

# 10<sup>th</sup> World Bamboo Congress, Korea

## September 2015

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# Considerations for a more responsible dissemination of alien bamboos

Susan Canavan<sup>1,2</sup>

Prof. John R. Wilson<sup>1,2</sup>

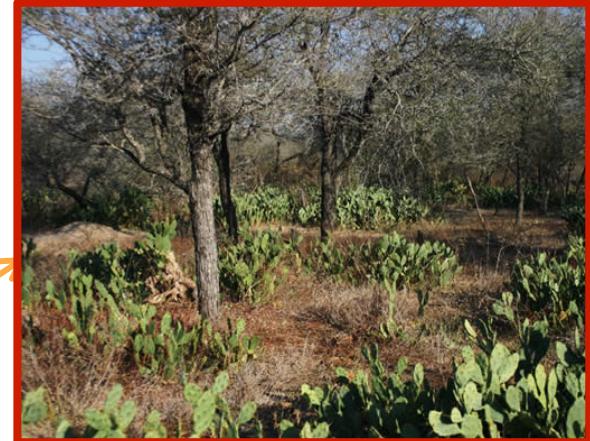
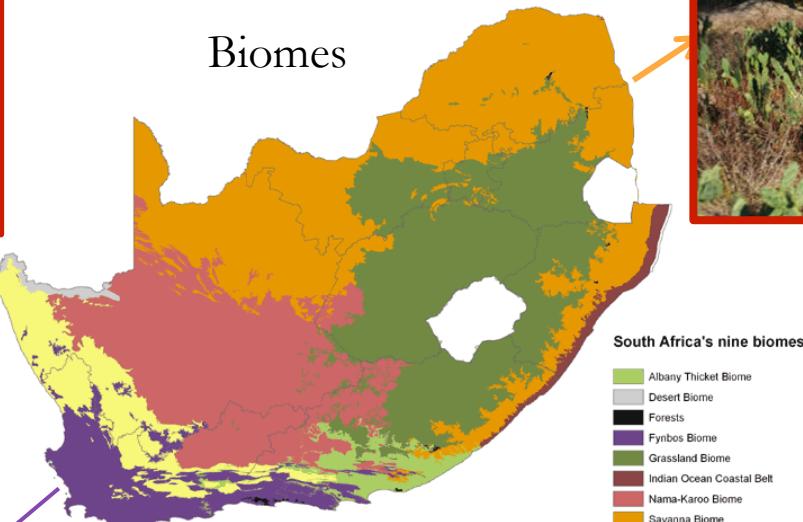
Prof. David M. Richardson<sup>2</sup>

<sup>1</sup>*Centre for Invasion Biology, Department of Botany and Zoology, Stellenbosch University, Matieland 7602, South Africa*

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# Biological invasions: South Africa

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# Biological invasions

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## **Invasive plants** (Richardson *et al.*, 2011) :

“Naturalized plants that produce reproductive offspring, often in very large numbers, at considerable distances from parent plants and thus have the potential to spread over a considerable area.”

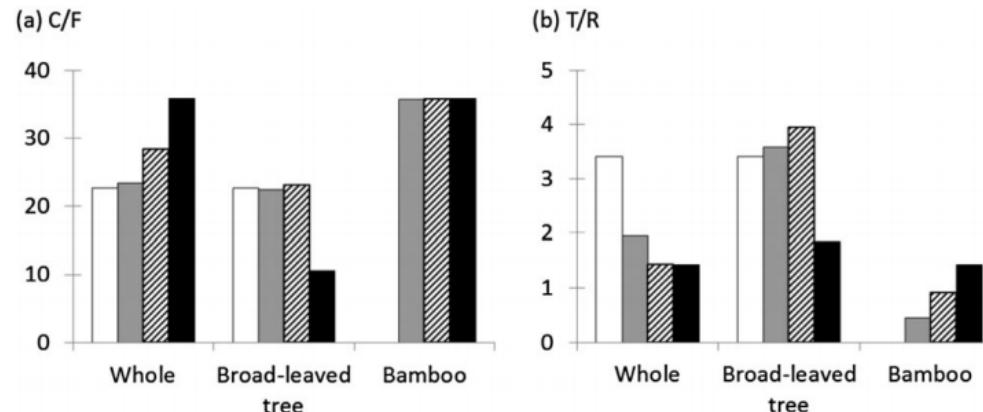
- Biological invasions widely heralded as the second greatest agent of species endangerment and extinction (Pejchar *et al.*, 2009)
- Invasions are typically the intended or unintended consequence of economic activity (Perrings 2001)

