


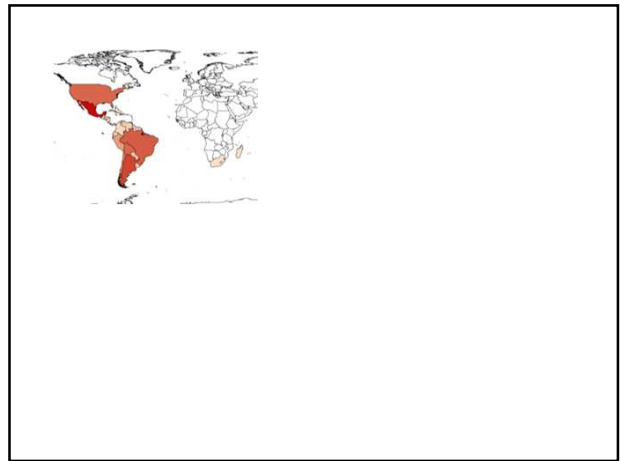
**C·I·B**  
2011 NRF Centre of Excellence for Invasion Biology

## USES AND RISKS OF CACTI: A PRICKLY SITUATION

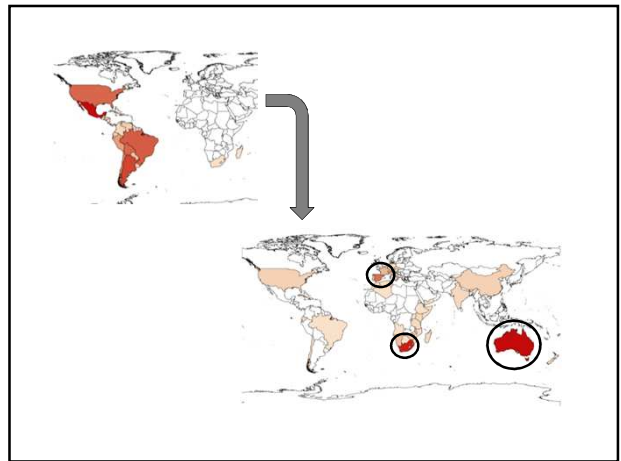

Dr Ana Novoa  
anan@sun.ac.za



www.sun.ac.za/cib/ International Cactus Pear Workshop



**POSITIVE IMPACTS OF CACTUS SPECIES**



**NEGATIVE IMPACTS OF CACTUS SPECIES**



**MANAGEMENT**

**CACTUS MANAGEMENT STRATEGY**

**CONTROL** (mechanical, chemical, biological, integrated...)

CONTROL (mechanical, chemical, biological, integrated...)  
 EARLY DETECTION

CONTROL (mechanical, chemical, biological, integrated...)  
 EARLY DETECTION  
 PREVENTION

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 EARLY DETECTION  
 PREVENTION

