Questions for Panelists: Questions were compiled from input provided by members of the Montana Invasive Species Council and the *Mogulones crucifer* Science Advisory Panel (SAP) steering committee. Panelists should provide responses to questions based on personal expertise, experience, or knowledge of this agent.

CURRENT STATUS OF MOGULONES CRUCIFER

- 1. What is the current distribution and rate of spread of Mogulones crucifer in the United States and Canada?
- 2. What are the legal and ecological implications (both good and bad) of the spread of *Mogulones crucifer* from Canada into the United States?
- 3. What specific reservations prevented *Mogulones crucifer* from being approved for release as a biological control agent in the United States?

MOGULONES CRUCIFER NON-TARGET IMPACTS

These questions relate to additional research and information on the impacts of Mogulones crucifer available subsequent to the submission of the original petition and the release of the agent in Canada.

- 4. What data has become available to assess the risks Mogulones crucifer poses to the environment?
- 5. What non-target species is *Mogulones crucifer* affecting in Canada, and what level of impact are they having (individual plants or populations)? Can the same impacts be expected in the United States?
- 6. Which species, threatened / endangered / others, are most at risk from *Mogulones crucifer*'s spread into the United States. Where do at-risk species occur?
- 7. Has there been a risk-benefit analysis conducted on the non-target impacts associated with *Mogulones crucifer*?
- 8. Does the current level of knowledge regarding the non-target impacts associated with *Mogulones crucifer* adequately address concerns expressed during the original TAG & USFWS reviews, and if not, what are the additional research needs?

PEST ALERT AND REGULATORY ISSUES

These questions relate directly to the purpose and efficacy of the USDA APHIS PPQ pest alert and the process by which a pest alert could be lifted.

- 9. What information can you share regarding the pest alert issued by USDA APHIS PPQ in March of 2010?
- 10. Does the pest alert prevent the submission of a new petition to USDA APHIS PPQ to gain approval to release *Mogulones crucifer* for classical biological control of houndstongue in the United States?
- 11. Will the fact that *Mogulones crucifer* is a declared USDA APHIS PPQ pest preclude its consideration as an approved weed biological control agent with the USDA APHIS PPQ Technical Advisory Group for Biological Control Agents of Weeds (TAG)?
- 12. Under what circumstances would (or should) the pest alert be lifted, and what information would be required to revoke the pest alert?

- 13. Is there a protocol in place that USDA APHIS PPQ would use to lift a pest alert?
- 14. How effective are the pest alerts? How many reports of *Mogulones crucifer* in Montana or other U.S. states can be linked to this pest alert and has there been any regulatory action as a result?

PETITION EVALUATION

These questions relate directly to specific research or additional information that would be needed by USDA APHIS PPQ and USFWS to consider reviewing a new petition to release Mogulones crucifer.

- 15. What ecological criteria would be used by USDA APHIS and USFWS to determine the safety of releasing *Mogulones crucifer* as a biological control agent in the United States?
- 16. What information would be required to approve *Mogulones crucifer* as a weed biological control agent in the United States?
- 17. Is there an acceptable level or type of spillover onto non-target plants that would still allow for USDA APHIS and USFWS to determine that *Mogulones crucifer* is safe to release as a biological control agent in the United States?
- 18. Are there examples where spillover was taken into consideration in the approval (or denial) of a permit to release a weed biological control agent in the United States or Canada?

MANAGEMENT RECOMMENDATIONS

These questions relate to Mogulones crucifer's current pest status and spread southward from Canada necessitating the development of management recommendations.

- 19. What are the pathways of introduction for Mogulones crucifer?
- 20. What mitigation strategies could be put in place by managers to protect threatened, endangered or sensitive plant species that could be impacted by *Mogulones crucifer*'s range expansion?
- 21. What should land managers do if they identify *Mogulones crucifer* in their property, *e.g.*, attempt to eradicate it? monitor it? and/or monitor potential non-target plants in the vicinity?
- 22. What are the legal ramifications for moving *Mogulones crucifer* within a state or across states/international boundaries under its current pest status?
- 23. What are the next steps for a reassessment of the legal status of Mogulones crucifer in the United States?
- 24. What is the status of *Mogulones borraginis*, and would *M. borraginis* be a superior biological control agent in areas where *Mogulones crucifer* is not present, or could it be used to mitigate the spread of *M. crucifer* into sensitive habitats or to states to the south of current infestations?