**Invasion of dwarf bamboo into alpine snow-meadows in northern Japan: pattern of expansion and impact on species diversity**

Gaku Kudo<sup>1</sup>, Yukihiko Amagai<sup>1,2</sup>, Buho Hoshino<sup>2</sup> & Masami Kaneko<sup>2</sup>



## SPECIAL ISSUE

**Impacts of moso bamboo (*Phyllostachys pubescens*) invasion on dry matter and carbon and nitrogen stocks in a broad-leaved secondary forest located in Kyoto, western Japan**KEITARO FUKUSHIMA,<sup>1,\*</sup> NOBUAKI USUI,<sup>†</sup> RYO OGAWA<sup>2,†</sup> and NAOKO TOKUCHI<sup>\*</sup><sup>\*</sup>Field Science Education and Research Center, and <sup>†</sup>Graduate School of Agriculture, Kyoto University, Kyoto, Japan

**Fig. 5** (a) Ratios of non-photosynthetic organ to photosynthetic organ dry weights (C/F); (b) ratios of aerial organ to root dry weights (T/R) for whole plants, broad-leaved trees, and *P. pubescens*. □, SF; ■, MF1; ▨, MF2; ▨, BF.

## **Non-indigenous bamboo along headwater streams of the Luquillo Mountains, Puerto Rico: leaf fall, aquatic leaf decay and patterns of invasion**

PAUL J. O'CONNOR<sup>\*1</sup>, ALAN P. COVICH<sup>\*</sup>, F. N. SCATENA<sup>†</sup> and  
LLOYD L. LOOPE<sup>‡</sup>



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*Chinese Journal of Plant Ecology*

## **Ecological studies on bamboo expansion: process, consequence and mechanism**

YANG Qing-Pei, YANG Guang-Yao<sup>\*</sup>, SONG Qing-Ni, SHI Jian-Min,  
OUYANG Ming, QI Hong-Yan, and FANG Xiang-Min

