

1

metre
per month
growth





1m²

**patch on a site can result
in costs of up to £70,000**

**Control costs would
exceed £1.6 billion if
existing methods were
used to eradicate the weed**

Management strategies

Prevent



Too late

Control



Best option

Eradicate



Too Great

Chemical

Restricted by legislation
and environmental
impact

Biological

**Most cost effective,
natural and sustainable**

Mechanical

Difficult, ineffective,
destructive and costly,
can be counterproductive



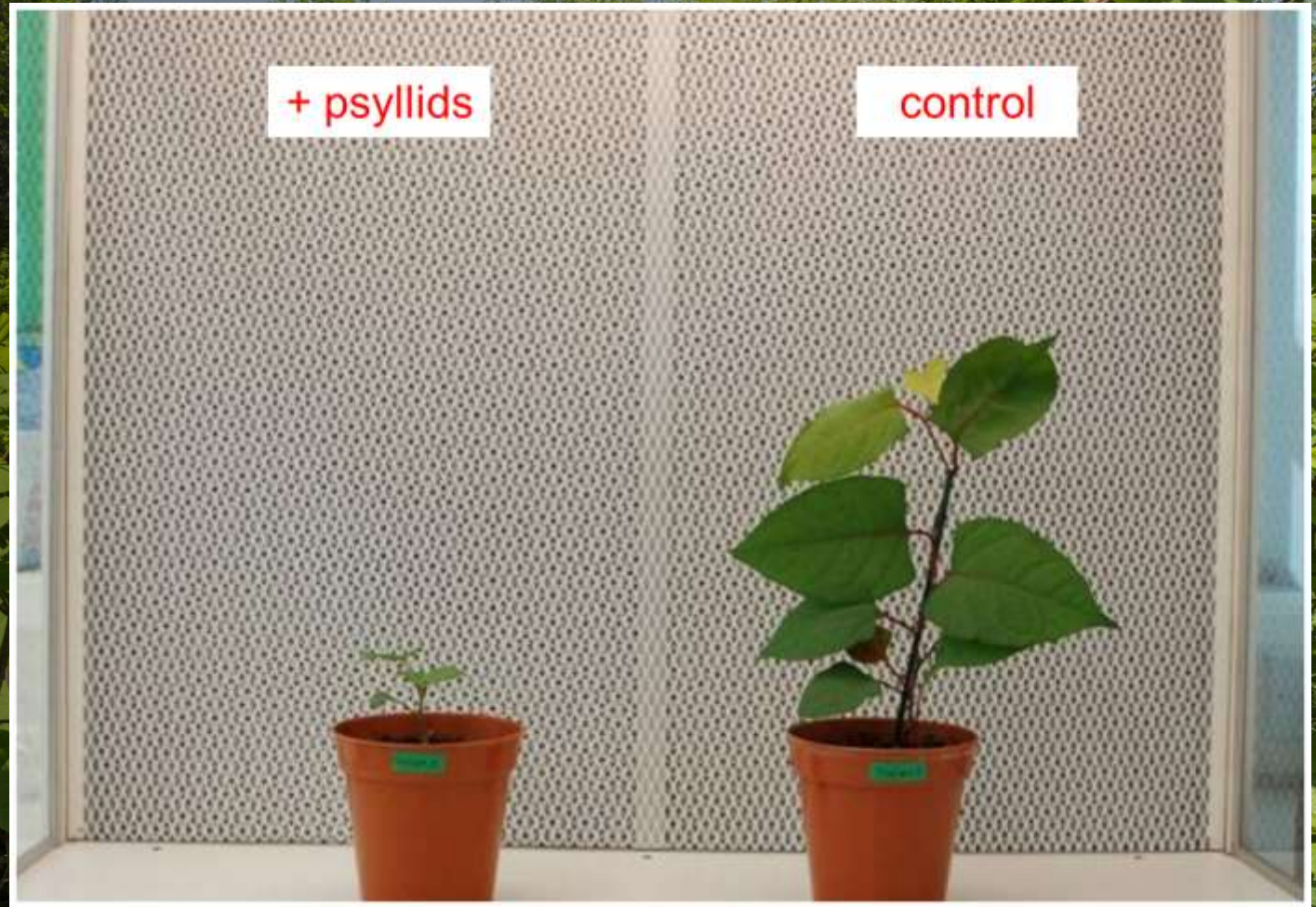
2mm



Sap-sucking psyllid specific to Japanese knotweed



Laboratory experiments showed potential





7

Years of testing

**UK
2010**

**Canada
2014**

**USA
& NL
2020**

In the Netherlands: #uitde1000knoop



Samenwerkingspartners

Werkgroep
plaagsoorten UvW



Universiteit
Leiden



Financiers



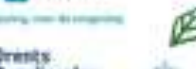
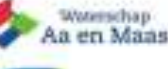
Delfland



