

# RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL  
SCOUTING NEWSLETTER

April 2022

## Highlights

- Suzano has developed a new model for eucalyptus forestry activities;
- New solutions for paper packaging are presented, from paper pouches, translucent paper to paperboard bottles.



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## START-UP OF THE MONTH



French startup Eranova manufactures biodegradable polymers using a patented process that extracts starch from algae, as an alternative to commonly used methods of extracting starch from crops such as potatoes or corn. In fact, an alternative bio-source for plastic production is starch coming from green Algae, an macroalgae that has become invasive in certain coastal areas. Combined with other materials, Eranova produces compounded resins or polymers that are compostable and biodegradable.

Read more ➤ [Eranova](#)



## FOREST



Suzano

### Suzano: model for forestry activities

Suzano has developed a model for forestry activities, named Tetrys, involving analytics, big data and artificial intelligence, for the evaluation of numerous scenarios to establish the best eucalyptus clonal allocation in face of variables such as temperature, rainfall, soil type and texture and altitude. The tool additionally reduces the risk of possible environmental problems, including the incidence of pests and diseases. To identify the best combination between clone and environment, simple data such as temperature, rainfall, altitude and soil type for each location are entered into the software. The algorithm then determines which clone will produce the greatest amount of pulp per hectare/year.

Read more > [Suzano](#)

● Forest



BIO-LUTIONS

### BIO-LUTIONS and Solenis: alternatives to single-use plastic packaging

BIO-LUTIONS is a German based startup which has developed a patented method for mechanically converting agricultural residues into self-binding and durable fibcro® natural fibers, without the need for binding agents or chemical cellulose isolation, as the fiber itself is used. These fibcro® natural fibers can be used to produce sustainable packaging and disposable tableware, using wet-moulding technology. Now BIO-LUTIONS will use Solenis' portfolio of barrier coatings for its fiber-based products, which includes a range of products that repel water and water vapor, hot and cold liquids and oils and greases, for the development of disposable alternatives to single-use plastic.

Read more > [BIO-LUTIONS](#)

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## PACKAGING



packagingnews.co.uk

### Sabert: new range of recyclable paper cutlery

Belgium, a global food packaging manufacturer has launched a new range of recyclable paper cutlery, made from FSC certified paper. Sabert has developed the sustainable cutlery from paper, that is strong, robust, and performs well with stiffness and cut quality when used with hot or cold foods. The patented cutlery is made from virgin cellulose, and fully recyclable with paper waste.

Read more > [packagingnews.co.uk](https://packagingnews.co.uk)

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Packworld

### Nestlé: new paper Smarties pouch

Nestlé Canada's Smarties pouch is said to be now made of paper instead of plastic. The pouches for Nestlé Canada comprises a surface-printed paper, a heat-resistant overlacquer and a water-based dispersion coating. The pouch development involved a proprietary toughened grade of paper, meeting the requirements for robustness and durability, as well as enabling a synergy between a special heat-seal coating and the paper's fibers.

Read more > [packworld](https://packworld)

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## PACKAGING



lpw online

### Sappi: new translucent paper

Sappi has developed a new translucent paper, branded as Crystalcon, providing a recyclable and easy-to-use packaging solution for food and non-food applications. Crystalcon is an uncoated, compostable translucent paper, applicable wherever high barriers are not required, but where product visibility is important. Listed possible applications are noodles, rice and magazines packaging, viewing windows in envelopes or sales packaging for greeting cards.

Read more > [ipwonline.de](http://ipwonline.de)

● Technological  
● Product Development



packaginginsights

### Mondi: packaging system for chilled food

Mondi has developed the BCoolBox, a packaging system, a mono-material constituted by tough, lightweight corrugated sides and insulation panels for keeping the contents protected and at 7 °C for at least 24 h. The solution has already been tested by the company Tyme Food, allowing it to ship food all across the UK from one central kitchen. The trial, conducted in various conditions with sensors implanted in BCoolBoxes, showed that meals arrived undamaged, unspoiled and cool, with their contents never exceeding the critical 7°C limit. Shipping weight charges were also reduced due to the compact and lightweight composition of the packaging.

Read more > [packaginginsights](http://packaginginsights)

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## PACKAGING



packagingeurope

### PulPac & HSMG: moulded fibre packaging with barrier properties

PulPac has partnered with HSMG, a company that has developed a patented technology, PROTĒAN®, for producing sustainable barrier coating formulations for water, oil and grease resistance, for the development of water and oil barriers for PulPac’s Dry Molded Fiber technology that allows a thin, stretchable substrate to be applied during the forming process, helping to ensure the recyclability of moulded fibre packaging used for applications like coffee cups. The process results in a strong, recyclable, and biodegradable alternative to single-use plastic that works even for hot drinks. Sweden’s MAX burgers will be the first company to use coffee lids made with PulPac’s Dry Molded Fiber and featuring the PROTĒAN barrier solution.

Read more > [packagingeurope](https://packagingeurope.com)

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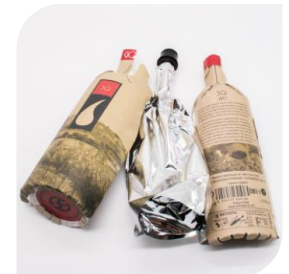


Frugal

### Frugal: paperboard bottle

An award-winning Italian winery has launched its 3Q Umbria Rosso red wine in the Frugal Bottle, now on sale in Ontario stores, Canada. The bottle is made from 94% recycled paperboard with a food-grade plastic pouch to hold the liquid. It is almost five times lighter than a normal glass bottle, making it easier to carry and lighter to transport, further helping to reduce the carbon footprint of the drinks industry.

Read more > [Frugal](https://www.frugal.com)



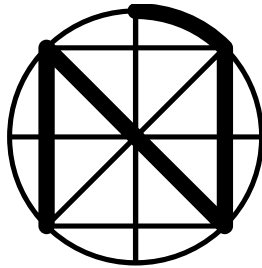
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