

Invasive Alien Plant Species



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Dhún na nGall**
Donegal County Council

What are IAPS

“Species introduced outside their natural range whose presence and/or spread threatens biological diversity, the environment, ecosystem services, the economy and human health”

The EC has recognised IAPS introductions as one of the main causes of natural biodiversity loss (second only to direct habitat destruction)



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Why are IAPS such a Problem?

- Non-native, no natural predators or pathogens,
- Very rapid growth and highly productive,
- Thrives in disturbed habitats and vacant sites
- Outcompete native vegetation, implication for biodiversity
- Propagate vegetatively Japanese Knotweed(JK) or produce high quantities of viable seed
- Hazardous properties
- Tenacious root systems and wide ranging dispersal mechanisms



High level economic cost

Estimated damage from IS worldwide is \$1.4 trillion or 5% global economy

Total annual cost in the European Union is > **€12 billion** (2008)

Total annual cost in Britain is > **£2.3 billion** (2013)

Total annual cost in Ireland is > **€266 million** (2013)

Highest impact species (Britain): Japanese knotweed **£166 million pa**



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Birds and Natural Habitats Regulations 2011

Plants specified include (Part 1 of the Third Schedule):

- giant hogweed (*Heracleum mantegazzianum*)
- giant knotweed (*Fallopia sachalinensis*)
- giant-rhubarb (*Gunnera tinctoria*)
- Himalayan balsam (*Impatiens glandulifera*)
- Himalayan knotweed (*Persicaria wallichii*)
- Japanese knotweed (*Fallopia japonica*)



Japanese Knotweed and related species



Japanese Knotweed

Identification of Leaves, Stem & Flower



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Himalayan Knotweed Identification



Non-Native Invasive Plants Legislation



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Birds and Natural Habitats Regulations 2011

Regulation 49

In the absence of a licence, any person who *'plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow'* any of the specified plants shall be guilty of an offence.

Regulation 50

Prohibition on dealing in and keeping certain species
Regulation 50 was due to commence in the final quarter of 2015



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Risks associated with Japanese Knotweed



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Why is Japanese Knotweed so invasive?

- Fast growing species
- Deeply penetrating woody rhizomes – 3m deep and 7m distant
- Tiny rhizome fragments (0.7gm) can produce new plant in 10 days
- Rhizomes may remain dormant (and viable) for up to 20 years
- Cut (fresh) stems produce shoots and roots from nodes when buried
- Out-competes and eliminates native vegetation in infested situations
- Causes bankside subsidence in river corridors
- Blocks sight lines and signage on roads and railways
- Grows through concrete, tarmac and other hard standing causing problems for road surfaces, pathways, walls and building foundations



Damage to Infrastructure



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How is Japanese Knotweed Spread?

- Giant female clone, spread by fragments not seeds,
- Hedge cutting and strimming are major reasons for spreading along road verges
 - Signage
 - Information leaflets
- Fragments moved on car tyres, wind, water, animals, etc.
- Construction work fragments roots
- Potential for hybridisation



Signage



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A photograph of a white sign with red and black text and images. The sign is for Japanese Knotweed. It features the Donegal County Council logo and name at the top. The main text is in both Irish and English. There are two photographs of the plant on the right side and a 'no cutting' symbol at the bottom.

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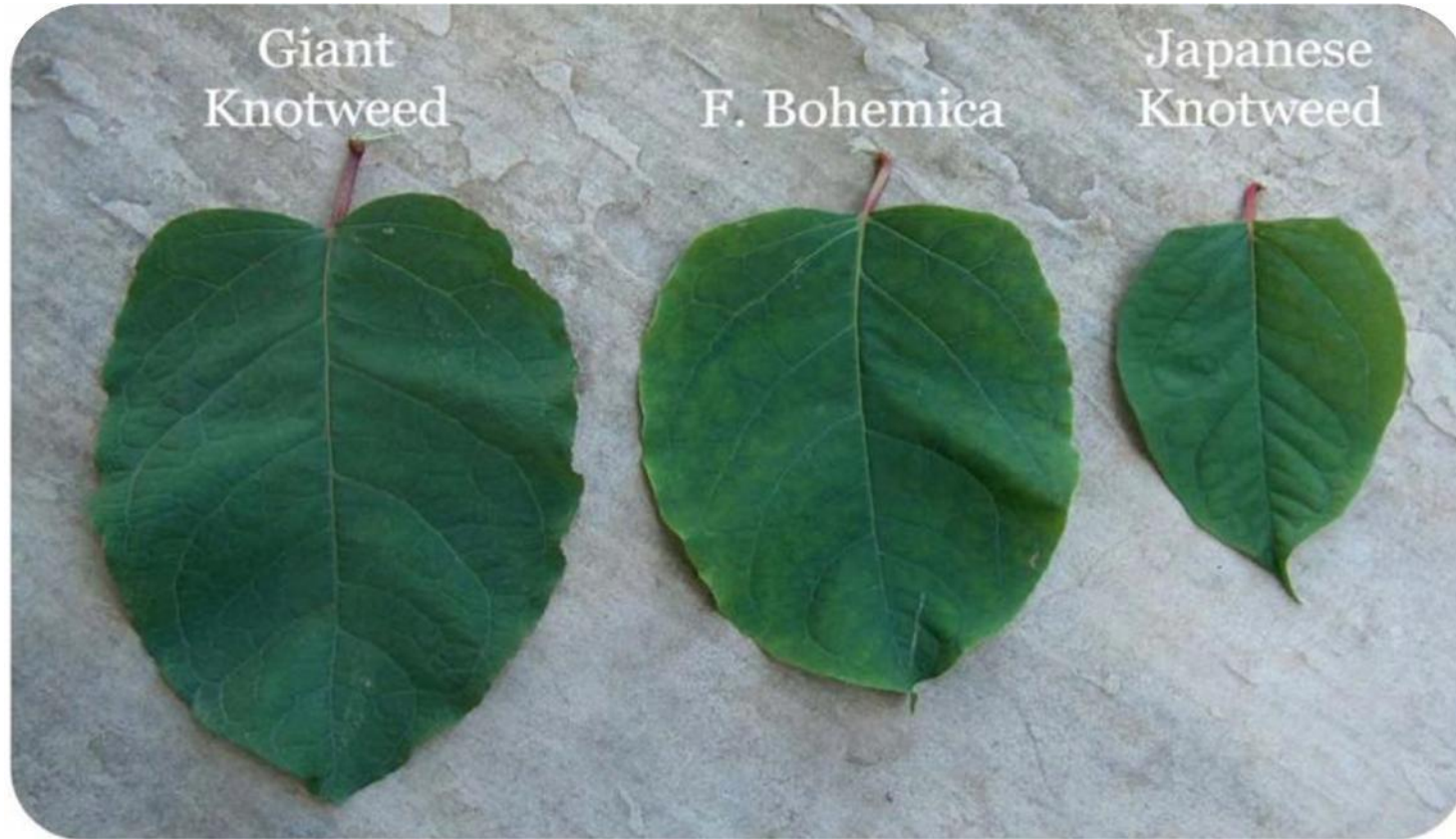
FÓGRA - NOTICE

Glúineach Bhiorach
Ná ghearr le do thoil

Japanese Knotweed
Please do not cut



Hybridisation



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