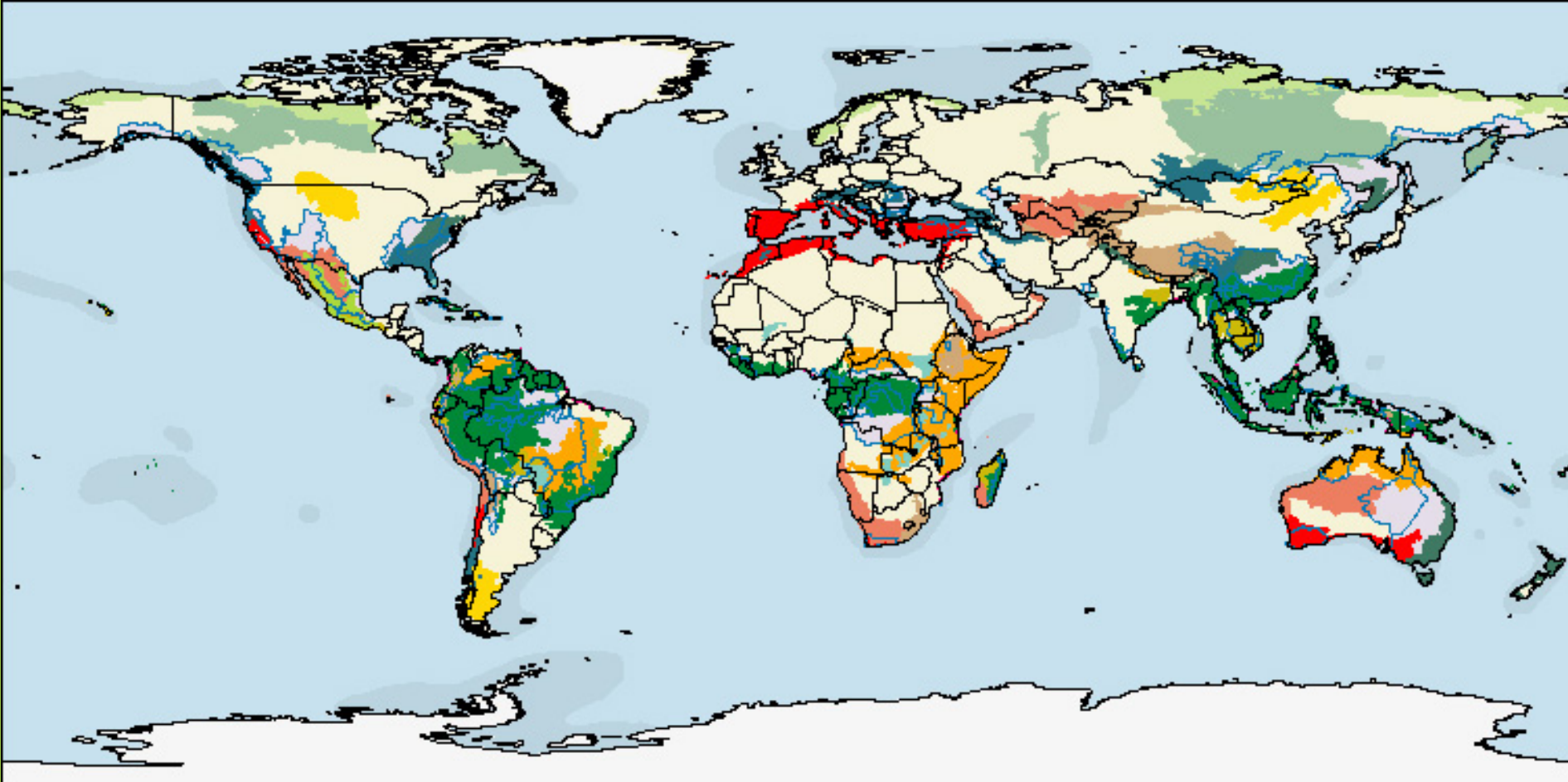
## Involvement of WWF in NC for 15 years, why ?



