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9. ABSTRACT To achieve its goal of reducing agricultural damage by rodents and other vertebrates, the Center functions as both a research and a training institution. Research at the Center includes studies on the taxonomy and distribution of rodent pests, laboratory testing and evaluation of rodenticides, laboratory and field studies of rodent food habits and feeding behavior, population ecology, and population estimation techniques. The Center also is active in training and extension, with pest management workshops, participatory and graduate training, and international cooperation.		
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Pest Research Profile

The Rodent Research Center

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On the campus of the University of the Philippines at Los Banos is the Rodent Research Center. This laboratory is engaged in a broad spectrum of research and training activities aimed at reducing vertebrate damage to agricultural crops in the Philippines and other countries in Southeast Asia.

The Rodent Research Center was established in June 1968 as a joint undertaking of the Government of the Philippines and the United States Agency for International Development (USAID). The Philippines is represented at the Center by personnel from the Bureau of Plant Industry and the College of Agriculture, University of the Philippines at Los Banos. Additional Philippine support and cooperation are furnished by the National Economic and Development Authority, the National Food and Agricultural Council, the National Science Development Board, and the Philippine Atomic Energy Commission. Personnel from the Denver Wildlife Research Center of the U.S. Fish and Wildlife Service, U.S. Department of the Interior represent USAID. The Center's activities are determined with the advice of a Board composed of senior members of each of the cooperating agencies.

Staff and facilities

The full time staff presently consists of 22 people: the Director, six biologists, one pharmacologist, one statistician, one librarian, two field technicians, one laboratory specialist, and various support personnel. Another biologist is assigned half-time to the Center to work principally on agricultural problems caused by birds.

The Center's buildings, all on the campus at Los Banos, provide about 500 m² of office, laboratory, and classroom space, including animal quarters. A 335-m² rat proof, bird-proof enclosure presently containing six small rice paddies is available for preliminary evaluations and damage studies.

Programme

To achieve its goal of reducing agricultural damage by rodents and other vertebrates, the Center functions as both a research and a training institution. Its programmes emphasize, not only applied research to find and evaluate effective control methods, but also consultation, demonstrations, and training to encourage rapid use of new findings and to assist in manpower development throughout Southeast Asia.

Research and evaluation

Research at the Center has covered a broad range of topics, including studies on the taxonomy and distribution of rodent pests, laboratory testing and evaluation of rodenticides, laboratory and field studies of rodent food habits and feeding behaviour, population ecology, and population estimation techniques. During the past year, work centred around the development and evaluation of improved techniques for sustained baiting with chronic toxicants (anticoagulants) in growing rice. Studies were conducted on bait formulation and acceptance,

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bait station design and arrangement, and field evaluation of sustained baiting at the small farm and village levels. Work planned for the future includes study of the competition among different rat species in lowland rice; the ecological relationships between rat populations and marsh habitat; continued evaluation of candidate rodenticides, bait additives, and chemosterilants (in cooperation with the Denver Wildlife Research Center); and assessment of rodent damage problems and new control methods in several agricultural crops. The Center has also begun studies on the food habits of several Philippine pest bird species and will expand its work on these and other vertebrate pests in the future.

Training and extension

The Center has been increasingly active in training and extension within recent years. A variety of people – farmers, government officials, chemical company representatives, professional agriculturists, and students – visit each year. In 1973, for example, about 300 visitors from 25 countries were briefed on activities, given advice and literature on rodent control, or helped in programme planning. Center staff members also provided resource lectures, laboratories, or demonstrations on rodent control to over 2,000 extension staff and key farmers from the Philippines and other countries in 1973. Training activities have received continued emphasis at the Center during 1974.

Pest management workshops

Recently, three international workshops involving 85 students from eight Asian countries were sponsored jointly by the Rodent Research Center, the Denver Wildlife Research Center, and USAID. These 12-day sessions were aimed chiefly at potential research personnel concerned with management of vertebrate pest problems. The schedule in each country included about 7 days of classroom lecture and discussion; 2 days of laboratory work dealing with toxicology, bioassay, and species identification; and 3 days of field exercises, including trapping in rice fields and surrounding habitats, making carcass examinations, testing bait acceptance, and conducting damage surveys in rice. A series of three follow-up workshops, more closely focused on the problems of operational rodent control, were sponsored by the Government of Indonesia and USAID and were conducted in Indonesia with the participation of Center staff members.

Participatory training

Participatory research training was initiated at the Rodent Research Center in 1972. In this programme, trainees from Asian countries, depending upon their background and objectives, spend from 3 to 6 months attached to the Center staff and participate in a variety of on-going research and evaluation activities, work independently on projects related to pest problems in their own countries, or develop work plans or project proposals for presentation to their parent agencies. Participants in this programme have received support from United Nations Development Programme projects, from USAID Missions, and from the governments of the Netherlands, Indonesia, Nepal, South Korea, and South Vietnam.

Graduate training

The opportunity for Master's Degree work in vertebrate pest management is available through the University of the Philippines at Los Banos. Graduate students have office space at the Center and make use of its facilities in conducting their research; senior staff members or other university faculty members may serve as graduate advisors. Five students have completed degree work under this programme, and 12 more are currently involved. Scholarships funded by the Philippine National Economic and Development Authority and developed through the cooperation of the Rodent Research Center Board are available to provide full support to qualified Philippine students. Opportunities also exist for international students in this programme.

International cooperation

Center staff members have participated in several cooperative research projects or problem surveys in five other Southeast Asian countries. Although support has been limited thus far, such work is expected to play an

increasingly important role in the Center's programme. Because many of the countries of tropical Asia have similar agricultural problems and vertebrate pest species, much may be gained by identifying common problems and working together to solve them.

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