



Louisiana Beekeepers Association

611 Evans Loop
Mansfield, LA 71052

December 12, 2017

To Whom It May Concern,

On behalf of our thousands of beekeepers and honey bee supporters statewide and nationally, we strongly urge you to oppose any action to introduce the non-native flea beetle, *Bikasha collaris*, as a biological control for the Chinese tallow tree (*Triadica sebifera*). The introduction of this beetle and control of Chinese tallow would result in the loss of a major forage source for honey bees and other pollinator species. This would directly affect these important pollinators, exacerbate the already disastrous Colony Collapse Disorder (CCD), and lead to very serious economic impacts for beekeepers on a national scale.

The current and future status of honey bees and other pollinating insects has received increasing scientific and public concern in the last decade. Honey bees and beekeeping are now considered an essential part of our overall agricultural efforts, not just for the economic contribution of honey sales, but for their key pollination contributions to one-third of the food that Americans consume (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2701761/>). According to economic research from the Cornell University, pollinators contribute 29 billion dollars to the agriculture sector. “More specifically, honeybees pollinated \$12.4 billion worth of directly dependent crops and \$6.8 billion worth of indirectly dependent crops in 2010.” (<http://news.cornell.edu/stories/2012/05/insect-pollinators-contribute-29b-us-farm-income>)

The Chinese tallow is now found in 12 states as noted in the BCIP Project Proposal (exhibit A). It provides a major (honey) market value in at least four of these states. Tallow can be found in all 64 parishes in Louisiana and also in 55 counties of Texas. Honey sales in Louisiana contribute over eight million dollars to the state agriculture sector (NASS). In 2016, Texas produced eight million pounds of honey, with a wholesale value of \$11.5 million, seven million pounds of which are attributed in part to the Chinese tallow nectar flow. Nationally, honey sales contribute roughly 336 million dollars to the value of US agriculture commodities in 2016 (https://www.nass.usda.gov/Statistics_by_State/Louisiana/Publications/Livestock_Press_Releases/BeeHoney/2017/lahoney17.pdf). Even though this is a significant contribution to our economy, the US still remains the top national importer of foreign honey at 423 million dollars (http://agriexchange.apeda.gov.in/product_profile/Major_Importing_Countries.aspx?categorycode=0408). The obvious conclusion is that beekeepers and honey producers in the United States need public support to preserve existing pollinator forage and nectar sources, particularly those so valuable as Chinese tallow. Hence the Pollinator Protection Act instituted federally in 2014.

There are over 4 million pounds of honey produced annually in Louisiana (NASS). Commercial beekeepers move thousands of colonies to Louisiana for the main purpose of capitalizing on the

abundant forage here and particularly the nectar of the tallow tree. The Chinese tallow is a major nectar contributor to the amount of honey produced in Louisiana. In an article published in the American Bee Journal, Hayes (1979) states “(The Chinese tallow tree)... has become the most successful tree nectar source ever introduced into the United States.” Tallow trees have been around since the founding of the United States. “[Ben Franklin] sent tallow seeds to a farmer friend in Georgia in 1772 to be grown as a cash crop.” (<http://blog.chron.com/houstongrows/2011/08/did-ben-franklin-bring-invasive-tallow-tree-to-texas/>) Tallow trees have truly turned into a cash crop for beekeepers.

Steve Bernard, local commercial beekeeper and owner of Bernard Apiaries Inc., claims that loss of the tallow trees would result in a 1.25 million dollar annual loss for his business. A decrease in tallow population or even worse, the complete eradication of the tallow tree by the flea beetle would greatly damage the commercial beekeeping industry statewide and nationally.

Reiterating, hundreds of thousands of hives are moved through the gulf coast areas during the tallow season. These hives are used specifically in the migratory pollination process and depend on tallow trees for pollen and spring build up. The hives later go to other areas in the country for further honey production and pollination services. This is of greater economic value than the honey produced from tallow trees.

Colony Collapse Disorder has been linked to a number of problems, but notably from the disappearance of critical pollinator habitat. Federal government dollars are being set aside to fund the repopulation of areas for pollinators and to provide protection for existing habitat. In Louisiana and other southern states, the Chinese tallow provides a significant source of nectar as well as pollen. To control or reduce the population of this targeted species, as suggested in the BCIP Project Proposal, would be counter to the Presidential memorandum...“to ensure the sustainability of our food production systems, avoid additional economic impact on the agricultural sector, and protect the health of the environment.” Under “Sec. 3. Increasing and Improving Pollinator Habitat (e) The Departments of Agriculture and the Interior shall... develop best management practices for executive departments and agencies to enhance pollinator habitat on Federal lands.” There are many acres of Federal land that would be directly at risk in Louisiana should this beetle be introduced and not contained and/or non target plants be affected. (exhibit B)

This concern leads to others, such as the success record for introducing related biological species with or without appropriate trials and very careful research protocols. In the case of the purple loosestrife in Massachusetts a biological control was successfully introduced in eliminating this plant, but at the same time the honey crop was eliminated, as well as forage for all pollinators. A more aggressive invasive species, phragmites, replaced the loosestrife and now there is no known control of this plant. Another similar story of unsuccessful biological control is the case of the Japanese Lady Beetle which continues to be problematic today. Many other failed biological controls can also be cited. Release of the *Bikasha collaris* into less than very carefully controlled settings could lead to disastrous consequences. The opportunity for the beetle to adapt and reproduce in a new environment is virtually unknown. In Biological Control: Measures of Success (editor G. Gurr, Steve Wratten), the authors report “only around 10 per cent of attempts are successful” and that the success rate has changed little for a century. They also note that

“biological control can cause harm, for instance when the released agent attacks a non-target organism of conservation or economic value.”

We certainly recognize the research and claims that invasive Chinese tallow is leading to an economic loss of \$300 million over a twenty year period in certain timber and forest regions of this state and others. Some of these industry researchers also believe that introducing the flea beetle could conceivably decrease the amount of chemicals used in that industry and other agricultural sectors to control the encroachment of the tallow tree on cleared land. Yet these industries have alternative methods of control whereas the beekeeping industry does not have an alternative forage source comparable to the Chinese tallow. As of today, the states that would be most affected by the proposed flea beetle gross an annual \$76 million in value of production (USDA, 2016), much of which is attributed to the presence of the Chinese tallow. This particular honey is produced in such volumes that it merits its own classification. Tallow honey sales are differentiated from other honey crops harvested and can bring up to \$1.60/lb (November 2017, USDA Honey Report) and in some areas of Louisiana over \$2/lb. There are other beneficial uses of the Chinese tallow. Studies have shown that the tallow can be a lucrative source for biofuel. The trees are also considered ornamental plants to some locals.

Nectar and pollen from the Chinese tallow are of substantial economic value to commercial beekeepers and the beekeeping industry. Protection of this pollinator habitat needs to be secured. For these reasons, we respectfully urge you to oppose the introduction of the non native flea beetle for the control of the Chinese tallow tree. Further research and experimentation with such a potentially dangerous biological control species should be restricted, or at the very least, very closely scrutinized and carefully monitored, so as to not lead to irreversible damage to existing Chinese tallow and cause great harm to pollinator populations and the entire beekeeping industry.

Sincerely,

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