



<p>WORKING PROJECT TITLE</p>	<p>Determining a risk assessment for cultivars of alien plant invaders</p>
<p>CORE TEAM MEMBER</p>	<p>Dr John Wilson</p>
<p>ACADEMIC LEVEL OF THE PROJECT</p>	<p>PhD</p>
<p>PROJECT BACKGROUND</p>	<p>The movement of plants around the world by the horticultural trade has historically been one of the major proximate causes of biological invasions. Legislation is currently being amended in South Africa as part of the National Environmental Management: Biodiversity Act to restrict the use of and trade in species that pose a high invasion risk to South Africa. One recommendation is that cultivars of species listed as invasive (or potentially invasive) that have an acceptable invasion risk (e.g. through sterility) are explicitly specified in and exempt from the regulations.</p> <p>The purpose of the studentship would be to develop tests that are necessary and sufficient to allow the cultivation of plants that would otherwise be regulated under NEM:BA. This would involve experimental tests of particular cultivars, an in-depth analysis in a particular group, and the development of a risk assessment protocol. They would also potentially shed light on species boundaries in plants. As such it is expected to produce both practical guidelines, and evolutionary insights that are publishable in top international journals. The project has the potential to link with the Early Detection and Rapid Response program of SANBI.</p> <p>This is a project suitable for students interested in molecular biology, evolutionary biology, ecology, and horticulture.</p>
<p>FURTHER READING</p>	<p>Dehnen-Schmutz K, Touza J, Perrings C and Williamson M (2007) A century of the ornamental plant trade and its impact on invasion success. <i>Diversity and Distributions</i></p>



	<p>13: 527-534</p> <p>Pemberton RW and Liu H (2009) Marketing time predicts naturalization of horticultural plants. <i>Ecology</i> 90: 69-80</p> <p>Reichard SH and White P (2001) Horticulture as a pathway of invasive plant introductions in the United States. <i>BioScience</i> 51: 103-113</p> <p>Wilson RL and Hoch WA (2009) Identification of Sterile, Noninvasive Cultivars of Japanese Spirea. <i>HortScience</i> 44: 2031-2034</p>
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