Myrtle rust in New-Caledonia

Elodie Nakamura,

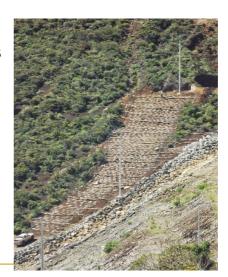
Department of Veterinary, Food and Rural Affairs of New Caledonia-July 2013

Myrtaceae in New-Caledonia

- 255 indigenous species
- 254 among them are native (endemic) species
 98,8% endemism
- Social importance
- Biodiversity conservation
- Botany : some myrtaceae species are still undescribed
- Some NC myrtaceae specialists are Australians researchers : Peter G Wilson

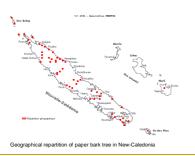
Myrtaceae in New-Caledonia

- Economic importance is increasing
 - Revegetation of disturbed mining sites
 - Ornamental plants
 - Essential oils potential importance



Myrtaceae in New-Caledonia

- Melaleuca quinquenervia
 - Social importance
 - □ Economic importance : honey and essential oil





About 395 nurseries in New-Caledonia 10% are producing endemic plants In North Province, 160 registrated nurseries Numerous but really little nursery Only 1 or 2 Myrtaceae (species name are not knowed)

Nursery industry

- Importation
 - Import conditions have changed
 - Only 3 nurseries have imported Myrtaceae
- More and more species are used in landscaping, gardens
 - e.g. Sannantha, Syzygium, Metrosideros, Eugenia, Myrtastrum,
 « Piliocalyx s.s.»
- Myrtaceae are mostly produced by revegetation nurseries

Mining revegetation

- Since 1971: 1 million plants on 390 ha
- 2012
 - 95 800 plants on 19 ha
 - Hydroseedling on 40 ha
- 40 different species
 - □ 15% of species are Myrtaceae
 - □ 30% of number of plants are Myrtaceae





Mining revegetation

- Plants on mining sitesGood adaptation in lateritic and saprolite soils,
 - Adaption to hilly areas
 - Adaptation to climatic areas
 - Easy to produce all



- Carpolepis, Cloezia, Sannantha, Xanthostemon
- Carpolepis laurifolia
 - Interesting for mining because non eaten by deers
 - Susceptible species





History

Suspicion : 26/03

Confirmation by photo with G.Pegg: 27/03

- Sampling for lab analysis : 28/03
- Inspection in import nurseries



History

- Meetings with the President of the government
- Advisory mission of Dr
 Fiona Giblin from the 13th
 to the 17th of may
- To be continued...



Organization

- 1 Management board
- 3 then 2 Technical boards
- Selection of rare and endangered Myrtaceae species
 - Construction of a Myrtaceae data base
 - Suceptibility and severity trial on nurseries plants (project)
 - Field reports

Actions

- Training
 - Disease management in nurseries
 - Disease diagnostic

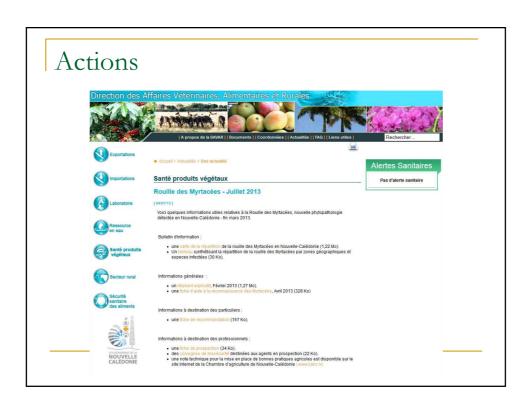




Actions

- Nurseries and Private individual guidance leaflet
- Nurseries inspection and advises
- Awareness compaign
 - Communication
 - TV
 - Radio
 - Brochures
 - Leaflet distribution in Agri fair





Synthesis table

zones	GRANDE TERRE SUD-EST					GRANDE TERRE SUD-OUEST										GRANDE TERRE NORD-EST														Г	NS		
ESPECES INFECTEES	HOUAILOU	KOUAOUA	CANALA	THIO	YATE	POYA	BOURAIL	MOINDOU	FARINO	SARRAMEA	LA FOA	BOULOUPARI	PAITA	DUMBEA	NOUMEA	MONT-DORE	PONERIHOUEN	POINDIMIE	TOUHO	HIENGHENE	POUEBO	OUEGOA	POUEMBOUT	KONE	ЛОН	KAALA GOMEN	KOUMAC	MUOA	BELEP	LIFOU	MARE	OUVEA	ILES DES PINS
Syzygium jambos	EN						EN		EN	EN							EN	EN		EN													
Syzygium wagapenses	Г				Р	Г	Γ																							Г		Г	
Carpolepis laurifolia	Г				Г	Г	Г					Г	Р	Г			Г							P		Г				Г	Г	Г	П
Melaleuca quinquenervia	Г					Г	Г										EN													Г		Г	
Cloezia sp.	Г	Г				Г																		Р									
Metrosideros sp.	Г					Г	Г										Г							P						Г	Г	Г	П
Uromyrthus sp.	Г				Г	Г	Г					Г		Г			Г							P						Г	Г	Г	П
Arillastrum sp.	Г					Г																		Р									
Eugenia gacognei	Г					Г																									EN		
Eugenia sp.	Г					ΕN																											
Myrtacée non identifiée						EN	EN		Р									EN															

Curent status of myrtle rust in NC

- Host species
 - □ 16 species (sure) and 21 different species (not sure)
 - Botanical identification difficulties
- Host genera : 9 generas
- Total n° of cases : 35 cases
- No of localisations : 31 locations