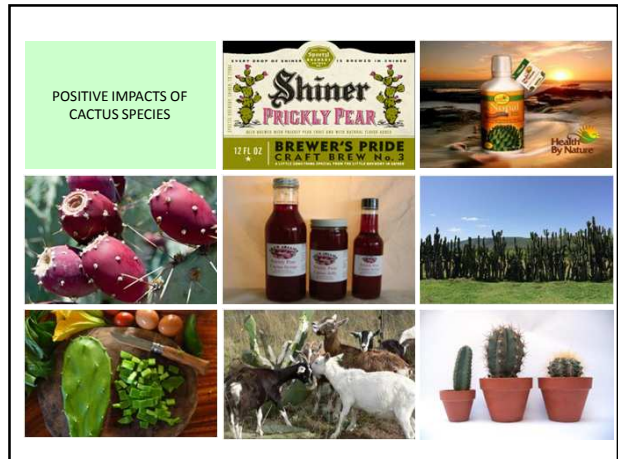
PREVENTION

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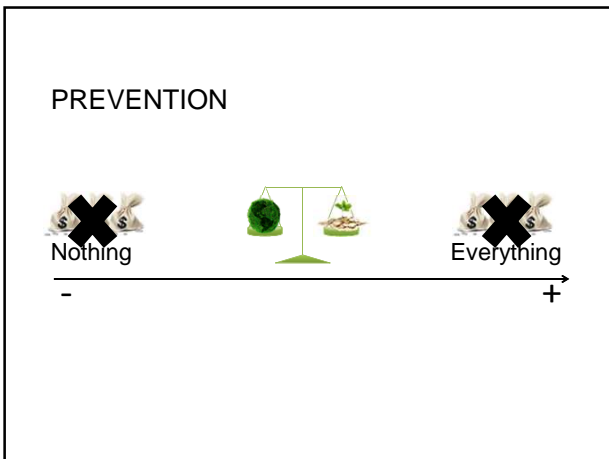
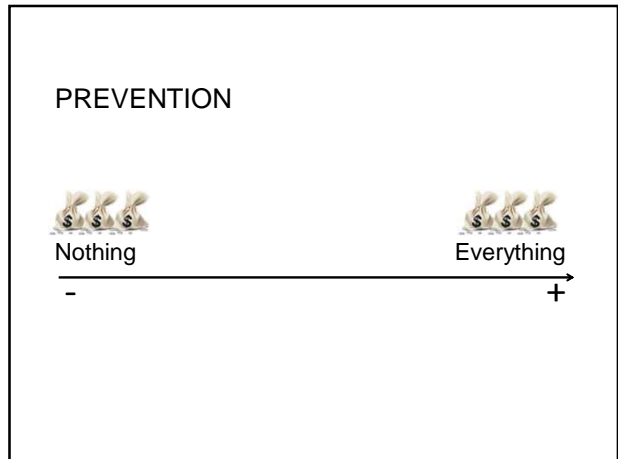
Regulation	APA 1911	CARA 1983	CARA 2001
Number of species	<i>Opuntia sp.</i>	14	14

