

## **ICAIS 2019 ABSTRACT PREPARATION GUIDELINES**

- 1. Please use the ICAIS 2019 Abstract Preparation Template (.dotx) when preparing your abstract for submission. See example abstract on page 2.
- 2. Abstracts are to be formatted to North American letter 8 ½" x 11" (216 mm by 279 mm) with 1" (25 mm) margins. The font size should be 11 point Arial, single spaced, paragraphs should be 6 pt before and 6 pt after text, format the text flush left.
- 3. List all authors and use superscript numbers to denote affiliations, using the same number for authors with common affiliations (as per example).
- 4. The name of the presenter is to be indicated in bold.
- 5. Abstracts are to be no more than 300 words in length.
- 6. Indicate the preferred presentation format (oral or poster presentation).
- 7. Provide email addresses for each author listed.
- 8. Be sure that the "track changes" function **has been disabled** before submitting the abstract.
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- 10. Abstracts must be submitted before the deadline: January 14, 2019.

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## Integrated Management of Waterhyacinth (*Eichhornia crassipes*)

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Waterhyacinth is one of the two most intensively managed floating aquatic weed in Florida. More than \$5.6 million in state and federal funds were spent in Florida in FY 2014-2015 to manage waterhyacinth and waterlettuce in public waters, so even a small reduction in herbicide use for waterhyacinth management could represent significant savings. Several biocontrol agents are utilized for waterhyacinth management; the newest is Megamelus scutellaris, which was released in 2010 and is currently being released on waterhyacinth throughout Florida. In these experiments we evaluated waterhyacinth growth after treatment with different rates of 2.4-D (the most common herbicide employed for waterhyacinth management) applied in conjunction with biological control agents. We used a 3 x 2 factorial with 3 rates of 2,4-D (control, low rate/2qpa, operational rate/4qpa) and 2 levels of biocontrol (no insects, unrestricted attack by Neochetina sp. weevils and M. scutellaris). Plants were cultured for 3 months after 2,4-D treatments, then rated, harvested and analyzed to evaluate combined and individual effects of insect biocontrol and herbicide rates on waterhyacinth growth. These experiments revealed that herbicide-treated plants without biocontrol insects recovered from 2,4-D damage, while herbicide-treated plants with biocontrol insects did not, and a second run of these experiments reinforced these findings. These results suggest that it may be possible to reduce 2,4-D applications for waterhyacinth management if biocontrol insects are introduced to or present in the treatment area.

Preferred presentation format: Oral

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