**NC= 1 of the 24 Hotspot of the planet (Myers, 1988)**



## Involvement of WWF in NC for 15 years, why ?



## Involvement of WWF in NC for 15 years, why ?



**4 of the 238 priority  
ecoregions of the planet  
(Global 200)**

1. Dry forests
2. Moist forests
3. Freshwater ecosystems
4. Coral reefs







# Conservation of New Caledonian flora: when Science optimizes decision & action...

## 2 Supporting research & acting to conserve NC flora





## Supporting research to conserve flora

### Financial support for flora conservation within DFCP

- monitoring & multiplication of rare species;
- fencing of priority sites;
- invasive species control (deers, weeds);
- horticultural enhancement
- mastering of native species production

### Support to scientists in the field

- Ex.: in INC project: botanical inventory, mapping edge dynamics, fire sociology, etc.



*Captaincookia margaretae*, Dry forest



# Acting to conserve flora

## Fire fighting

- **Actions** in Montagne des Sources, Vallée de la Comboui etc. on priority sites for flora conservation;
- **People mobilization** for a better fire management.



## Forest restoration

- **Collaboration** with local authorities, tribes and other partners
- Identification of **priority sites**: Nouméa's dry forests, Aoupinié moist forests, etc.
- **Securization of threatened species**: *Pittosporum tanianum*, *Phyllanthus conjugatus* var. *ducoensis*, *Emmenosperma pancherianum*, etc.);
- **Selection and production** of structural & pioneer sp.



## Lobbying to conserve flora

### Issues:

- Mapping conservation stakes for ultramafic substrate vegetation and a better taking into account of it in the NC Mining Scheme;
- Implementing NC fire action plan;
- Integrating dry forest conservation in urban plan (landscape approach)
- Control & management of invasive species + their eviction in development projects for the benefit of native species



SLN



Lavaka on ultramafic substrate, Mont-Dore



Ultramafic substrate rainforest, Yaté



# Conservation of New Caledonian flora: when Science optimizes decision & action...

## 3 Research and Conservation : observations and propositions

## Reminder: Main threats

- Fire
- Mining
- Biological invasion (competition, predation)  
facilitated by fire & mining
- Urbanization (focus on dry forest & mangroves)
- Traffic (ex: *Callitris sulcata* à Thio)
- Climate change





# PROBLEMATIC FRAMEWORK

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CONSERVATION

RESTORATION

VALORIZATION

?

?

?

KNOWLEDGE - UNDERSTANDING

?

?

?

ACCES & MAXIMIZED MOBILIZATION OF THE RESEARCH  
INPUTS

## Observations

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Research studies & results allow:

- mobilizing authorities and people to save dry forest
- setting up Invasive Species Group (GEE)
- Demonstration of the unadaptated protected areas network to ensure the conservation of the threatened flora (Jaffré 1998)
- Priorization of the conservation efforts in dry forest species list (Redlist reviewing)
- Identifying global threats, issues and urgences for NC flora conservation

