

## September 2013

# Bioplastics feedstock not in competition with food or feed, reveals data

The surface required to grow sufficient feedstock for today's bioplastic production is less than 0.006% of the global agricultural area of 5 billion hectares. This is the key finding published by European Bioplastics, based on figures from the Food and Agriculture Organization of the United Nations (FAO) and calculations of the Institute for Bioplastics and Biocomposites (IfBB, University Hannover, Germany).

In a world of fast-growing population with an increasing demand for food and feed, the use of feedstock for non-food purposes is often debated controversially. The new brochure "Bioplastics - facts and figures" published by European Bioplastics, is said to move the discussion on to a factual level.

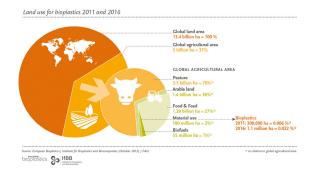
Of the 13.4 billion hectares of global land surface, around 37% (5 billion hectares) are currently used for agriculture. This includes pastures (70 %, approximately 3.5 billion hectares) and arable land (30%, approximately 1.4 billion hectare). This 30% of arable land is further divided into areas predominantly used to grow crops for food and feed (27%, approximately 1.29 billion hectares), as well as crops for materials (2%, approximately 100 million hectares, including the share used for bioplastics), and crops for biofuels (1%, approximately 55 million hectares).

European Bioplastics market data depicts production capacities of around 1.2 million tonnes in 2011. This translates to approximately 300,000 hectares of land use to grow feedstock for bioplastics. In relation to the global agricultural area of 5 billion hectares, bioplastics make use of only 0.006%. Metaphorically speaking, this ratio correlates to the size of an average cherry tomato placed next to the Eiffel Tower.

According to European Bioplastics, a glance at the global agricultural area and the way it is used makes it abundantly clear: 0.006% used to grow feedstock for bioplastics is nowhere near being in competition with the 98% used for pastures and to grow food and feed.

European Bioplastics notes that increasing the efficiency of feedstock and agricultural technology will be key to assuring the balance between land use for innovative bioplastics and land for food and feed. The emergence of reliable and independent sustainability assessment schemes will also contribute to this goal.

Excerpted from Packaging World, May 2013



Feedstock required for bioplastics production accounts for only a minimal fraction of global agricultural area, according to new data published by European Bioplastics.



### Featured Biobased Products:

### M-605

Cortec® provides whole line of very active corrosion inhibitors additives for de-icing salts (M-605. M-605L, M-605PS). All of them easily blend with different types of deicers and provide excellent corrosion protection even when incorporated in compounds containing Chloride.

M-605 series deicers are in compliance with PNS (Pacific Northwest Snow and Ice Control Chemical Products) specifications. The additional and very important advantage of M-605 series is their close to zero environmental impact. All three of them are nontoxic, environmentally friendly, and contain no chromate, nitrite, or phosphate inhibitors.

The recent news is that M-605 PS was confirmed to be 98% Biobased. This result was obtained by independent ISO-17025 certified Beta Analytical laboratory when tested according to ASTM D6866-12. M-605 PS is a powder, economical for use and shipment and has no transportation restrictions.



## MCI® CorteCure®

MCI® CorteCure® from Cortec® Corporation, a multi-function water-based, membrane-forming, concrete curing and corrosion-inhibiting compound containing Cortec's Patented Migrating Corrosion Inhibitor (MCI®). This is the environmentally responsible way to aid in the proper curing of concrete while, at the same time, promoting strength and durability by providing corrosion protection to the embedded reinforcement. It is made from biobased renewable materials and contains a fugitive dye to assist in the proper application coverage without staining concrete surfaces.

MCI® CorteCure® is formulated to provide a safe, non-flammable, convenient, and easily applied initial cure for all newly worked concrete. It is a USDA Certified Biobased Product and VOC-compliant per European and Californian regulations. MCI® CorteCure® is degradable and will flake off after 4-8 weeks exposure to UV and traffic abrasions, allowing subsequent treatment such as tiling, paint, or sealer. Steel-reinforced concrete bridges, highways, and streets exposed to corrosive environments (carbonation, de-icing salts, and atmospheric attack), buildings and foundations of all types, marine concrete structures, as well as the restoration and repair of all reinforced concrete structures will benefit from this product. Protect your new or old project from premature or excessive drying, temperature extremes, and damage by promoting proper cement hydration with MCI® CorteCure®.

#### Eurocorr 2013

Cortec will be giving a presentation at Eurocorr called: "Use of UV- spectroscopy for detection of MCI® Migration Depth in concrete", which will take place in Portugal on September 2nd.