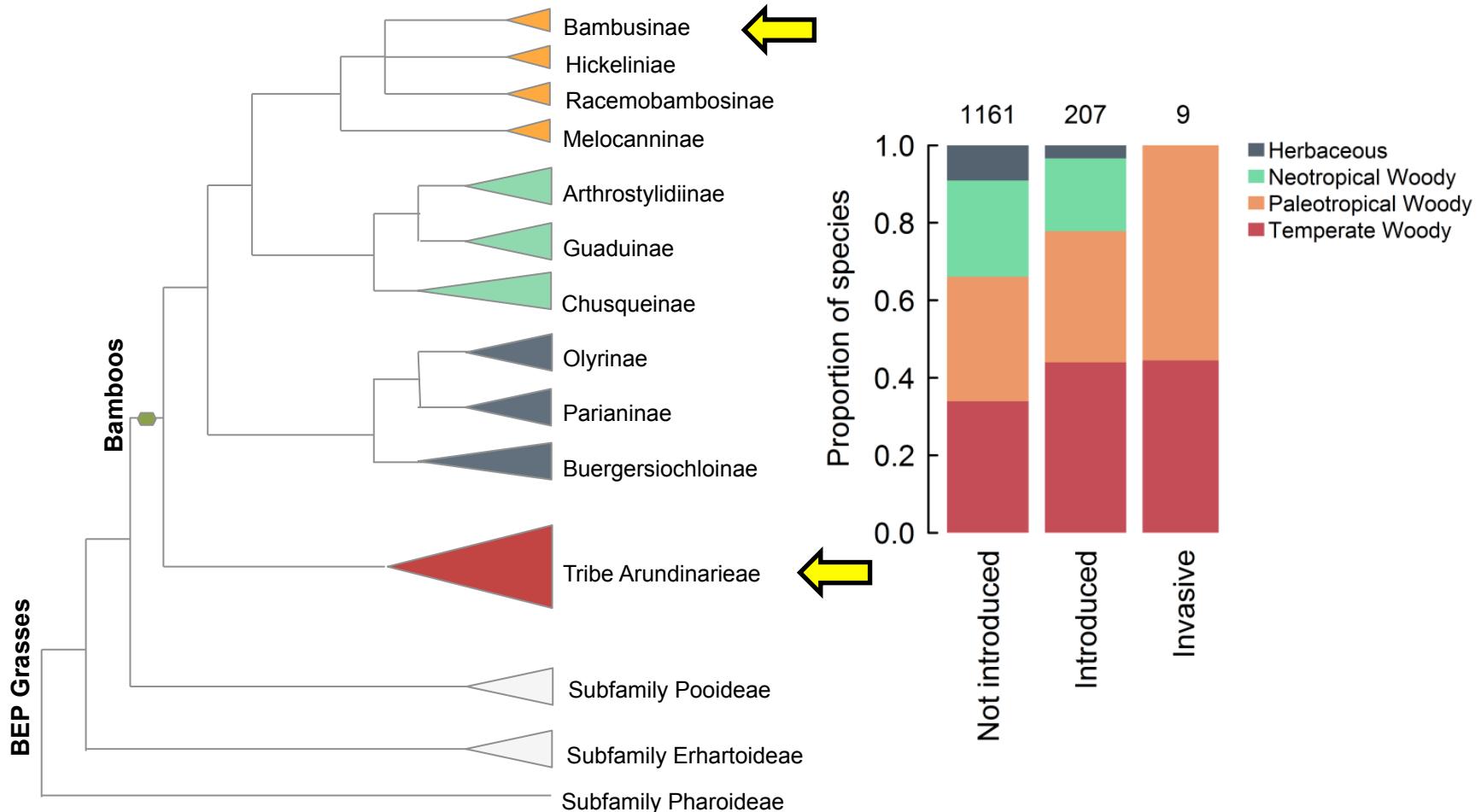


# The global dissemination of bamboo

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# The global dissemination of bamboo: Phylogenetic signal?



# The global dissemination of bamboo: Who's winning the popularity contest?

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# The global dissemination of bamboo: Who's winning the popularity contest?

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	Cultivars (%)	Varieties (%)
<b>Not introduced</b> (n=1437)	13 (9%)	30 (41.7%)
<b>Introduced</b> (n=223)	131 (90.9%)	42 (58.4%)
<b>Invasive</b> (n=13)	70 (48.6%)	5 (6.9%)
<b>All species</b> (n=1673)	144	72

