



5 January 2007

Climate Change becoming stronger on the agenda

Climate Change: A Lesson from History

Weak winter monsoon rains may have contributed to the decline of both China's Tang Dynasty and the Mayan civilization in Mexico, suggests an article published in *Nature* (4 January). The authors speculate that global climate change, causing a tropical rain belt to migrate, may have been a factor — with the same system affecting monsoon rains in Southeast Asia today.



During the eighth and ninth centuries, shifts in an equatorial area of low pressure, known as an inter-tropical convergence zone may have led to weakened winter monsoon rains. Ac-

According to the article, dynastic changes often involved popular uprisings associated with crop failure and famine which can be related to periods of reduced rainfall. Today the same intertropical convergence zone shifts in response to El Nino events, which weaken monsoon rains in Southeast Asia.

A team of Chinese and German palaeoclimatologists analysed material from Lake Huguang Maar, a natural sediment trap in Southeastern China. They used the magnetic properties and titanium content of the sediment core, spanning a 16,000 year period, as indications of the strength of the winter monsoon winds.

A comparable pattern to that found in China was seen in Cariaco basin sediment off the Venezuelan coast, indicating that a similar drought may have hit nearby Mexico in the late eighth century. This coincided with the downfall of the Mayan civilization, around the same time period.

The article adds to the ongoing international discussion on climate change and its impacts - issues that are becoming more and more important to the agricultural research and development community. Regardless of the limitations that historical comparisons typically have, such studies do highlight the sensitive interactions between climate, environment and human livelihoods.

During its last Annual General Meeting in Washington DC, the CGIAR announced initiatives to improve cooperation between scientists working on crops and those working on climate, and to intensify research efforts to make agriculture more resilient to climatic stress. "Food supplies and food security, and protecting agriculture from the impacts of climate change should be our immediate concerns", states the Intergovernmental Panel on Climate Change (IPCC).

Generating effective technologies and "climate ready" crops that can withstand higher temperatures, water logging and drought, have been a part of AVRDC's research portfolio for several years. Issues related to climate change are likely to become even more important in the future.

Adapted from SciDev.Net (<http://www.scidev.net>)
4 January 2007

For further information:

IFPRI FORUM: How Will Agriculture Adapt to a Shifting Climate?
December 2006
<http://www.ifpri.org/pubs/newsletters/ifpriforum/if200612.asp>

CGIAR News December 2006
http://www.cgiar.org/enews/december2006/story_02.html#

CGIAR & Climate Change
<http://www.cgiar.org/impact/global/climate.html>

ILRI: Mapping climate vulnerability and poverty in Africa: where are the hot spots of climate change and household vulnerability?

New Publications (Articles & Books) Received by the Library

International Institute of Tropical Agriculture (2006). *Biological alternatives to harmful chemical pesticides*. Cotonou: IITA. 24 pp.

Marsh, S.P., MacAulay, T.G., Van Hung, P. (2006). *Agricultural development and land policy in Vietnam*. Canberra: ACIAR. 272 pp.

Ros, C., Guerrero, M.M., Martinez, M.A., Barcelo, N., Guirao, P. (2005). Resistant sweet pepper rootstocks integrated into the management of soil borne pathogens in greenhouse. *ACTA HORTICULTURAE*. no.698:305-310.

Sheu, Z.M., Wang, T.C. (2005). Physiological races and IGS-RFLP haplotypes identification of *Fusarium oxysporum* f. sp. *lycopersici* isolates in Taiwan. *PHYTOPATHOLOGY*. v.95(6):S95.

Brunner, P.C., Frey, J.E. (2004). Isolation and characterization of six polymorphic microsatellite loci in the western flower thrips *Frankliniella occidentalis* (Insecta, Thysanoptera). *MOLECULAR ECOLOGY NOTES*. v.4:599-601.

Jones, J.B., Lacy, G.H., Bouzar, H., Stall, R.E., Schaad,

N.W. (2004). Reclassification of the xanthomonads associated with bacterial spot disease of tomato and pepper. *SYSTEMATIC AND APPLIED MICROBIOLOGY*. v.27:755-762.

Srinivasan, R., Uthamasamy, S. (2004). Rapid plant screening technique – a novel tool for the evaluation of antixenosis resistance mechanism of tomato accessions to whitefly in laboratory condition. *RESISTANT PEST MANAGEMENT NEWSLETTER*. v.14(1):4-5.

