

5th Euro-Global Summit and Expo on

Food & Beverages

June 16-18, 2015 Alicante, Spain

Sea grass as source of cellulose for food wrapping paper manufacturing

M Menta Ballesteros Martín
Pablo de Olavide University, Spain

Current issues on deforestation and the scarcity of wood species resources for producing cellulose pulp for paper and cardboard industries have awakened the scientific community interest to explore efficient and sustainable non-conventional raw materials. In the last decades, many efforts have been directed towards research into non-wood raw materials such as cotton stalks, rice, among others. Moreover, new pulping processes have been studied as alternative for highly contaminant classical treatments as Kraft. The promising results found for obtaining paper sheets with acceptable properties coming from unconventional pulping raw materials treated with alternative processes open the way to sustainable and economic processes to be exploited. High content of sea grass is accumulated on mediterranean coast forcing in the summer season to its withdrawal being the residue disposal to collection points or destined to incineration. However, alternative uses for these residues are suggested, and some researchers are studying the valorization of this marine waste as low cost biosorbent bulking agent, biofuel ruminant nutrition or source of cellulose. A feature that makes it particularly interesting the use of sea grass as an alternative material for paper making is its scarcity content in lignin. Moreover, the amounts of holocellulose and cellulose are similar to those encountered in softwood and hardwood. The aim of this study is evaluated the potential of minimally contaminant technologies in order to obtain pulps and paper sheets with adequate properties and demonstrate the validity of sea grass as an alternative, non-wood pulping raw material for its application for food wrap manufacturing.

Biography

M Menta Ballesteros Martín is full Professor in Pablo de Olavide University in Seville. She has published more than 20 papers in reputed journals and has a patent. Her scientific production has focused on decontamination and disinfection by Advanced Oxidation Processes. Currently, she is a member of ECOWAL group that focuses its research on the use of macro algae for food, paper and cosmetic industries.

Notes: