

The Role of District Agricultural Research and Extension Stations in Crop Pest Diagnosis and Identification and Future Prospect - Taking Kaohsiung District Agricultural Research and Extension Station As an Example

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Abstract

Under the supervision of the Council of Agriculture, all the seven District Agricultural Research and Extension Stations (DARESSs) have been in charge of the management of local crop pests since their establishment mostly more than a hundred years ago. The DARESSs work on the research and extension of crop pest diagnosis and identification, the coordination of experts, and the implementation of pest control measures. With the mission of serving farmers in the forefront, the DARESSs provide crop disease and pest diagnosis consultation service, which helps facilitate agricultural production, improve farmers' livelihoods, and maintain food safety for consumers. In practice, whether a pest situation can be well-managed depends largely on the development and implementation of effective pest identification and control measurements by the DARESSs. The DARESSs therefore play a crucial and irreplaceable role in crop production and conservation of natural resources; they also have a great influence on the rising and decline of agricultural economy. In recent years, with higher risk of introducing foreign pests due to increased international trade, more emphasis has been put on the DARESSs' task of early detection and accurate identification of invasive pests. On the other hand, the impact of climate change on the incidence and spread of major/minor crop pests also raised the alarm of insufficient professionals in the DARESSs. To cope with the growing demand for professional manpower, we advocate an increase of plant protection officials in the DARESSs. Future solutions may also include the optimum use of available human resources and the improvement of competence of researchers in the DARESSs, as well as the promotion of closer cooperation with experienced researchers in the universities and research institutes.

Key words: diagnosis, identification, pest management, district agricultural research and extension station

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