## Expectancies

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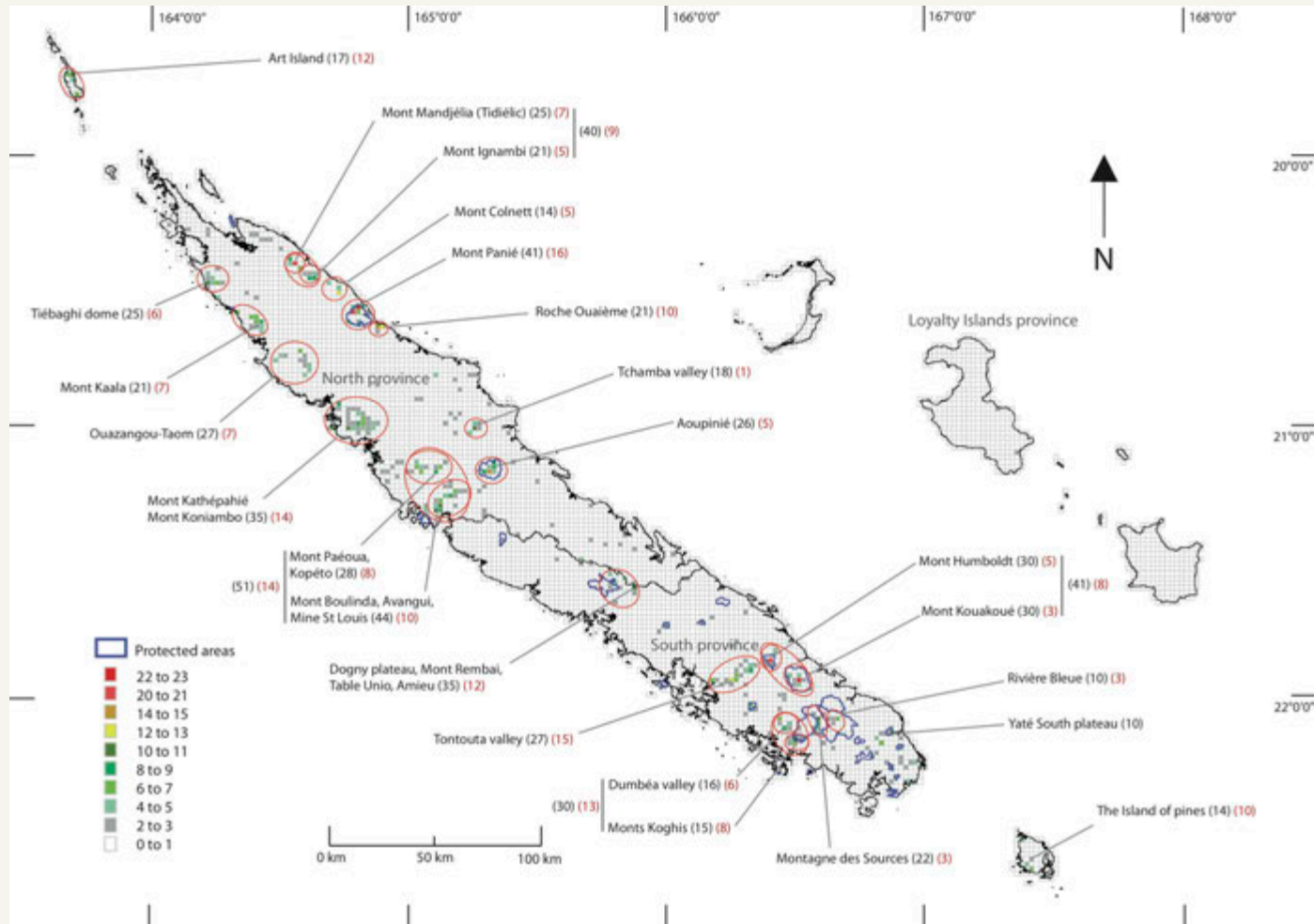
- development of decision-tools as mapping inventory of conservation stakes for ultramafic substrate formations
- research on ecology & natural regeneration mechanisms of forests
- research & sustainable development to optimize economic valorization of NC forest (forestry, horticulture, etc.) i.e its environmental services



## Ex 1: New Caledonia dry forest map (DFCP/DTSI)



## Ex 2. : Micro-endemism map (A.Wulff et al, in prep)



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## Propositions

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- **Ensuring communication / transmission of scientific information** (publication) to all stakeholders of NC flora conservation
- Providing scientific input « **according to experts** » to make more consistent the time to research with the time of understanding, decision and action
- More daring the couple "**research & action**" by developing monitoring protocols on the field action projects (restoration, invasive species control, etc.)
- More daring **Participatory Science** to leverage the effort of collecting data via public networks including NGOs (Plant'Net, SMNC, etc)



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## 5 Conclusion



## Conclusion

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ACT

TOGETHER

NOW

HERE



# Thank you for your attention



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