Africa to eastern and southern Africa, and eastern India through southeast Asia to northern Australia and the Pacific to Tahiti. The fern entered Florida as a commercial ornamental plant and was first documented to have become naturalized in 1965. However, its explosive growth and rapid spread are relatively recent and it is now causing concern because of its dominance of native vegetation in many communities. *L. microphyllum* is considered to be a good target for biological control. First, it belongs to a taxonomically isolated group, not closely related to native or economic plants in Florida. Second, the plant is not known to be a weed in its native range, apart from an unconfirmed report of weedy tendencies in Malaysia. Third, non-biological control methods are environmentally damaging and too expensive to use on the scale required to control the plant. Our biological control program is currently focused on surveys for natural enemies of *Lygodium* species in *L. microphyllum*’s native range, including Australia, Southeast Asia and West Africa. Preliminary surveys in Southeast Asia and Australia have identified promising natural enemies, including pyralid moths and sawflies. Searches for natural enemies of New World tropical *Lygodium* species will also be made to find *Lygodium* specialist herbivores that may be employed as ‘new association’ biological control agents for *L. microphyllum*. Host specificity research will be conducted in our Brisbane, Australia and Gainesville, Florida, laboratories. Comparative ecological studies of the fern in Florida, where it is a problem exotic, and in Australia, where it is a well behaved native, are planned to better understand these differences.

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Towards the Biological Control of Japanese Knotweed?

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Japanese knotweed, *Fallopia japonica* (=*Reynoutria japonica* = *Polygonum cuspidatum*) is a member of the family Polygonaceae of which there are about 40 genera worldwide containing more than 800 species. It is native to Japan, China, and Korea where it occurs as a component species in the early stages of succession on lava flows. This plant was imported in Europe and North America in the 19th Century as an ornamental and, after naturalization around the turn of the century, its spread can be said to have been explosive. Its vegetative habit and preference for riparian habitats and disturbed areas has led to rapid colonisation alongside waterways and derelict land. The characteristic dense, monospecific stands often outcompete and exclude native plants. This paper outlines the problems posed by the weed and the ineffectiveness of current control methods together with their associated costs. Potential conflicts of interest are dealt with and a comparative review of the natural enemies in the native vs. the introduced range (UK) is made. Future challenges are outlined and the opportunity for a consortium-funded collaborative programme is emphasised. Classical biological control is recognised as the only cost-effective, environmentally sensitive, and sustainable approach to controlling Japanese knotweed in the United Kingdom and yet it still remains the forgotten alternative.