



The impact of heavy exploitation of invasive alien plant species on their management and control in Nigeria

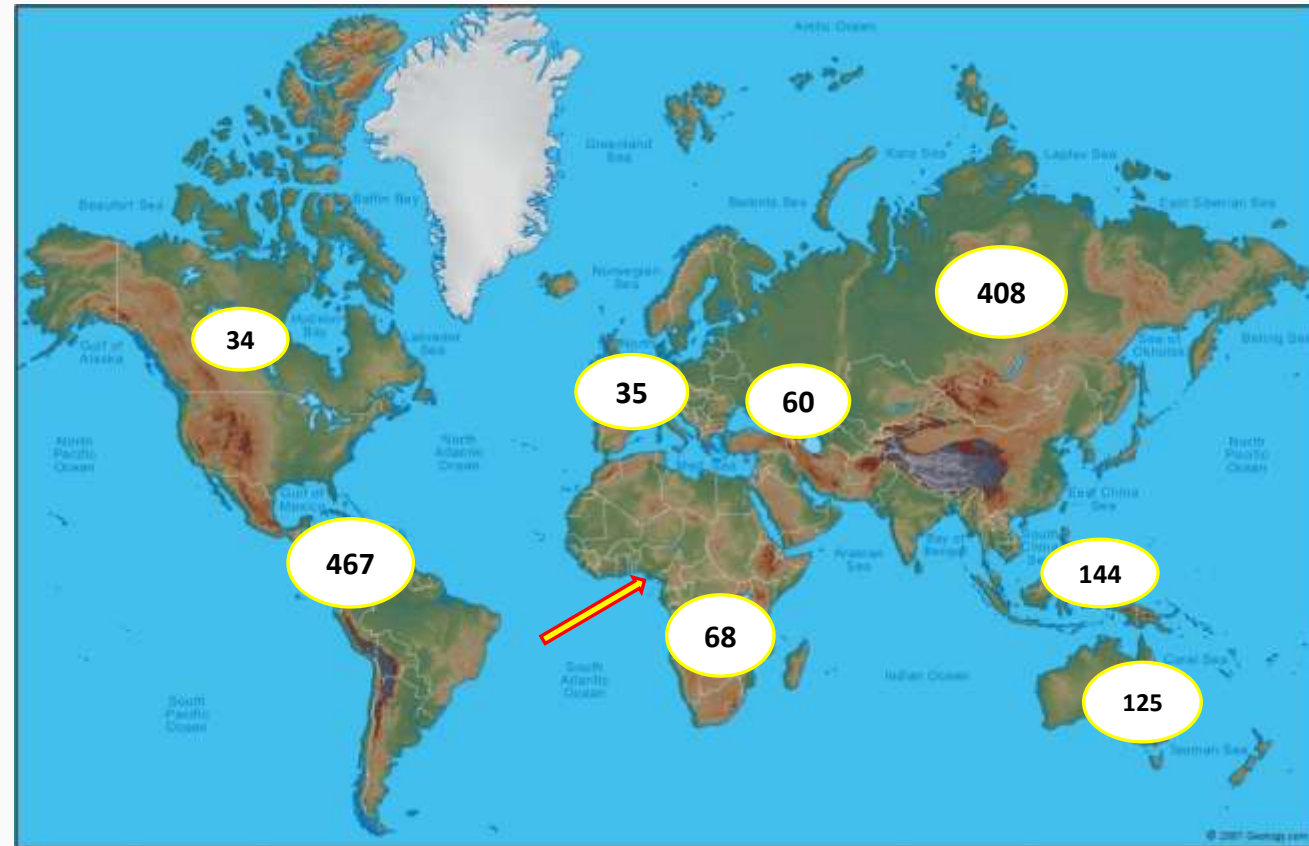
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Sweepstake dispersal of species

About 1500 plant species have been introduced to Nigeria for:

- ❖ Food
- ❖ Ornamental/horticulture
- ❖ Accidental – crossed the sea or mixed with other plants
- ❖ Forestry
- ❖ Trade and exchanges



