

TE-TZU CHANG

I am a Chinese national and my name, if Romanised, reads as Chang Te-Tzu. For the convenience of colleagues and friends, I generally use the abbreviated form, T.T. Chang. You are welcome to call me 'T.T.' I completed my education at the college level in China. My graduate studies were then pursued in the USA.

My major area of research is plant genetics and its application to crop improvement, germplasm conservation, and crop evolution.

During my professional career I have served two institutions: the Sino-U.S. Joint Commission on Rural Reconstruction (JCRR) in Taiwan and the International Rice Research Institute (IRRI) in the Philippines. Both institutions have earned world-wide fame for enhancing the livelihood of underprivileged farmers and low-income consumers through the achievement of increased food production and more equitable distribution.

My contributions at the level of research and technology transfer have been:

- 1) the introduction of the potent semidwarfing gene in Taiwan's land races into tropical rice. This greatly raised yield potential and led to the 'Green Revolution' in rice; and
- 2) the conservation of the diminishing land races, thus reducing the perils of genetic uniformity in improved cultivars. Through international collaboration we were able to save endangered gene-pools and preserve their seeds at the IRRI. Many land races and their wild relatives are no longer found in their old habitats. I also shared my expertise and experience in seed storage with national and international agricultural research centres by helping China, India, Taiwan and others in constructing modern genebanks.

In recognition of these activities, many awards and honours have been bestowed on me. Nevertheless, I highly value my membership of the Pontifical Academy of Sciences. Actually, I began my collaboration with this Academy in 1998 with the Study-Week on the 'Food Needs of the Developing World in the Early Twenty-First Century'. Its proceedings have just been published.

I am both honoured and pleased to be present at this Assembly and to join many eminent scientists in discussing the role of science and the future of mankind.

Thank you.