Bringing the benefits of scientific agricultural advancement to a wider audience

FFTC publications and website on Asian agriculture

FFTC Publications

The Center's publication program is committed to ensure that the dissemination of agricultural information is focused on the right problem, is relevant and useful, is involving the right users, and is not duplicating the information disseminated by other organizations. The most recent and relevant agricultural technology and information collected by the Center through its various activities are documented and published in the forms of technical and extension bulletins, book series, newsletters, and a yearly publication on statistical agricultural indices in the region.

MAJOR AGRICULTURAL STATISTICS

Another issue of this regular annual periodical was published in 2005. It gives an overview of Asian agriculture by showing important agricultural statistics and indicators, including food availability, self-sufficiency rate, and farm size in 21 Asian and Pacific countries. As well as the paper publication, an electronic version is available free of charge on the Center's website and database.

COMPOST PRODUCTION: A MANUAL FOR ASIAN FARMERS

This book explores everything about composting, particularly on how it is done, and the physical, chemical, and biological changes inherent in the process. This Manual will be a useful source of information, especially for small-scale farmers and extension workers in Asia, toward coming up with ecologically sound agricultural practices for the sustainable agricultural development of the region.

BULLETINS

Organic farming for sustainable agriculture

Organic farming as a key to sustainable agriculture has captured the attention of many countries worldwide. Consumers' concern with food quality and safety, as well as the conservation and protection of the environment, have stimulated demand for organic products and intensified research, development and extension efforts on organic agriculture globally.
The following Bulletins discuss recent trends and development in organic agriculture in the Asian region.

EB 558 Organic farming for sustainable agriculture in Asia with special reference to Taiwan experience
- S.C. Hsieh

EB 559 Improving plant protection for the development of organic agriculture in Taiwan
- C.Y. Lin

Nonchemical management of vegetable diseases
Vegetables are important to our daily diet, as they are our major source of vitamins, minerals and dietary fiber. However, improper use of agricultural chemicals, especially the excessive use of pesticides and fungicides in growing vegetables, not only results to residue contaminated products but also causes environmental problems. This Bulletin discusses nonchemical management to control soil-borne diseases in vegetable crops.

EB 560 Management of crop diseases with agricultural waste
- J.W. Huang

Database on alien invasive species
Recently, the rate of introduction of invasive alien species has increased along with increases in global trade and human travel. The economic damage and ecological impacts caused by these invasive alien species have also been increasing. Sharing of recent information on invasive alien species is deemed necessary to help resolve such problems and minimize the damage caused by these species.

EB 561 Invasive species, databases and decision making: critical Issues
- G. Norton

EB 562 Current status and management of invasive species in Taiwan
- Y. Yeh

EB 563 Development of the Asian-Pacific Alien Species Database (APASD)
- M. Matsui

Biotechnology and trade
Developing countries could benefit significantly from the development and use of modern biotechnology in agriculture within a proper biosafety regime. Rapid technological developments have resulted from molecular biology-based research. These rapid developments, coupled with changing consumer demands and preferences caused by a fear of genetically modified (GM) food, are pushing governments to rethink existing regulations and policies. These Bulletins discuss the trade potentials of agricultural biotechnology.

EB 564 Marching toward the market: the business potential of agricultural biotechnology in Taiwan
- P.C. Liou

EB 565 Development and application of biofertilizers in Taiwan
- C.C. Young

EB 566 Current status of transgenic approach for the control of papaya ringspot virus
- S.D. Yeh

Pathogen-free banana and plantain repositories
Given the benefits and great potential of the banana industry in the Asian and Pacific region, proper maintenance of pathogen-free foundation/seedling nurseries is necessary. This Bulletin discusses virus-indexing technology toward the establishment of repositories for banana germplasm and as centers for the multiplication and dissemination of planting materials.

TB 170 Banana virus-indexing technology and disease management
- H.J. Su

Soil and water conservation
These Bulletins are useful reference materials for a better understanding of innovative practical techniques for and theories on the conservation of soil and water resources in the agricultural natural environments. The transfer and dissemination of these new innovative technologies are deemed vital in improving agricultural production, providing better livelihood opportunities to resource-poor farmers, and preventing further degradation of the natural resource base for agriculture.

EB 567 Newly developed technologies for soil and water conservation
- E.J. Sadler

EB 568 Soil erosion, measurement, and control techniques
- J.D. Choi

Small-farm mechanization
Practical application of existing systems and technologies influencing the adoption and utilization of small farm machineries are discussed in the following Bulletins. Topics include: factors influencing the successful development, adoption, and utilization of small farm mechanization systems and technologies; problems, issues, and constraints
in developing and introducing small farm mechanization systems and technologies to the end users; and recommendations to enhance small farm mechanization development and adoption, particularly in less-developed countries.

**EB 569** Technology development process and experiences on small farm mechanization in Taiwan  
- D.S. Fon

**EB 570** Technology transfer strategies and experiences for small farm mechanization technologies in the Philippines  
- F.O. Paras, Jr.

**Whitefly management and control**
These Extension and Technical Bulletins discuss the characteristics of whitefly, particularly the *Bemisia* sp., and the crop protection management needed to effectively keep track and control this pest species and its associated plant diseases from spreading to new crops and locations.