PREVENTION

Nothing

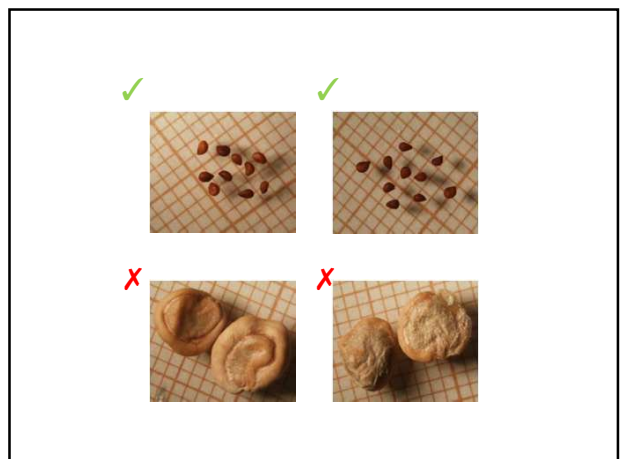
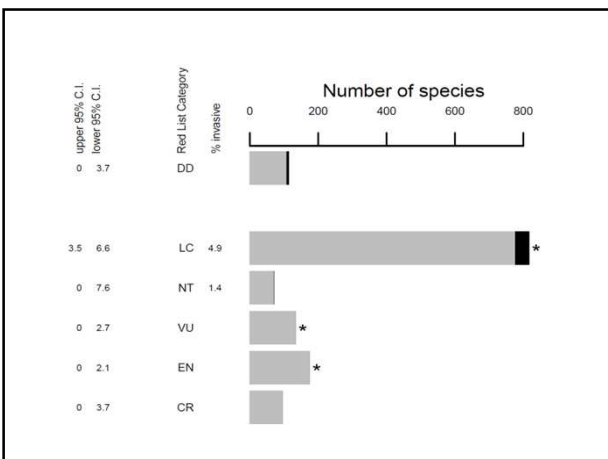
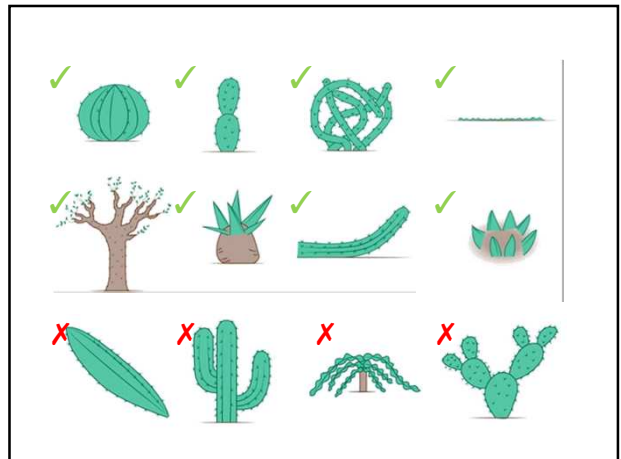
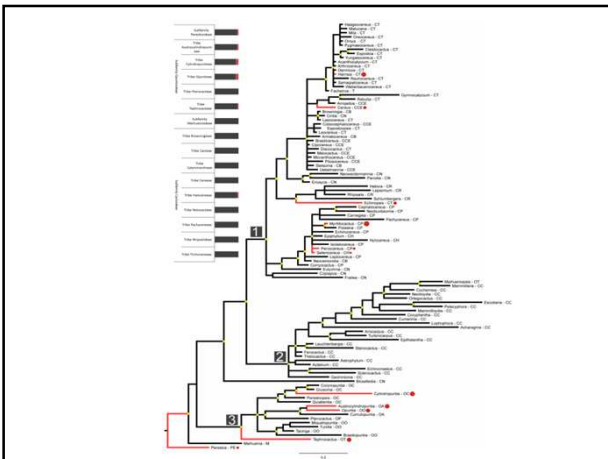
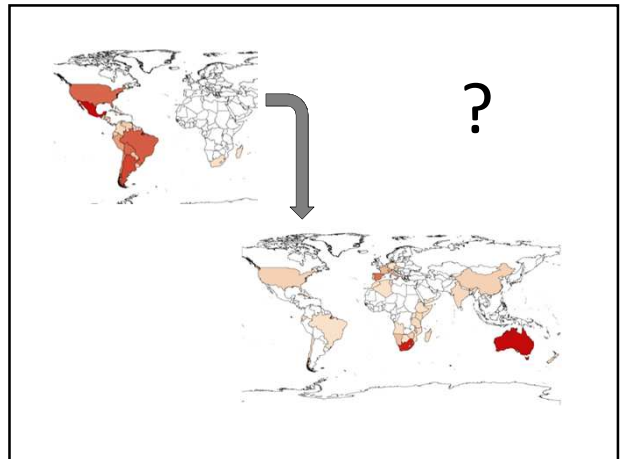


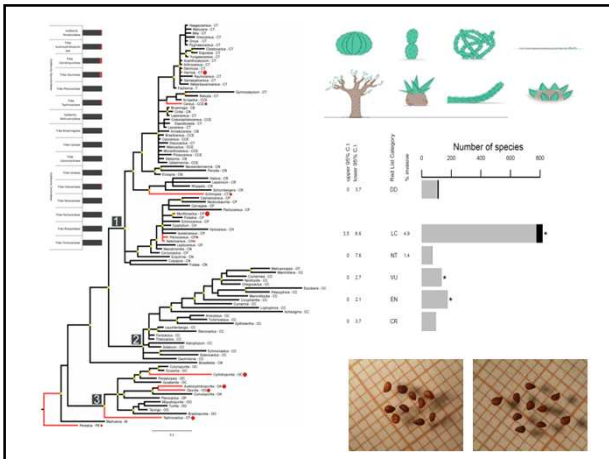
Regulation	APA 1911	CARA 1983	CARA 2001	NEMBA 2014
Number of species	<i>Opuntia sp.</i>	14	14	1919