Exotics turned invasives



Chromolaena odorata



Lantana camara



Eichhornia crassipes



Nypa fruticans



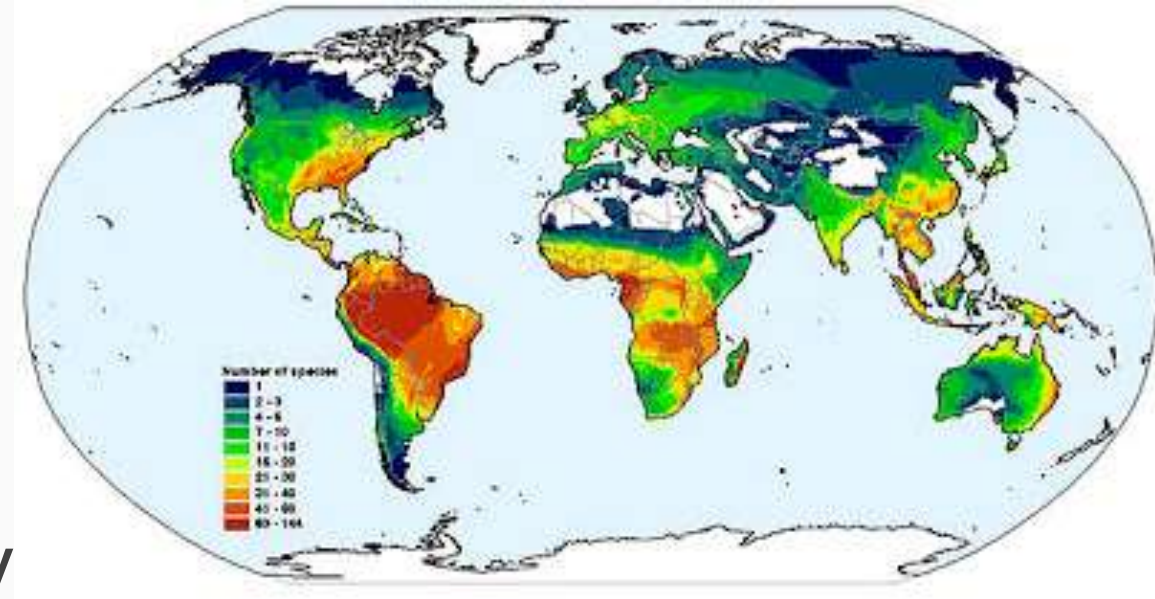
Tithonia diversifolia



Typha australis

Invasibility of tropical ecosystems

- ❑ Niche/habitat heterogeneity
- ❑ Climate stability
- ❑ Competitive ability of invasive species
- ❑ Human-assisted migration
- ❑ Metabolic theory of ecology
 - ❖ Increased net primary productivity



Control efforts on invasive species in Nigeria

- Chemical control
- Mechanical control
- Cultural control
- Biological control



Harvesting pressure (“economic control”)

Communities heavily exploit resources from the invasive plants

- ❖ Community-based projects
- ❖ Reduces propagules from the invasives
 - Reduces dispersal and colonization
- ❖ Provides incentives for harvesters

Recommended when other methods:

- ❖ Fail to control invasive weeds
- ❖ Are detrimental to the environment
- ❖ Are expensive to maintain

Economic potentials of invasive plants

- Charcoal – *Prosopis juliflora*, *Leucaena leucocephala*, *Typha australis*
- Biogas – *Chromolaena odorata*, *Eichhornia crassipes*
- Ethnomedicine – *C. odorata*, *Tithonia diversifolia*
- Livestock feed – *L. leucocephala*, *T. diversifolia*
- Local products – *Nypha fruticans*, *Lantana camara*
- Fertilizer – *E. crassipes*

Borokini and Babalola 2012, *Management of Biological Invasions*

Success stories on land restoration



Women removing uprooted *P. juliflora* stumps from invaded lands in the Afar Region, Ethiopia.



Charcoal Making – Additional livelihoods during lean agriculture season



20 to 25% charcoal production from 100 kgs of Prosopis Juliflora

Market retail value @ Rs. 14 per KG



Photo credits: Dr. Nakka, Wakie et al. 2012, IITA

For questions and further discussions:

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