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# 1. Title

Impact of Bioenergy Cropping on Soils and the Environment

# 2. Type

Inter-Divisional Symposium

### 3. Organizer(s) & Convener

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#### 4. Rationale

Given global concerns about energy security, the heavy reliance on fossil fuels that are produced in a relatively limited number of geographic areas, and the environmental burdens caused by production and use of fossil fuels, there is a need to study renewable energy production systems and the impacts these systems have on soils and the environment. Renewable energy production systems must be sustainable. Among sustainable renewable energy production systems, bioenergy may provide the greatest benefits because of its wide range of applications and mostly positive aspects on the environment. But since most bioenergy crops are produced on agricultural land, feedstock selection and agronomic production practices could have either positive or negative impacts on soil and the environment.

### 5. Objectives

The objective of this symposium is to explore the impact of sustainable bioenergy crop production on soils and the environment by discussing bioenergy feedstocks and feedstock production systems.

### 6. Description

This symposium will bring together world-leading experts and researchers to share the current status of renewable energy production systems and the impact these systems have on soils and the environment. While agricultural residues, wood and forest residues, double cropping systems, and municipal and industrial wastes may be discussed, particular emphasis will be placed on current and future sustainable bioenergy systems. Moreover, the effects of dedicated energy cropping systems and crop residue removal for bioenergy feedstock production on greenhouse-gas emissions, changes in



soil C and N and microbial communities, soil and water conservation, and rural society will be discussed.



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