Calder, P.C., Field, C.J., Gill, H.S. (2002). *Nutrition and immune function*. Wallingford: CABI Publishing. x, 426 pp.

Gubar, S.I., Konstantinova, E.P. (1991). A new method for the purification and determination of the total alkaloids in a culture of *Rauwolfia* tissue. *CHEMISTRY OF NATURAL COMPOUNDS*. v.27(1):132-133.

Kodde, D.A., Palm, F.C. (1986). Notes and comments wald criteria for jointly testing equality and inequality restrictions. *ECONOMETRICA: JOURNAL OF THE ECONOMETRIC SOCIETY*. v.54(5):1243-1248.

- Source: Fang-chin Chen/Library Services Unit

New Popular Magazines Are Now Available in the Library

National Geographic (English) - January 2007

Photo Techniques - January/February 2007

The Economist: Don't mess with Russia – 16th-22nd December 2006

The Economist: Happiness – 23rd December 2006-5th January 2007

- Source: Fang-chin Chen/Library Services Unit



Recommended Web Link of the Week: WORLD WEATHER

TuTiempo.net – a website focusing on the Weather. It includes global information on Weather forecasts, Climate, Astronomy and Hotels. You can choose a region, country or location to view the weather forecast, or search the climate and historical weather records for over 8000 weather stations worldwide.

Please visit <http://www.tutiempo.net/en/>.

- Source: Fang-chin Chen/Library Services Unit

Food for Thought

Indigenous Vegetables make their way in the news. The International Conference on Indigenous Vegetables in Hyderabad less than a month ago that we reported on has been echoed in a number of print and online media. The latest clip mentioning AVRDC comes from the

Indian EXPRESS, a Mumbai based national newspaper, that devotes a separate page for rural and agricultural news. The article can be found in the news section of AVRDC's intranet.

- Source: CTO

New Staff

Dr. Anna Dibiyantoro as Project Site Coordinator for the ACIAR-funded project "Integrated Disease Management (IDM) for anthracnose, phytophthora blight, and whitefly-transmitted geminiviruses in chilli pepper in Indonesia" effective 1 January 2007. She has been appointed under a consultancy contract for an initial period of one year with duty station in Tegal, Central Java, Indonesia.

Dr. Dibiyantoro, a national of Indonesia, has a PhD degree major in Environmental Biology and IPM from the University of Newcastle-upon-Tyne in UK. She was a researcher at the Indonesian Vegetable Research Institute (IVEGRI) before accepting our position offer.

Dr. Dibiyantoro will work closely with representatives of NARS in Western and Central Java under the supervi-

sion of the project manager, Dr. Paul Gniffke. Her main tasks are to provide coordination and facilitation services for the numerous activities in the project, and cooperate with project partners in implementing and monitoring activities, involving regular travel to target production areas in the Brebes/Tegal, Magelang, and Rembang areas of Central Java.

- Source: Dr. Thomas A. Lumpkin/Director General



The Center gives a warm welcome to Mr. Kuo Liang-tsai 郭亮材, Field Assistant at Crop and Ecosystem Management Unit. Mr. Kuo reported for

duty on 1 January 2007. He can be contacted at ext. 413.

- Source: Felisa Wang/ASU

Farewell

Ms. Su Mei-yueh (Humie) 蘇美月, Aide at the Food and Dormitory Services Unit, will retire on 12 January. Humie has served the Center for more than 31 years. We express our deep appreciation for her hard work during the past years with the Center. We wish her good health and much happiness! Humie also conveys her deepest and heartfelt thanks to all those who worked with her to make her life with the Center very pleasant and memorable. Her special thanks will go to her supervisors—Lydia Wu, Drs. Yin-Fu Chang and Thomas Lumpkin.

任職餐宿服務室的蘇美月女士將於元月12日屆齡退休，感謝蘇女士31年多來對亞蔬的辛勤付出，在此特別祝福退休後的她身體健康精神愉快！

蘇女士也特別藉亞蔬周刊一角，表達她對亞蔬的不捨之情以及對所有愛護她的同仁、長官的感謝之意！尤其是龍溥經主任的照顧讓她銘感五內。

- Source: Felisa Wang/ASU