

BIOFERTILIZERS

GENERIC ELECTIVE (GE)

Sustainable agricultural practices are key to counter the damages caused due to excessive use of chemical fertilizers and pesticides in modern agriculture. The use of high yielding varieties together with synthetic fertilizers has enabled us to feed the ever-increasing population and achieve food security. However, this has caused extensive damage to agricultural soils making them infertile. Organic farming involving the use of biofertilizers and biopesticides is being seen as a sustainable alternative to synthetic inputs in agriculture. Biofertilizers are substances containing microorganisms (microbial inoculants) which increase soil fertility and plant growth when added to soil.

Scope of Biofertilizers as GE for students:

1. This course will acquaint students from various disciplines about the different types of biofertilizers and biopesticides used in organic farming and the various methods of making compost from organic waste. This basic knowledge may help students (other than those from biology background) enhance their knowledge about sustainable agricultural practices and may help them prepare for various competitive exams.
2. Organic farming is being adopted as an alternative to chemical-based agriculture globally. This course will offer students an opportunity to learn about the concept of 'certified organics', the process of acquiring certification for agricultural products and usage of different logos to indicate a product as 'certified organic'. This knowledge will help students from all disciplines in their day to day life to differentiate certified organic products from fake organic products and the various benefits of adopting an organic lifestyle.
3. Ethical consumerism is the practice of using products that are 'certified organic'. This course will make students aware about the green practice of being an ethical consumer and will help to make them socially and environmentally aware about the ill-effects of being a consumer-centric society. This will help students from various disciplines other than biology especially commerce advance their conceptual understanding about environmental aspects of consumerism.

4. The course will also impart knowledge related to the usage of different microbes as fertilizers, methods of mass multiplication (including on-farm methods) and the various carriers used for inoculation. This may open new vistas for students especially from biology background and may encourage them to take up this field as a career option. With some more training in the field, the students may start their own facility for producing commercial biofertilizers.

For any query contact

Dr. Deepika Sharma

Department of Botany

deepikabotany@zh.du.ac.in

9873034092