

A BRIEF INTRODUCTION TO TAICHUNG

DISTRICT AGRICULTURAL IMPROVEMENT STATION

INTRODUCTION

Initially, Taichung District Agricultural Improvement Station (Taichung DAIS) was founded in 1902 and had three experimental stations belonged to Taichung, Changhua and Nantou Farmer's Associations. In 1924, all three stations were merged into one station and named as "Taichung Agricultural Experiment Station". The organization of the station had been changed several times since then. It was given the present name and placed under the Department of Agriculture and Forestry, Taiwan Provincial Government in 1960. The station is located at Tatsuen, Changhua. The station consists of one branch station (located at Puli, Nantou prefecture), three technical divisions and three administrative offices. Totally, there are 80 staff members and approximately 50 hectares of land for field experiment. The domain of the so-called "Taichung District" of Taichung DAIS including the areas of Taichung, Changhua, and Nantou prefectures and Taichung city has a total acreage of 738,700 hectares of which 27% are crop lands.

TAICHUNG DAIS'S OBJECTIVES

- To serve as a regional agricultural research center to improve the genetic potential for major crops of economic importance.
- To develop farming systems of various crops so that to increase and stabilize agricultural production through the use of adequate cultural practices.
- To propagate and maintain the improved varieties of crops and other germplasms.
- To develop specific new techniques for vegetable and flower production and to focus on the forcing culture for fruit trees, including grapevine, pear, peach, plum, and mango, etc.
- To identify and solve the problems of soils, fertilizers and plant nutrition as well as other constraints to agricultural development.
- To develop alternative means of controlling diseases and pests and to forecast the epidemic of disease and insect pest in the field.
- To improve and design the farm machinery and implements which are available for the small-scale farmers to facilitate the farming mechanization.
- To intensify the study on the agricultural economics, and to improve the farm management technique in rural areas so that to find the way of reducing the cost of agricultural production.

■ To carry out agricultural extension through technical service to farmers, training classes, field demonstration and other measures.

■ To assist national and regional research programs through cooperation and support between research stations and institutes.

HIGHLIGHTS OF AGRICULTURAL RESEARCH AND DEVELOPMENT

In the past years, through the joint efforts of the members of this station the research work had been very productive and fruitful. For instance, a large number of rice varieties has been bred and officially released by this station, such that Taichung Sen 10, Taichung Sen (waxy) 1, Taichung (waxy) 70, Tai Sen 1, and Taichung 189 etc. They show higher yield, good quality and resistance to diseases. They are now widely cultivated by the farmers. Hybrid sorghum, Taichung 5 was bred in 1977, and has been widely grown in Taiwan. A heat tolerant tomato variety "Taichung Asveg

No.4" had been developed and officially released in 1989. It has an outstanding performance with regard to yield, resistance to disease, firmness of fruit, and heat tolerance. The research on grapes was directed to develop the technique of regulating the flowering time so that to harvest grapes 2-3 times a year. An outstanding technique of topgrafting temperate pears onto tropical pear, has been developed to produce temperate pears in the tropical lowlands of Taiwan. This method enabled farmers to produce fruit 40-50 days earlier than normal harvesting time. The DRF hydroponic system developed by this station for vegetable culture under tropical condition has been widely adopted by the farmers for a large scale commercial production of vegetables. Because of above mentioned achievement, this station received several research awards from the Agricultural Association of China, the Department of Agriculture and Forestry, Taiwan Provincial Government, and the Council of Agriculture, R.O.C.