



The mission of the Florida Native Plant Society is to promote the preservation, conservation, and restoration of the native plants and native plant communities of Florida.

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SUBJECT: Recommendation to Stop Promoting *Jatropha curcas* as Biofuel Crop

Dear Drs. Arrington and McLellan:

There are many good reasons for Florida to embrace the production of biofuel crops, and we may be uniquely positioned to do so with our sub-tropical climate and long growing season. Agriculture has long been a staple of Florida's economy and biofuels may provide a promising and profitable addition to the crops currently cultivated in Florida. Biofuels will also play an important role in the United States' efforts to become independent of foreign energy sources and to reduce carbon emissions.

In recognition of the above, ***the Florida Native Plant Society is supportive of the search for crops that would be responsible choices for biofuel production.*** However, the potential for a plant species to become invasive must be considered a critically important characteristic when assessing its suitability as a biofuel crop. The economic and environmental consequences of invasions by non-native species have been so severe in Florida that we must exercise extreme caution to prevent additional invasions. ***There is troubling evidence that Florida is not exercising an appropriate level of caution on this front and FNPS wishes to register its objections to the Institute of Food and Agricultural Sciences' (IFAS) ongoing and aggressive promotion of Jatropha curcas as a biofuel crop.***

Roy Beckford, the IFAS Extension Agent in Lee County, has been actively promoting the cultivation of *Jatropha curcas* there and elsewhere, and recently justified these actions to FNPS in a communication asserting that neither the Florida Exotic Pest Plant Council (EPPC) nor the USDA has identified it as an invasive or nuisance species. He also explained that it has been present in

Florida for many years without exhibiting any sign of invasiveness. These arguments give us little comfort, as to our knowledge IFAS has done nothing to assess the potential invasiveness of this species. If you have conducted scientific trials or other analyses that indicate *Jatropha curcas* has a low potential for invasiveness, as is the usual standard of your agency, then please share these data with us. The EPPC does not identify a non-native plant species as invasive until it has already demonstrated invasiveness. ***Promoting the cultivation of a non-native species unless or until it has been listed as invasive by EPPC does not qualify as an appropriate level of caution.***

As you know, one of the best indicators that a non-native species will be invasive is evidence of its invasiveness in another geographically similar location. The Global Invasive Species Program (GISP) has categorized *Jatropha curcas* as a high risk species because it has already demonstrated invasiveness on every continent except Europe and Antarctica (GISP, 2008). Australia and Hawaii conducted assessments that predicted *Jatropha curcas* would be invasive.

The mission of the GISP is to “*conserve biodiversity and to sustain human livelihoods by minimizing the spread and impact of invasive alien species.*” In the case of Florida’s promotion of *Jatropha curcas*, there may be a bitter irony hiding in the GISP’s linkage of conserving biodiversity and sustaining human livelihoods. The future of Florida’s citrus industry, which has been the basis of many livelihoods, is in doubt due to the invasion of non-native disease (citrus canker, and now greening). Biofuel crops have been suggested as a possible alternative for the croplands that have been in citrus cultivation. ***IFAS is now promoting the replacement of an historically important crop that has been devastated by an alien invader with a new species that appears likely itself to become an alien invader.*** Florida cannot afford to ignore the economic and environmental costs of adding another invasive species to the long list of such species that are already degrading our natural areas, eroding our native biodiversity, and costing us many millions of dollars every year in control efforts.

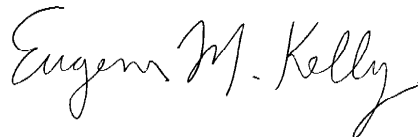
IFAS is widely respected for its scientific expertise and its application of science to the agricultural enterprise. We strongly urge you to rescind your support for the cultivation of *Jatropha curcas* and to discourage any additional planting until you have thoroughly assessed its potential invasiveness in Florida. At the least, all existing plantings should be carefully monitored and quickly eradicated if there is any evidence of invasiveness, or if an assessment by IFAS suggests it will likely become invasive; however, FNPS recommends that you ask for all existing plantings to be quickly eradicated, including sites in Lee, Hardee and Lake Counties. ***Make no mistake about our position on this issue: we are horrified by what we perceive to be a reckless and premature push to promote the large-scale cultivation of *Jatropha curcas* in Florida and insist***

that IFAS now move to halt the planting of this species with an equivalent measure of speed and aggression.

We also ask that you consider safer alternatives for biofuel crops. Switchgrass (*Panicum virgatum*) is a native species that has been demonstrated to be more efficient than corn as a source of ethanol production. Sugar cane (*Saccharum officinarum*) has been cultivated for many years in Florida, has not been invasive, and has also been determined to have high potential as a biofuel source. The current cultivation of sugar cane in the Everglades agricultural areas is a major source of nutrient pollution to the Everglades. Growing sugar cane as a biofuel source, rather than as a food crop, would require little, if any, fertilization and would make its continued cultivation more compatible with the competing need to protect and restore the Everglades ecosystem. We recommend that you place more emphasis on the use of such species as biofuel sources, and that you always err on the side of caution to prevent new species invasions in Florida.

Thank you for considering our concerns. We look forward to a reply, and to working collaboratively with IFAS on this and other matters of importance to Florida.

Sincerely,



Eugene M. Kelly, President
Florida Native Plant Society

cc: Governor Charlie Crist
Charles Bronson, Florida Commissioner of Agriculture
Welton G. Caldwell, Chairman, Lake County Commission
Ray Judah, Chairman, Lee County Commission
Matthew Baumann, Mayor, City of Groveland
Elaine Renick, Lake County Commission
Roy Beckford, Lee County Extension Director
Lockie Gray, Hardee County Extension Director

Citations

Global Invasive Species Programme. May, 2008. *Biofuel Crops and the Use of Non-Native Species: Mitigating the Risks of Invasion.*