Blue food colourant

The Centre for Bioprocess Engineering Research (CeBER) has developed a method of extracting and purifying the blue pigment (phycocyanin) from Spirulina biomass as a product for the food colorant industry.

Phycocyanin is one of very few natural blue pigments that are approved for use in the food and cosmetics industries where it is in high demand and of value. The pigment is one of the major constituents of Spirulina, a 'microalgae,' used in many countries as dietary supplement whose nutritional and therapeutic values have been well documented.

Recently, there has been a trend in the food colorant industry towards using natural equivalents. Thus beyond the existing natural pigment market there is even potential for an increase in market size over the next few years. This can be evidenced by the fact that global sales of natural food colourings surpassed those of synthetic colours for the first time in 2011. A part of this has to do with a change in legislation. For example, in Europe, regulatory limits on use of artificial colourants has created a huge demand for natural. Consumers are also now seeking products that contain simple, easy to recognise ingredients that are close to nature.

The UCT team has developed a novel process that improves the recoveries of phycocyanin from spirulina and enables the rigorous microbial quality targets to be attained. The extraction process can be used for either dried or freshly-harvested, wet biomass.

Market

Producers and distributors of natural colourants for the food and cosmetic industries.

Keywords:
MRI, patient tracking, MRI orientation, image correction

Intellectual Property Rights:

Not yet filed

Technology Readiness Level:
4 - Lab scale demonstration

Contact:

Francois Oosthuizen,
Project Manager,
Research Contracts & Innovation,
University of Cape Town

francois.oosthuizen@uct.ac.za
www.rci.uct.ac.za