

# RITAM Newsletter No 46 – February 2007

## 1. New prophylactic compound from Malagasy plant

We congratulate RITAM members Prof Philippe Rasoanaivo and Prof Dominique Mazier on the discovery of a new molecule from a Malagasy plant, which specifically inhibits the liver stages of malaria parasites. Tazopsine was isolated from the plant *Strychnopsis thouarsii*, which is a traditional remedy for malaria in Madagascar. It completely blocks the development of *P. falciparum* in cultured hepatocytes *in vitro*. Furthermore, oral administration of the derivative NCP-tazopsine completely protected mice from a sporozoite challenge.

This is a very important discovery opening the possibility of a new antimalarial prophylactic, with low risk of resistance because it attacks the liver stages and not blood stages of the malaria parasites.

The collaboration between Prof Rasoanaivo and Prof Mazier started after they met at the first RITAM meeting in Moshi in December 1999. Prof Mazier had developed a model for culturing the liver stages of malaria parasites *in vitro* and was keen to test plants which might act on this stage. Prof Rasoanaivo had discovered several interesting plants in Madagascar and was keen to test them on this model. The rest, as they say, is history! This is just one example of a very fruitful collaboration which was initiated through RITAM.

The full text article is available free online:

Carraz M, Jossang A, Franetich JF, Siau A, Ciceron L, Hannoun L, Sauerwein R, Frappier F, Rasoanaivo P, Snounou G, Mazier D (2006). A Plant-Derived Morphinan as a Novel Lead Compound Active against Malaria Liver Stages. *PloS Medicine* 3 (12):e513. [www.plosmedicine.org](http://www.plosmedicine.org)

Further coverage: “Tree bark molecule may combat malaria”

<http://www.scidev.net/News/index.cfm?fuseaction=readNews&itemid=3316&language=1>

## 2. Traditional, Complementary And Alternative Medicine: Policy & Public Health Perspectives

**20% DISCOUNT available if ordering before 10<sup>th</sup> February!**

This new book edited by RITAM Chairman Prof Gerry Bodeker has just been published. It is the first book to address public health issues in traditional, complementary and alternative medicine (TCAM). It presents state-of-the-art reviews of TCAM research in a range of priority public health areas such as malaria and HIV and in such common ailments as skin conditions and orthopaedic injury in developing countries. Contributions analyse policy trends in areas such as financing of TCAM and education and training in this field as well as selected case studies of model TCAM projects.

Important chapters on research methodology, ethical and safety issues, and intellectual property rights pertaining to traditional medicine are also presented.

Public financing for TCAM is a test of the commitment of governments, and the book includes an analysis from the World Health Organization's (WHO) Global Atlas data of the worldwide trends in this area. With safety concerns foremost in the minds of both policy makers and the public, the book offers a global overview of policy and legislative trends in this field as well as an important set of guidelines for pharmacovigilance and TCAM products.

In case you or any colleagues may be interested in this, the publisher's website is:

<http://www.icpress.co.uk/books/medsci/p419.html> (or click on the title above)

**They are offering a 20% discount on orders placed before 10 February 2007**, by quoting the discount code ICP419.

### **3. *Zambian antimalarial plants***

RITAM member Rev Dennis Fowler has written an extremely comprehensive review of Zambian plants with potential for use as antimalarials. He draws on his experience while working in Zambia for many years, and also on a wide range of literature, including very rare ethnobotanical documents. This review is now available to be consulted on the RITAM website, in the "publications" section:

<http://www.giftsofhealth.org/ritam/public.htm>

### **4. *Forthcoming conference of interest***

XVIIth International Congress for Tropical Medicine & Malaria (ICTM2008)

**Theme:** Tropical Medicine and Welfare: from Bench to Field

**Date:** September 29-October 3, 2008

**Venue:** International Convention Center Jeju, Jeju Island, Korea

**Website:** [www.ictm17.org](http://www.ictm17.org)

**Secretariat:** INSESSION International Convention Services, Inc.  
3rd Fl. 672-35 Yeoksamdong, Gangnam-gu, Seoul 135-915, Korea

**Phone:** +82-2-3452-0507/+82-2-3471-8555 **Fax:** +82-2-521-8683

**E-mail:** [ictm17@insession.co.kr](mailto:ictm17@insession.co.kr)

### **5. *Websites of interest***

WHO has published new malaria treatment guidelines and these are available online at:

<http://www.who.int/malaria/docs/TreatmentGuidelines2006.pdf>

New RITAM member Prof Ginsburg runs a comprehensive website on the biology, physiology and biochemistry of the erythrocytic stages of *P. falciparum* :

<http://sites.huji.ac.il/malaria/>

RITAM member Dr Olufemi Rabiou has recently launched a website:

[www.alternativemedicineandscience.com](http://www.alternativemedicineandscience.com) as a news and information service on complementary and alternative medicine (CAM). The website seeks to promote

collaboration among scientists, professionals and ordinary persons interested in CAM. Dr Rabiou would be interested in your feedback on the website.

