Russian Olive – a Suitable Target for Classical Biological Control in North America?

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Abstract

Projects to develop biological control solutions against invasive plants are mid-to long-term endeavors that require considerable financial support over several years. Discussions of concerns and potential conflicts of interests often occur when biological control agents are first being proposed for release into the environment. Such late discussion, which in some cases results in delays or in the halt of ongoing biological control programs, has led to uncertainty, confusion and frustration among the various stakeholder groups, including the biological control practitioners. Russian olive (Elaeagnus angustifolia L.), a small tree or multi-stemmed shrub native to south-eastern Europe and Asia, was introduced to North America in the late 19th century as a horticultural plant. It has since spread into the environment, particularly along river courses where it now occupies similar habitats as tamarisk. To date, Russian olive has become a declared noxious weed in four US states. Because of the perceived benefits of planting Russian olive in some regions, developing a classical biological control program against Russian olive could give rise to a conflict of interests. To address and discuss potential conflicts of interests right at the onset of this new biological control initiative, we recently created a platform to collect, analyze and disseminate science-based information on Russian olive. Particular emphasis is being put on the following questions: 1) what are the economic, environmental or social impacts caused by Russian olive in North America or in other parts of the invaded range, 2) what are the goals of Russian olive management, and 3) is classical biological control a useful and feasible way to achieve these management goals? We will present first results of our data analysis and propose a way forward to reach common ground among key stakeholders regarding under which conditions Russian olive is a suitable target for biological control.