1. REVIEW GROUP
2. DEVELOP APPROACHES TO REGULATE THE GROUP
1. DISCUSS THE OPTIONS WITH STAKEHOLDERS
1. PRESENT RECOMMENDATIONS TO POLICY MAKERS

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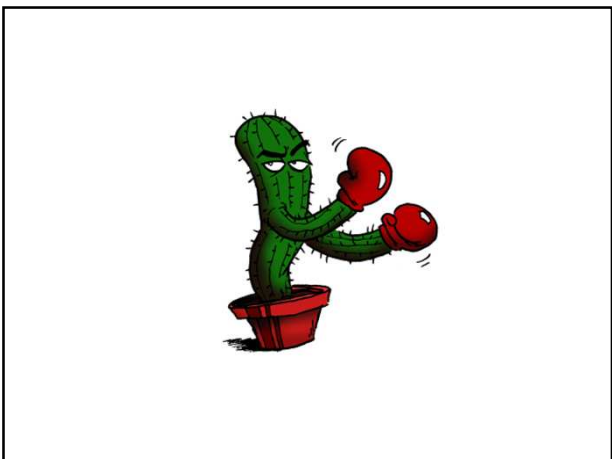


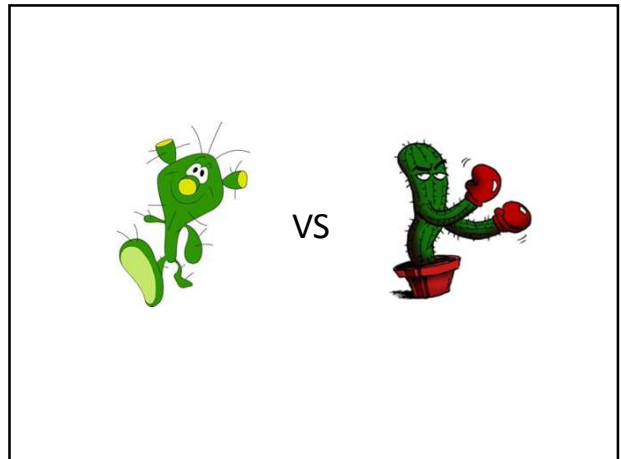
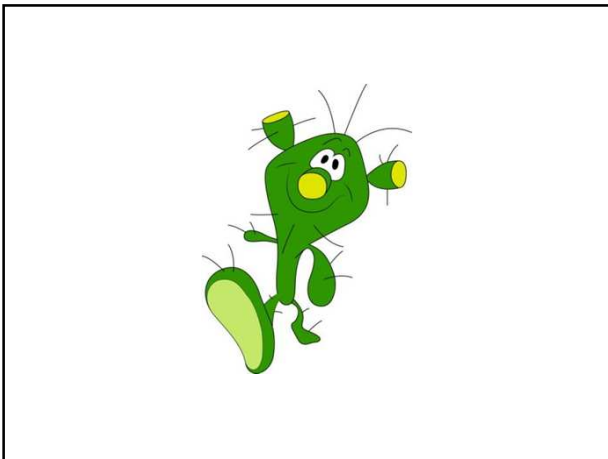
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Approach	Number of species on the Invasive list	Number of species on the Prohibited list	Number of non listed species

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	35		
	35		
	35		
	35		
	35		
	35		
	35		

Approach	Number of species on the Invasive list	Number of species on the Prohibited list	Number of non listed species
1. Currently invasive in the country	35	0	1884
2. Invasive anywhere in the world	35	23	1861
3. Invasive anywhere + climatically suitability	35	0-23	1861-1884
4. Any genera that contain invasive species	35	503	1381
5. Any growth form that contain invasive species	35	977	907
6. Any species with seed characteristics associated with invasiveness	35	?	<1884
7. Whole family banned	35	1884	0





