

## Third National Congress of Recycling and Reuse of Renewable Organic Resources in Agriculture



Islamic Azad University, Khorasgan Branch (Isfahan) Agricultural Faculty, Waste and Wastewater Research Center 13-15 May 2008

## **New Prospects in Potato Process Waste Applications**

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With production of over 4.5 million tons potato yearly, Iran ranks thirteen among all countries over the world. Due to high volume production and diversity of processing plants, considerable amounts of residues and wastes are left yearly at farms, factories and shops. Despite being useful for production of several value-added chemicals, the residues are disposed with high charges because of lack of proper knowledge and technology. Therefore researches about potato residues and their applications have gained more popularity recently. In the current research, different types of potato wastes and their amounts have been determined based on potato production and active processing plants .Subsequently, estimations have been made on the amounts of extra residues in the next twenty years. In the next step, development of potato wastes application in some industrial countries have been investigated. These applications include production of bioethanol as renewable fuel, xantan for food industry bioplastics and biopolymers for pharmaceuticals, food and chemical industry. In the present paper, these applications have been discussed and the processes have been thoroughly explained. Consequently according to residues amounts in the country and regarding advancement of other countries, some new strategies for potato wastes application have been proposed.

**Keywords:** Potato process waste, Bioethanol, Renewable fuel, Xantan, Bioplastic, Biopolymer

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