

INNOVATIVE ECOLOGICAL PALLETS PRODUCTION BY RECYCLING FLOWER STEMS IN COLOMBIA

In 2015 the [Bioestibas Company](#) based in the Antioquia Department of Colombia converted 2.160 tons of Hydrangea stems into ecological pallets. This biomass in most cases is removed through a direct burning which provokes a serious air pollution.

Bioestibas is an innovative company that produces and markets ecological pallets made with agricultural trash highly polluting the environment and coming from the stems of the Hydrangeas that are grown in the East of the Antioquia Department. Bioestibas also managed to manufacture a product of a superior quality compared to the traditional wood stowage currently available in the market.

Hydrangea is an important export product of the region and 800 farmers produce more than 6000 thousand tons per month of agricultural waste made with the flower stems.

Along with this innovative production the company recycles an abundant waste of the territory, limiting the damages to the environment. At the same time the production of ecological pallets contributes to limit the use of wood and the consequent deforestation.

The company estimates that each month it manages to prevent logging more than 775 trees and the emissions of 1260 tons of gases with a greenhouse effect. Besides this it supports the proper disposal of the Hydrangea stalks of more than 800 farmers.

In addition, thanks to the innovative production process implemented, the company achieved a product with a higher quality compared to the traditional wooden stowage available in the market. The ecological pallet presents, among others, the following technical features: it is structurally resistant as it is done of a whole piece; it is resistant to moisture being produced with a water-repellent additive; it is resistant to pests and fire, ideal in industrial processes with flammable materials; it is lighter than the traditional pallet facilitating the transport; once arranged in piles it saves a quarter of the volume of a traditional pallet; it doesn't contain metals; it can be produced in different colours; it is recyclable and reusable.

The inventors of this innovative production process, Álvaro Vásquez and Lina Echeverry, after having won an award and a seed capital from the SENA Entrepreneurship Fund, placed the production factory in the municipality La Ceja (Medellín, Department of Antioquia).



Bioestibas each month collects 90 tons of hydrangea stems from crops in the Region, generating an economic benefit for the flower growers who could save over 75% of costs for the final disposal of organic leftovers.

In the factory the raw material is cut, moulded, dried and pressed at a high temperature with raisins and catalysts, in order to obtain a 100% ecological pallet made of a superior quality compared to the traditional wooden stowage. The company produces 4.300 ecological pallets per month, to be used for the most part in packaging and transport of exportable goods. In three years the business increased its operational capacity, its production and its staff plant, which grown from three to 16 employees.

The company Bioestibas won important awards in Colombia and abroad for its innovative product and its contribution to the environment. The company that actually processes only a small part of the flower stems produced in the region, is planning the expansion of its production plant to obtain up to 900 tons of organic waste, 10 times more than it does at present.

As it is emphasized by the Bioestibas inventors, there are thousands of possible goods to be produced with organic waste, included those currently produced with wood. The success and growth of innovative companies that invest in creating new ecological products by recycling territorial waste materials are of a general interest. Those businesses, besides creating new economy and new qualified job places, contribute to reduce deforestation and improve the environment.

To know more

[Bioestibas website](#)

[Bioestibas in Facebook](#)

[Article in chivas.com](#)

[Article in Colombia.inn.com](#)

[Article in elespectador.com](#)

[Article in webpicking.com](#)



En el 2015 convertimos 2.160 toneladas de tallos de hortensia en estibas ecológicas. De no haber sido por Bioestibas esta biomasa hubiera tenido como disposición final la combustión, generando hidrógeno de cianuro, componente fundamental del famoso gas ciclón.



NOS SENTIMOS ORGULLOSOS DE QUE EL AIRE DEL ORIENTE ANTIOQUEÑO SEA MÁS LIMPIO CON NUESTRO PROCESO.

Bioestibas

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