



Press Release

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IB2Market brings new biobased products to the market

IB2Market, a public project funded by the European Union, brought a number of new-to-market and biobased molecules to the market. Several new types of bio-surfactants (*more specifically Bolaform, Acidic and Lactonic Sophorolipids*) and specialty carbohydrates like Sophorose and Human Milk Sugars (*more specifically Fucosylated Oligosaccharides*) are now commercially available. These molecules have new and interesting characteristics useful for applications in the field of pharma, functional & medical nutrition, cosmetics, nano-technology and many, many more. Innovative industrial biotechnology processes made it possible to produce these complex molecules starting from renewable resources using biological processes. Such processes are sustainable, reduce greenhouse gas emissions and dependence on fossil resources.

Industrial Biotechnology has proven to be a powerful tool to ensure a sustainable future. It uses micro-organisms to produce complex molecules that can be used as such, or as building blocks for bio-chemicals, bio-detergents, bio-materials, etc. In some cases micro-organisms are even able to make complex molecules which cannot be produced at all by conventional chemical processes. Furthermore, Industrial Biotechnology uses renewable resources instead of fossil resources, creating a bio-economy with significantly reduced greenhouse gas emissions and low dependence on fossil resources.

IB2Market, a project financed by the 7th Framework Program of the European Union, aims to bring industrial biotechnology from the research lab to the market and to solve the bottle-necks in industrialization and commercialization. The project covers process development, scale up, market exploration and the drafting of a valorization plan to support a successful market introduction.

The first class of new molecules are biosurfactants such as 'Bolaform Sophorolipids' and Acidic and Lactonic Sophorolipids. In simple language they could be best described as types of bio-detergents. Although these new molecules have good performance for application in the 'green detergent industry' where *wild type* sophorolipids are already commercialized, these new types of sophorolipids also show very promising properties for future application in the fields of pharma, agro, food, cosmetics, nano-technology and many, many more. These new biosurfactants are 100% biodegradable and are 100% produced from renewable resources.

The second class of new molecules are specialty carbohydrates. Fucosylated oligosaccharides (e.g. Human Milk Oligosaccharides) are so called 'rare' sugars and are very difficult to synthesize via conventional routes (e.g. extraction, chemical synthesis, enzymatic synthesis). They play vital roles in animal and human health processes and are considered as an untapped source of innovation within the wellness, biomedical, pharmaceutical and cosmetics high-end areas. Due to the lack of their availability and efficient technology to produce them, these products are currently very expensive hampering the application development and access to market processes. Inbiose, a Ghent University spin-off company has solved this problem via a technology platform leading to a high production efficiency, which dramatically reduces their production costs and unlock key added-value market access.

Also sophorose and L-fucose are now available. Both are specialty carbohydrates for which currently no easy production route exists. L-fucose is a specialty carbohydrate with numerous applications, mainly in health care. Sophorose has applications in the cosmetics, foods and biofuels industry. The availability of sophorose and L-fucose at low prices will stimulate application development for these specialty carbohydrates.

These products are available for testing as of today. The project partners look forward to cooperate with potential customers to bring production and application of the new products in line with the customer's needs, to adapt product formulation to application needs or to cooperate on possible new applications.

Notes to editors:

1. IB2Market Contact:

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IB2Market website: www.IB2Market.eu.

2. The IB2Market Project Partners are:

- BCNP Consultants (DE)
- Bio Base Europe Pilot Plant (BE)
- Carbosynth (UK)
- EOC (Belgium)
- Inbiose (BE)
- Innovhub (IT)
- Nova Institute (DE)
- Ghent University (BE)

3. New products:

- Bolaform Sophorolipids
- Acidic Sophorolipids
- Lactonic Sophorolipids
- Sophorose
- Fucosylated oligosaccharide – 2'-Fucosyllactose (2'-FL)
- Fucosylated oligosaccharide – 3-Fucosyllactose (3-FL)
- Fucosylated oligosaccharide – 6'-Fucosyllactose (6'-FL)
- Fucosylated oligosaccharide – Lactodifucotetraose (di-FL or LDFT)
- Fucosylated oligosaccharide - L-Fucose

For more information on these products, please go to one of the following websites:

- IB2Market: <http://www.ib2market.eu>
- Inbiose: <http://www.inbiose.com/>
- Carbosynth: <http://www.carbosynth.com/>