

## **Biotex Flax Used to Improve Impact Performance for Bamboo Bike**

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Composites Evolution's Biotex Flax has been used by Guapa Cycles to improve the impact performance of its 'Urban One' Bamboo bicycle.

UK-based Guapa Cycles designs and engineers wood composite bicycles by using technology proven to excel in the harsh conditions experienced in surf and snow sports. Whilst researching alternatives to carbon for use in its bamboo and composite bicycle, Guapa were introduced to Flax, which was interesting due to its performance and processability as well as the bonus it offered being environmentally-friendly.

Thomas Henry Williams, Co-Founder & Design Engineer at Guapa said "The ability to incorporate a material such as flax into our bike wasn't a decision forced through the need to find a material that has its environment credentials; rather an educated decision to find the best performing material for our application. The natural mechanical properties that the flax and the wood composite provides is, for our application, better than using a material such as carbon; the flexural stiffness provided by the fusing of these two natural materials provided us with the desired strength, flex and ultimate vibrational characteristics. The proximity & environment impact of the product is then extremely closely linked to our brands philosophy of smarter manufacture, building closer to home and nearer to the end consumer."

Guapa describe the ride as stiff yet extremely smooth, vibrationless with no noise, just pure efficient fun. Through European standard testing, the bicycles have been proven to be as strong if not stronger than Carbon, Aluminium or Steel frames. All with a frame weight of just 3.3 kg.

Brendon Weager, Technical Director at Composites Evolution, commented "It's been great to work with Guapa Cycles and we are really pleased to see that they recognised the outstanding performance of the Biotex materials. We look forward to working with them in the future."

A Guapa 'Urban One' Bicycle will be on show at JEC Europe between 10-12th March, Porte de Versailles, Paris, France at stand G70, Hall 7.3.



Photo provided by Guapa Cycles.

<http://www.guapa.cc>  
<http://www.compositevolution.com>

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## **NOTES FOR EDITORS**

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### **ABOUT COMPOSITES EVOLUTION**

Composites Evolution is a supplier of innovative, sustainable materials to the composites industry, including Biotex high-performance natural composites. Their product lines include fibres, resins and intermediates based on natural, bio-derived, recycled and recyclable feedstocks, which enable customers to meet cost, weight and environmental targets.

### **ABOUT BIOTEX**

Biotex natural reinforcements and intermediates provide the high performance and easy processing normally associated with glass fibre composites but with lower weight and environmental impact. They are suitable for semi-structural and decorative applications in sectors such as automotive, construction, marine, sports and consumer goods. Biotex uses a unique Twistless Technology to ensure a high degree of fibre alignment and performance. Standard materials include Jute, Flax, commingled Flax/PLA and commingled Flax/PP (others available on request) in formats including yarns, fabrics (woven and non-crimp) and preconsolidated sheets.