The Journal BMC complementary and alternative medicine is available free online at the following web address:

<http://www.biomedcentral.com/bmccomplementaltermmed>

The web-journal "ID21 health" has produced a recent issue focussing on malaria:

<http://www.id21.org/health/index.html>

White House Summit on Malaria

You can hear speeches from the White House Summit at:

[http://www.kaisernetwork.org/health\\_cast/player.cfm?id=2959](http://www.kaisernetwork.org/health_cast/player.cfm?id=2959)

The "President's Malaria Initiative" has committed funds to 15 African countries, aiming to reduce malaria mortality by 50%.

## **6. Recent Publications of Interest**

**The following are recent publications by RITAM members:**

Adebayo A. Gbolade (2006) Insecticidal use of Nigerian-grown plants. *Discovery and Innovation* 18 (2), 123-140.

Carraz M, Jossang A, Franetich JF, Siau A, Ciceron L, Hannoun L, Sauerwein R, Frappier F, Rasoanaivo P, Snounou G, Mazier D (2006). A Plant-Derived Morphinan as a Novel Lead Compound Active against Malaria Liver Stages. *PloS Medicine* 3 (12):e513. [www.plosmedicine.org](http://www.plosmedicine.org)

Gego A, Silvie O, Franetich JF, Farhati K, Hannoun L, Luty AJF, Sauerwein RW, Boucheix C, Rubinstein E, Mazier D (2006). New Approach for High-Throughput Screening of Drug Activity on Plasmodium Liver Stages. *Antimicrobial Agents And Chemotherapy*, 50(4): 1586–1589.

Bart Knols & Matt Thomas (2006). Fungal Entomopathogens For Adult Mosquito Control – A Look At The Prospects. *Outlooks on pest management*, 17(6): 257

**These are other publications of interest:**

Bussmann RW, Sharon D (2006). Traditional medicinal plant use in Northern Peru: tracking two thousand years of healing culture. *Journal of Ethnobiology and Ethnomedicine* 2006, 2:47. Available online at:

<http://www.ethnobiomed.com/content/pdf/1746-4269-2-47.pdf>

<http://www.biomedcentral.com/content/supplementary/1746-4269-2-47-S1.pdf>

Vinay R. Kamat (2006). "I thought it was only ordinary fever!" Cultural knowledge and the micropolitics of therapy seeking for childhood febrile illness in Tanzania', *Social Science & Medicine* 62(12), p2945-2959

K. Kamsuk, W. Choochote, U. Chaithong, A. Jitpakdi, P. Tippawangkosol, D.

Riyong and B. Pitasawat (2007). Effectiveness Of Zanthoxylum piperitum-Derived Essential Oil As An Alternative Repellent Under Laboratory And Field Applications. Parasitology Research, 100(2): 191-427.

<http://www.springerlink.com/content/m637413j48001p30/?p=fc56f4fbbebf4ddda504fb51d73f09a6&pi=19>

Nature supplement 1 (2006). Determining the global health impact of improved diagnostic technologies for the developing world.

Joseph Njau, Catherine Goodman, S. Patrick Kachur, Natasha Palmer, Rashid Khatib, Salim Abdulla, Anne Mills and Peter Bloland (2006). Fever treatment and household wealth: the challenge posed for rolling out combination therapy for malaria', Tropical Medicine and International Health 11(3): 299-313,

Jean-Pierre Unger, Umberto d'Allesandro, Pierre De Paepe and Andrew Green (2006). 'Can malaria be controlled where basic health services are not used?', Tropical Medicine and International Health 11:3, pp 314-322.

Wiesman Z, Chapagain BP (2006). Larvicidal activity of saponin containing extracts and fractions of fruit mesocarp of *Balanites aegyptiaca*. Fitoterapia 77: 420–424.

WHO-AFRO (2006). The Health of the People: The African Regional Health Report.

## 7. New Members:

We welcome the following new members who have joined since the last newsletter:

Prof Hagai Ginsburg, Department of Biological Chemistry, Hebrew University, Jerusalem. Working on functional genome of *Plasmodium falciparum*.

*With very best wishes,*

*Yours ever,*

*Merlin Willcox (Secretary)*