

Special Seminar



Chiu-Chung Young

Academician of Academia Sinica, (Taiwan)

National Chair Professor, Ministry of Education of ROC (lifetime honor)

PRESENT POSITION:

- National Chung Hsing University: Chair Professor, Executive Director, Advisory Committee,
- Chair Professor, Department of Soil and Environmental Sciences
- ROC Member of the Scientific Committee on Problems of the Environment (SCOPE)
- President, Chinese Sustainable Agriculture Association
- Editorial Boards: Food Science and Agricultural Chemistry, Journal of Biomedicine and Biotechnology, Recent Patents on Material Science, Recent Patents on Food, Nutrition & Agriculture
- Art Judge Committee, Art Center of National Chung Hsing University

EXPERIENCE:

- 1995-1997 President, the Chinese Society of Soil and Fertilizer Sciences
- 1986-Now Professor, Department of Soil and Environmental Sciences, National Chung Hsing University
- 2003-2004 Vice-president, National Chung Hsing University
- 2004-Now Executive Director, Advisory committee, National Chung Hsing University
- 2005-Now Chair Professor of National Chung Hsing University
- 2009- National Chair Professor of Ministry of Education of ROC

HONOR AND SCHOLARSHIPS:

- Scientific Council of Environment (SCOPE) : Life Achievement Awards on Environmental Sciences (2010)
- National Science Council : Outstanding Research Awards (1985-1987, 1987-1989, 1989-1991, 1991-1993, 1993-1995 for 10 years 5 times), Special Research follow Awards (1996-1998) (1999-2001) , Outstanding Research Fellow Award(2003), Technology Transport Award (2008)
- Ministry of Education : National Chair (2005-2008,2010-lifetime honor), Academic Award (1999), Outstanding Teacher Award(1994), Outstanding Education Member Award (1992)
- The Executive Yuan : Outstanding Achievement Award in Science and Technology (2004)
- National Chung Hsing University : Chair Professor(2005 to now), Outstanding Research Teacher Award(1999)
- Outstanding Research Awards: from Chinese Soil and Fertilizer Society(2006)

Chiu-Chung Young

Academia Sinica, Taiwan.

Research and Application of Soil Microorganisms in Agriculture

Abstract:

There are five factors that affect agricultural production, including climate, crop, soil, cultivation management, and pest control, to achieve the goal of increasing agricultural production and quality. Modern agricultural production with a large amount of chemical fertilizer and pesticide application led to the deterioration of the environment, soil degradation and increasing pest problems. Soil is the base of crop growth, and the basis of sustainable agriculture. However, any crop production requires fertilizers in order to promote growth and development of plants. The key point of application of different fertilizers is to increase the advantages and reduce its disadvantages of the fertilizer. Therefore, in order to solve the problems of modern agriculture, the biodiversity of microorganisms play an important role for protecting soils. Microorganisms have been shown to reduce the use of chemical fertilizers, and are more substantial for the benefits of intangible conservation of soil. Microbial Fertilizers Act has been established in the COA in Taiwan. Microbial fertilizers is that their ingredients contain microbes that have the effect of active microorganisms applied to crop production with the ability to provide plant nutrients or promote nutrient utilization. The development of soil microbes has the advantages of promoting crop growth and induced reduction of pests and diseases. Furthermore, some soil microorganisms have other effects on crop drought resistance, heat resistance, salt tolerance and iron and sulfur absorption.