Biobased organic acids production by metabolically engineered microorganisms - DTU Orbit (08/11/2017)

Biobased organic acids production by metabolically engineered microorganisms

Bio-based production of organic acids via microbial fermentation has been traditionally used in food industry. With the recent desire to develop more sustainable bioprocesses for production of fuels, chemicals and materials, the market for microbial production of organic acids has been further expanded as organic acids constitute a key group among top building block chemicals that can be produced from renewable resources. Here we review the current status for production of citric acid and lactic acid, and we highlight the use of modern metabolic engineering technologies to develop high performance microbes for production of succinic acid and 3-hydroxypropionic acid. Also, the key limitations and challenges in microbial organic acids production are discussed

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