Enhanced production of amino-carboxylic acids from biomass-derived sugars by recombinant *Corynebacterium glutamicum* strains

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Amino-carboxylic acids such as gamma-aminobutyrate (GABA) and 5-aminovaleric acid (5-AVA) can be used for synthesis of biodegradable nylons such as nylon-4, nylon -5 and nylon -6,5. Biorefinery for production of these bio-based nylons can be established by polymerization of amino-carboxylic acids from renewable resources using recombinant microorganisms. In this presentation, we report the development of C. glutamicum strains for the production of amino-carboxylic acids from empty fruit bunch (EFB) solution and miscanthus hydrolysate, respectively. The results obtained in this study provides useful information for establishing biorefineries for production of amino-carboxylic acids and the application of Empty Fruit Bunch solution and Miscanthus hydrolysate solution as carbon source for production of platform chemicals. The detailed strategies and results will be presented in this presentation.