Den Haag



Hunze en Aa's



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In the Netherlands: #uitde1000knoop

Purpose: Manage invasive alien plants using their natural enemy/ies

Started in 2019 with 2 candidates

Japanese psyllid
Leaf spot disease



In 2020 a release permit was obtained from the Dutch authorities to release the Japanese psyllid in the NL (3 locations)

Field locations



Piet Kranenbergpad, Amsterdam



RWZI, Zeist

Landgoed Wellenseind, Lage Mierde



2020
Release in autumn
→ Test ability to overwinter

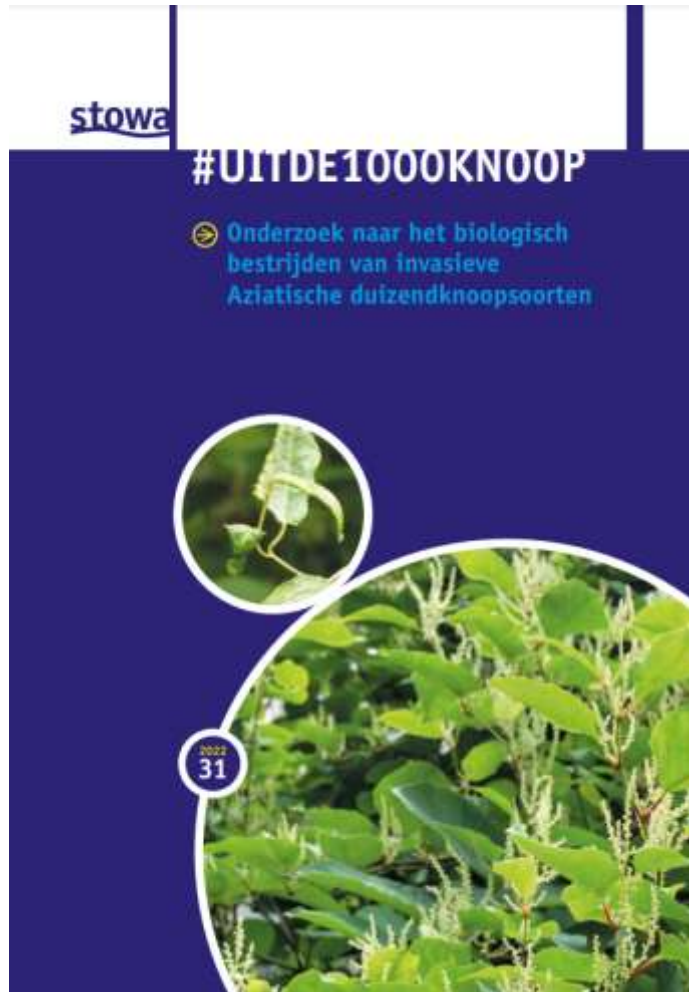
2021
Release in spring/summer
→ Test ability to multiply

2022
→ Monitoring only

Damage to young leaves



Results 2020-2021-2022



- Able to survive the Dutch winter (mild)
- Able to complete its lifecycle
- Population growth rather variable
- Able to spread to near stands
- Damage found only on young leaves/shoots
- No side-effects discovered

Communication 2021-2022



Winterlezing Hortus Leiden



A new population of the biocontrol agent *Aphalara itadori* performs best on the hybrid host *Reynoutria x bohemica*

Ana M. Camargo, Dalvik Kucera, Michel J.C. Post, Suzanne T.S. Lemmen

De Levende Natuur



De Landgoedeigenaar



Planned activities 2023



- Monitoring 3 field locations
- Workshop recognizing the psyllid to wider public
- Keep rearing the psyllid for future releasing and testing
- Communication

- Subject to approval:
- Release at more field locations (4-8)
- Combination with other management practices



With thanks to all colleagues and partners involved in the research and testing of natural enemies in the quest to manage the level of infestation of the Japanese knotweed and other invasive weed species in Europe and around the world

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