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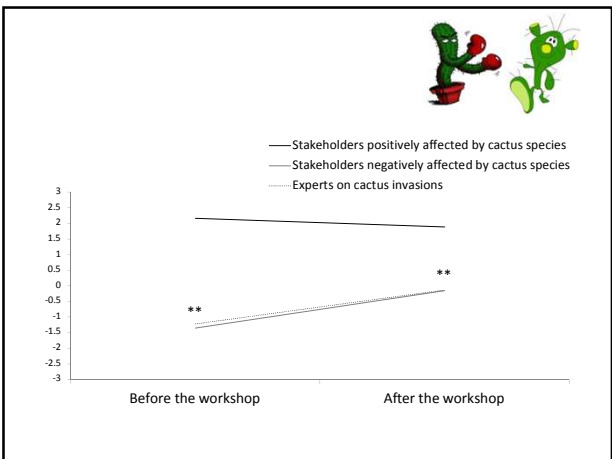
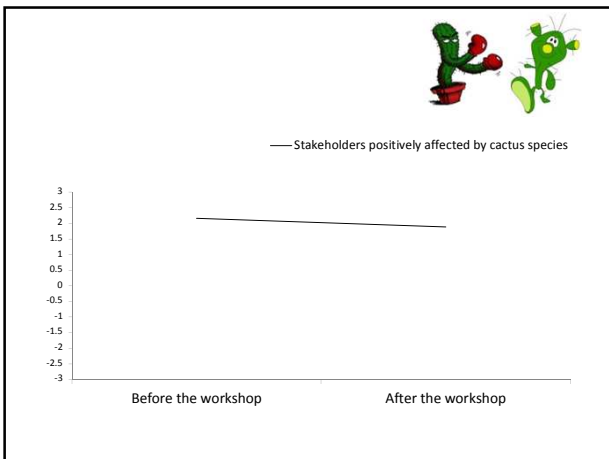
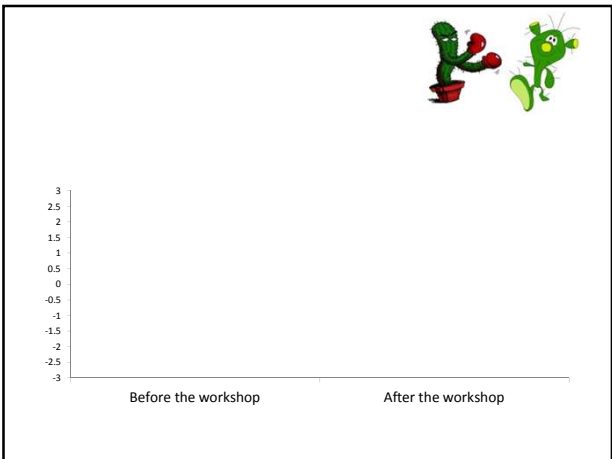
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Number of species	<i>Opuntia sp.</i>	14	14	1919	313

**INTEGRATE "SCIENCE" AND "COLLABORATION WITH STAKEHOLDERS" INTO POLICY**






Stakeholders' mentioned limitations for cactus management on South Africa.

	Stakeholders positively affected by cactus species	Stakeholders negatively affected by cactus species	Experts on Invasion Biology
Funding	x	x	x
No enough stakeholders' involvement	x	x	x
Lack of information (specially on impacts)	x	x	x
Lack of interest		x	x
Lack of support from the government	x		x
Taxonomic difficulties	x		x
Inadequate coordination of management efforts	x		x
Lack of registered herbicides		x	x
Safety of workers (spines and native wildlife)		x	x
Taxonomic difficulties	x		x

CACTUS  
MANAGEMENT  
STRATEGY



20-24 September 2015  
Hawaii  
<http://www.emapi2015.hawaii-conference.com>

**anan@sun.ac.za**




**QUESTIONS...?**

**Thank you!**

David M Richardson    Cactus Working Group  
John RU Wilson  
Jaco J Le Roux  
Haylee Kaplan



