

Raszka Shelley

From: Gallagher Chuck
Sent: Monday, March 30, 2015 7:28 AM
To: Raszka Shelley
Subject: FW: Arundo Donax/HB 2183

From: Paul Greer [<mailto:pgreer@tamu.edu>]
Sent: Sunday, March 29, 2015 8:57 PM
To: Gallagher Chuck
Subject: Arundo Donax/HB 2183

Chuck,


There is a proposal to grow Arundo Donax, or Giant Reed in Northeastern Oregon commercially. The purpose is for biofuel; however, Arundo Donax is not a good choice due to low sugar content. It has starches, but they must be converted to sugars for biofuel production. Further, Arundo Donax is listed on the USDA as an invasive or noxious weed in several states, including your neighbor to the south, California. See link and text from USDA below.

Arundo Donax is selected because it will survive on little water and relatively poor soils. However, it will thrive with more water, and generally use all it can get. Considering the likely lack of water for Oregon agricultural needs, anything that takes away from that should be strictly avoided.

Consider the Rio Grande River in Texas. In many places, Arundo Donax lines the banks so thick, it is seen as a problem to Homeland Security as it allows people to illegally enter the U.S. at the Texas border under the cover of the plants. Arundo Donax certainly has been a problem for Texas, and along with Salt Cedar, is believed to contribute to the low water flows of the Rio Grande river.

In the area I live, it regularly freezes in the winter, with the temperatures frequently reaching the mid 20's. Arundo Donax easily survives that freeze, and is back every year. It is very hard to eliminate, and I would hate to think it is spoiling the beauty of Oregon.

I urge you to do what you can to prevent this if possible. And at the very least, look closely at HB 2183, which aims to put strict bond requirements in place that would provide assistance if eradication is required. Removing an invasive plant can be very costly, and without a proper bond place, the burden would fall on the backs of Oregon tax payers. Even then, restoring an ecosystem damaged by an invasive plant may never be truly restored.

I am happy to speak with you directly if you would like. My cell phone is  979-220-0796, feel free to contact me at your convenience as needed.

<http://www.fs.fed.us/database/feis/plants/graminoid/arudon/all.html>

Arundo Donax, commonly known as Giant reed is listed as a noxious weed in Texas, an exotic plant pest in California, an invasive weed in Hawaii, and as an invasive, exotic pest in Tennessee."

<http://onlinelibrary.wiley.com/doi/10.1111/gfs.12097/full>

"The results of the present study suggest that significant differences in freeze tolerance exist between clones of giant reed. Herbaceous perennials display seasonal periodicity in their resistance to cold stress, which is related to important physiological and metabolic changes. Our research confirms the existence of a physiological response to acclimation, which provides a basis for improving the tolerance of Arundo donax L. to acute freeze stress by increasing plant TSS and proline contents. The development of a reasoned process for the selection of a clone tolerant to freeze stress must be based on standardized data, both quantitative and qualitative. In giant reed, a relationship between LT50 and winter injury in the field is present, similar to that observed in some perennial grasses. The large variation in freeze tolerance between clones will allow for the selection of suitable Adx clones for extending cultivation more to the north in colder climates. Screening giant reed genotypes for freeze tolerance in controlled environment chambers appears to be a valid method for use in breeding programmes aimed at developing the use of Adx as a biofuel feedstock in the transition zone."

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