'Plant-eating predator to fight superweed is not magic bullet'

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Plans to introduce plant-eating predators to fight a superweed spreading throughout Britain should not be seen as a 'magic bullet', says a world expert on Japanese knotweed at the University of Leicester.

Dr John Bailey of the Department of Biology has been researching the invasive weed since the 1980s. The research continues with PhD students Michelle Hollingsworth and Catherine Pashley. Research in the Leicester department established that the weed in Britain was a single clone- making it one of the biggest female organism in the world.

Dr Bailey has commented on plans announced this week to introduce a biocontrol to eradicate the weed that is plaguing Britain. The natural predator, a sap-sucking psyllid insect, is proposed to combat the weed. Plans have been submitted to the Government for approval.

University of Leicester scientists have previously liaised with the team behind the latest proposal including Dick Shaw, the lead researcher on the project, from Cabi, a not-for-profit agricultural research organisation.

Dr Bailey said: "Biological control is commonly used in the UK Glasshouse industry with a great deal of success. However, the use of predators invariably means that these die out when the prey levels get very low, and before the target is completely eliminated, so repeated applications are required.

"There is no doubt that in parts of the country Japanese Knotweed is still spreading along riversides and that in such areas it is extremely difficult to use herbicide – even supposing the will and the funding were available! Japanese Knotweed may be a big bully of a plant in Europe, but in Japan it is just one component of a giant herb community, and what we in the West think of as its almost profligate vigour is only enough to keep it in the game, struggling as it does to find somewhere to grow and to avoid the effects of the numerous predators that it attracts.

"A Biological control agent, as the developers themselves admit, is no 'magic bullet'. Certainly such a release will weaken existing plants and slow down or hamper range extension, it may even have the effect of reducing the amount of hybrid seed produced. But it must be viewed as an invaluable aid to levelling the playfield in the fight against this alien plant, rather than as a 'mission achieved'.

"If it is to be released it should be as part of a co-ordinated campaign which involves both public education of the dangers of inadvertently spreading the plant, and a redoubling of the use of more conventional control methods. To introduce a control agent and then sit back and let it do its work would lead to little reduction in the occurrence of the plant, and to a great increase in the unsightliness of its formerly pleasantly verdant appearance."

Source: University of Leicester