

A close-up photograph of a flowering rush plant. The image shows several thin, green stems rising from a dark, blurred background. At the top of these stems are clusters of small, light-colored flowers with dark centers. Some flowers are fully open, while others are still in bud form. The lighting is soft, highlighting the delicate structure of the flowers.

Flowering Rush Symposium

Discussion/Summary

Where do we go from here?

Discussion-Management

- General comments - chemical and mechanical control methods have been disappointing and often relatively ineffective, creating concerns that the flowering rush populations will continue to expand and spread.
- Flowing water systems (rivers and flow-through reservoirs) – limit herbicide treatment options
- Prospects for biological control of flowering rush are promising; need impact data; need funding!!
- Mechanical control – role for mechanical removal of small incipient infestations; i.e. commercial docks would be also sites for removal with specialized equipment
- Listen to agricultural community and take direction/also irrigation community

Chemical Control

- What do we need?
 - Need to maximize options for control- ID state/county partners
 - Renovate Max G – will it do a better job of rhizome control than other systemic herbicides. Suppression currently – expand work: need funding to implement field trials
 - Long term treatment – does that also apply to Renovate Max G or just to diquat (Terra Gutter – 3 yr data on diquat); systemic herbicide will not act same as contact herbicide
 - Timing with Renovate Max G; did not work well in WA.
 - Consider contact herbicide to reduce above ground biomass and follow with systemic (or combination of contact and system herbicide); control extensive root system difficult with contact herbicide
 - Application technique, timing, plant growth stage – needs further research
 - Need approval for more herbicides (additional research)
 - Thinvert surfactant – approved for aquatic use; may increase efficiency
 - The following were discussed during presentations
 - Combination of endothall + triclopyr – needs additional review in deeper water system (submersed plants)
 - Diquat-Repeat (2/yr) applications reduced biomass and plant abundance (both emergent and submergent).
 - Renovate Max G – 18 MAT good control (submergent plant control best; min impact in emergent plants)
 - granular fluridone (Sonar[®] PR) and triclopyr (Renovate[®] OTF) combinations had impact on emergent and below ground biomass reduction.
 - Glyphosate, imazapyr and triclopyr on emergent plants have shown that imazapyr provided the best control when at least 2 ft of leaf was above water.

Needs-Discussion

- Inventory – continue to measure spread>new sites to survey; location/extent of diploids/triploids
 - Send samples to John Gaskin for genetic analysis
- Rapid spread in some waters: northern ID/WA WA; no reports in CO
- Does water quality impact flowering rush spread.
 - (in Columbia river which is somewhat turbid;
 - Substrate changes following treatment of FR
- Effect of river velocity on flowering rush establishment and spread
- Additional research on impacts of FR on macro/micro invert's, other impacts? (strengthen biocontrol success)
 - Economic
 - Ecological
 - Human health/recreation (swimmers itch etc)
- Biocontrol: *B. nodulosus* rearing/biology/phenology of biocontrol agents; host specificity testing; extend surveys
 - Test plant species- collect and send to Jennifer
- Funding-Association of lake associations – perhaps may be funding source;
 - Possible from lake district or WI DNR
 - Need to send request to MN; WI and other states with FR to get input for funding for biological control
- Forum for data distribution/sharing; linkedin, WSSA, APMS;
- Vector of spread – keep out of other states; mortality of propagules;