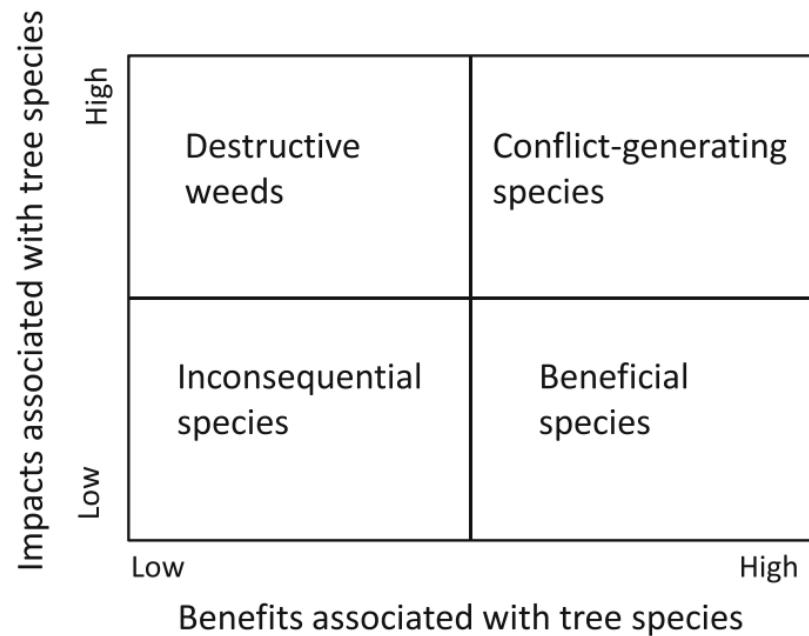
# Biological invasions & industry

Biol Invasions (2014) 16:721–734  
DOI 10.1007/s10530-013-0615-8

ORIGINAL PAPER

## Challenges and trade-offs in the management of invasive alien trees

Brian W. van Wilgen · David M. Richardson



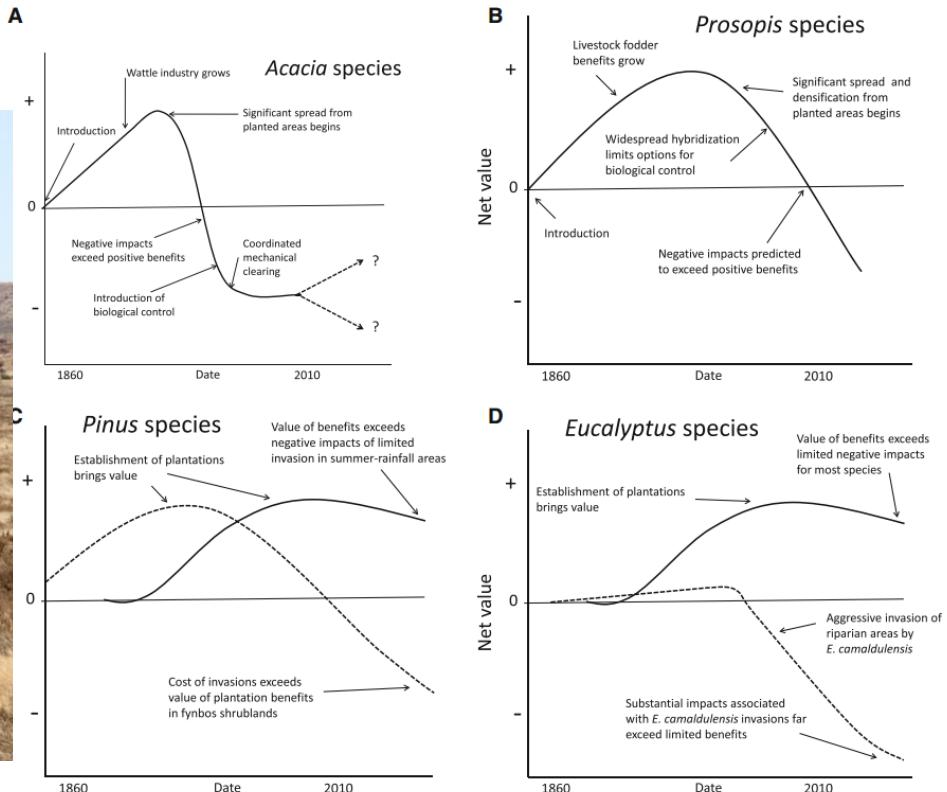
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# Alien Bamboos: a threat or opportunity?

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If you are interested in this research, have some input, comments  
please get in contact!

Thank you all

**Susan Canavan**  
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# References

**Fukushima, K., Usui, N., Ogawa, R. & N. Tokuchi.** Impacts of moso bamboo (*Phyllostachys pubescens*) invasion on dry matter and carbon and nitrogen stocks in a broad-leaved secondary forest located in Kyoto, western Japan. *Plant Species Biology*. **30** (2): 81-95.

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