Creation of a Prioritization Model to Identify Weeds of Global Significance

Background. USDA, APHIS, PPQ's Center for Plant Health Science and Technology began staffing scientists in 1997 for what was to become the newly created Plant Epidemiology and Risk Analysis Laboratory (PERAL). One of the first recognized priorities of scientists working within PERAL was to partner with professional societies to produce pest lists. PERAL entered into a cooperative agreement with the Weed Science Society of America to create a three-year project to better address noxious weed issues.

The following subsequent events added impetus to the project:

- Recommendations within "Safeguarding American Plant Resources: A stakeholder review of the APHIS-PPQ safeguarding system" to improve PPQ's pest risk models
- Passage of the Executive Order 13112 (1999) which set into motion a coordinated effort on the part of 17 federal government agencies to mitigate the adverse affects of invasive species that would harm agricultural, managed, and natural ecosystems
- Passage of the Plant Protection Act (2000) empowered USDA to carry out the mandates of the Act and better address invasive species

Project results. The objectives of this three year project resulted in:

- Developing a model capable of prioritizing noxious weeds posing significant risk to U.S. ecosystems to assist PERAL in prioritizing weed risk assessments
- Developing factsheets for 50 pest plants posing the greatest threat to United States ecosystems along with factors to justify ranking
- Developing a prioritized list of plants that are in the United States and
    - Have ornamental, herbal, medicinal or religious value
    - Are not naturalized, and
    - Pose potential risk
- Developing a list of 730 plants with the potential to cause negative impact within the United States
- Providing a list of references used
- Providing final reports for each year of the project
- Publishing an article in *Weed Science* to report the results of this project*

* Parker, Chris, Barney P. Caton, and Larry Fowler. 2007. Ranking Nonindigenous Weed Species by Their Potential to Invade the United States. *Weed Science* 55:386-397.