

Gardeners help scientists target invasive plants... before they invade

Introduced into Britain and Ireland by well-meaning Victorian plant-hunters, plants such as Himalayan Balsam continue to swamp native riverside and woodland vegetation, while Japanese knotweed causes headaches for house-holders seeking insurance. If only scientists could go back in time and warn those horticulturists that some of the species they were cultivating carefully would cause us all centuries of problems.

Well here's the next best thing: scientists are recruiting gardeners across Britain and Ireland to help them identify tomorrow's Japanese knotweed, today.

A new citizen science project called Plant Alert¹ offers gardeners on the frontline a quick and easy way of reporting any ornamental plants showing signs of invasiveness. Gardeners are best placed to spot these potential troublemakers - the plants that have to be controlled to prevent them from overgrowing other plants or spreading into parts of the garden where they are not wanted. Traits which should set alarm bells ringing include vigorous growth, prolific self-seeding, longer flowering periods and any plant which the gardener has to 'keep on top of' to prevent it spreading.

Dr Katharina Dehnen-Schmutz², Plant Alert Co-ordinator, said "Ornamental plants escaping from gardens are the main pathway for non-native plants outnumbering native plant species in the British flora, with some of them having high negative impacts on ecosystems, biodiversity and the built environment. While non-native plants play a vital role in gardens, the challenge now is to identify the small number of possible future invasive plants with potentially high negative impacts, out of the ever-increasing pool of about 70,000 ornamental plants available to gardeners".

Plant Alert is a collaboration between the Botanical Society of Britain and Ireland³ and Coventry University⁴ aimed at closing the invasion debt gap; the time between a plant being introduced into the garden, to when it's jumped the garden fence and escaped into the wider environment where it can out-compete our native wild species.

Kevin Walker, Head of Science at the Botanical Society of Britain & Ireland, said "Bitter experience has shown that species that are invasive in gardens are also the ones that are likely to 'jump the garden fence' and cause problems in the wild; usually because they can regenerate very effectively and grow vigorously, outcompeting native species. The most effective way to reduce the impacts of these species is to identify them before they escape into wild - this is exactly what this project aims to achieve. Armed with this information we can then alert others to the threats they pose allowing policies to be put in place to prevent their sale and implement eradication programmes in case they do manage to escape".

With Spring well and truly underway and locked down gardeners spending more time in their gardens, Plant Alert are putting the call out to recruit even more people to be our eyes and ears: we'd like all gardeners, whether they have a tiny border in a backyard or they are managing acres of shrubs, to use this app: <u>https://plantalert.org/app/list/survey/welcome</u> and report potentially invasive plants. Results so far, including the ten most frequently recorded invasive plants, can be viewed here: <u>https://plantalert.org/results.php</u>

-----ENDS -----

Contact Dr Katharina Dehnen-Schmutz, Plant Alert Co-ordinator, for further information.

Email: Katharina.Dehnen-Schmutz@coventry.ac.uk Mobile: 07557425278

- Plant Alert is a new long-term citizen science project designed to help prevent future invasions of ornamental plants. It is run by the Botanical Society of Britain and Ireland in collaboration with Coventry University and co-ordinated by Dr Katharina Dehnen-Schmutz and Dr Kevin Walker. More info about Plant Alert on <u>our website</u> and <u>our Twitter account</u>.
- 2. Dr Katharina Dehnen-Schmutz is an Associate Professor in Plant Ecology at CAWR. Her research focuses on plant invasions resulting from ornamental horticulture and how they can be prevented: <u>https://pureportal.coventry.ac.uk/en/persons/katharina-dehnen-schmutz</u>
- 3. The Botanical Society of Britain & Ireland (BSBI) is the leading society promoting the study, understanding and enjoyment of wild plants in Britain and Ireland. Founded in 1836, we are now one of the world's largest contributors of biological records, many collected by our volunteer members, both amateur and professional botanists, who benefit from our research, training and outreach programmes.
- 4. The Centre for Agroecology, Water and Resilience (CAWR) at Coventry University is driving innovative, transdisciplinary research on the understanding and development of resilient food and water systems internationally. Unique to this Centre is the incorporation of citizengenerated knowledge - the participation of farmers, water users and other citizens in transdisciplinary research, using holistic approaches which cross many disciplinary boundaries. More info at https://www.coventry.ac.uk/research/areas-ofresearch/agroecology-water-resilience/