**TB 171** *Bemisia tabaci*, from molecular to landscape  
- P. de Barro

**EB 571** Survey of whiteflies and their transmission of plant viruses in Taiwan  
- C.C. Ko

**Technology dissemination**
This Bulletin discusses the "human aspect" of the technology transfer process. It also explores innovative methods of disseminating new technology considering the human-technology-environment interaction.

**EB 572** From free of charge to payable services: agricultural technology transfer considering the influence of human factors  
- H.S. Lin

**Swine production efficiency**
These Extension and Technical Bulletins discuss the need to promote overall farm efficiency in swine production amid global trends and developments, particularly to improve swine reproductive efficiency and nutrient utilization; minimize the impact of the production system on the environment; improve the well-being and reduce animal stress; reduce the prevalence of pre- and post-food safety pathogens in meat; improve disease prevention and control; and meet consumer satisfaction and preferences for value-added pork products.

**TB 172** Genomic pig breeding for growth amd meat quality  
- M.C. Wu

**EB 573** Litter-bed pig house: a system for caring for both the animal and the environment  
- S.Y. Sheen

**Pathogen-free banana seedlings**
This Bulletin shares recent technologies and experiences particularly in the cultivation of pathogen-free banana seedlings, management of insect vectors, and disease diagnosis.

**EB 574** Production and cultivation of pathogen-free banana tissue culture plantlets in Vietnam  
- Le Thi Thu Hong

**PRACTICAL TECHNOLOGY LEAFLETS**
The success or failure of technical development programs often depends as much on the quality of extension support as on the technology itself. Hence, a large number of the Center's work programs were designed to support and strengthen the region's national extension systems. In an effort to establish a new system for the collection and dissemination of practical technologies, the Center has taken advantage of the strength of existing national extension systems in the Asian and Pacific region by establishing a regional extension network covering eight countries, namely, Indonesia, Japan, Korea, Malaysia, Philippines, Taiwan, Thailand, and Vietnam.

In 2005, with the cooperation of eight country coordinators under this regional extension network, FFTC published a total of 27 Practical Technology leaflets. These leaflets are fact sheets of technology for small-scale farms in Asia, and are intended primarily as an information resources for Asian extension systems.

- **2005-1** Leaf meal from alternative sources
- **2005-2** Bamboos: suitable for rehabilitating mined-out areas
- **2005-3** New machines for processing cassava roots into dried cassava grates
- **2005-4** Use of predatory earwigs to suppress Asian corn borer
- **2005-5** Farmer-designed elevated goat pens and contraptions to ease manure collection
- **2005-6** Mechanized village-level handmade papermaking
- **2005-7** Managing Phytophthora disease of durian
2005-8  Simple apparatus for the measurement of 222Rn concentration in surface water
2005-9  Purification of wastewater from shrimp pond using mangroves
2005-10 Lactic acid bacteria strains suitable for high quality silage production in the tropics
2005-11 Sugarcane syrup in pig diet
2005-12 Postharvest pest control using aromatic plants
2005-13 Vacuum frying for fruit crispy processing
2005-14 Processing of seaweed taffi
2005-15 Casapro: Alternative feed for beef cattle
2005-16 Processing technology of grated cassava and cassava flour
2005-17 Processing of fermented rice straw
2005-18 Krisa, salacca crispy
2005-19 Processing of banana flour
2005-20 Processed product of pineapple (Nata de Pina)
2005-21 Preservation of cut flower by drying and formula media
2005-22 Multi-purpose sowing machine
2005-23 Herbal extract against fruit flies
2005-24 Fruit-flavored soybean milk
2005-25 Wood vinegar
2005-26 Paper made from durian rinds
2005-27 Line weaving spider as biological control proof levee and simple pavement

Cooperators in the Leaflet Project
In carrying out the leaflet project, the Center is indebted to a group of cooperators from eight Asian countries. These cooperators sent in the technical information which was published in the leaflets. They also helped to assess and translate the materials, and distribute them to users in their own countries.

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**FFTC Website on Asian Agriculture**

In 2001, the Center has made available free of charge on its website and database the full text of its publications for the last 15 years. Since then, the FFTC website and database has become an important information resource on Asian agriculture, particularly by the national extension systems of the region.

In the five years since it first came on-line, the level of use has tended to double each year. The website registered 76,000 requests in 2000; 417,000 requests in 2001; 822,472 in 2002; 1.6 million requests in 2003; 2.3 million requests in 2004; and 3.02 million requests in 2005. This growing use of the FFTC website and database gave a larger number of people access to the Center's technical information, at no extra cost to the Center.

Based on a project conducted in 2003 on the evaluation of use of its website and database, the Center is now monitoring in more detail the way in which visitors are using the FFTC database. While it has been able to count the number of pages opened ("hits") ever since the database first came into use, the Center can now monitor which documents are being selected, and relate these figures to the number of each document available. FFTC will be able to use these lists of favorite topics as an indication of users' information needs, and therefore a guide as to which topics might be emphasized in future years. Postharvest technology seems to be a topic many readers find of particular interest, as is vegetable production under structures, and compost production and use.

For further information, contact:
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**Use of the FFTC website and database, 2000-2005**

- Total 2000: 75,896
- Total 2001: 417,082
- Total 2002: 822,472
- Total 2003: 1,672,680
- Total 2004: 2,311,040
- Total 2005: 3,026,909