



NATIVE TREES CLEAN THE AIR OF CARBON DIOXIDE, PASTURES POLLUTE



Eddy Flux tower

Carbon dioxide gas, one of the culprits causing global warming, is a product of burning fossil fuels, like coal and gas. But carbon dioxide is also released into the atmosphere as plant material decays. Using a breathalyzer for the atmosphere called an eddy-flux tower; Sebastian Wolf, post-doctoral fellow at ETH Zurich, Switzerland, with colleagues from STRI and Catherine Potvin, professor at McGill University, discovered that pastureland releases a large amount of carbon dioxide into the air (260 grams of carbon per square meter per year) whereas native tree plantings absorb an even larger amount of carbon (442 grams per square meter per year) as they grow, cleaning carbon dioxide from the air.

At the Sardinilla site in Central Panama, trees planted in 2001 are already 20 meters (60 feet) tall. A previous collaboration between STRI and the Yale School of Forestry and Environmental Studies to evaluate the potential of native trees for reforestation gave

researchers the information they needed to select good timber species that are relatively easy to grow in a variety of conditions.

They chose:

- Luehea seemanii* (guácimo colorado)
- Cordia alliodora* (laurel)
- Anacardium excelsum* (espavé)
- Hura crepitans* (tronador)
- Cedrela odorata* (cedro amargo)
- Tabebuia rosea* (roble)

In addition to storing carbon, the areas planted with native tree species stored more water in the soil, making these areas more resilient to seasonal drought. Wolf will travel to the University of California, Berkeley this month to work as a post-doctoral fellow in the Berkeley Biometeorology Lab.

Wolf S, Eugster W, Potvin C, Turner BL, Buchmann N. 2011. Carbon sequestration potential of tropical pasture compared with afforestation in Panama. Glob Change Biol 17:2763–80.

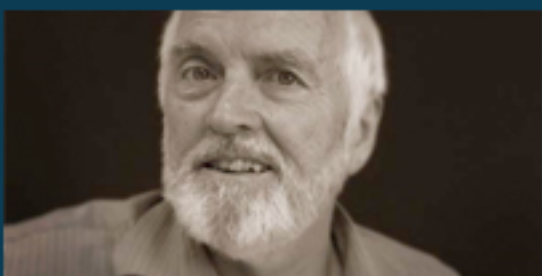
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STRI book to understand climate change and REDD+

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Bermingham meets with Panama's Foreign Affairs minister

STRI director Eldredge Bermingham (left) met with Panama's Foreign Affairs minister Roberto Henríquez (right) on Thursday, October 13 in the head offices of the ministry. Bermingham expressed...

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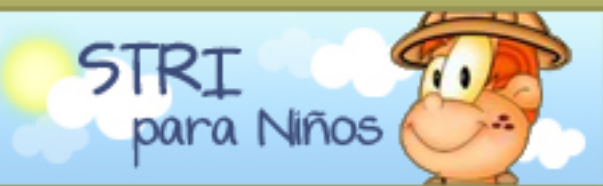


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