

RITAM Newsletter No 38 – July 2005

Dear Colleagues,

1. Clinical Trial Guidelines

A workshop on “Methodology for clinical trials on traditional medicines” was organised by the “Programme Pal+” in Paris on 9th – 10th May. The organisers were Prof Michel Sauvain, and Prof Bertrand Diquet, and the aim was to develop guidelines for Pal+ on clinical trials of herbal antimalarials. The majority of participants were clinical researchers from France and Francophone Africa. There seemed to be a consensus that clinical trials could and should be used early on in the investigation of a herbal antimalarial, and are more likely to yield useful results than screening *in vitro* or in mice. Merlin Willcox (RITAM secretary) was invited to present some of the work done by RITAM, including recent trials in Madagascar and Mali. However, some of the participants felt that observational studies were inadequate, because of the lack of randomisation and control groups.

Various options were discussed, but the majority of participants suggested that asymptomatic carriers of malaria should be enrolled as volunteers. In this way, the herbal medicine could be compared to placebo in a cross-over study. So a healthy patient, who happened to be a carrier of *P. falciparum*, would be treated for one week with the herbal medicine, and for one week with placebo (or vice-versa). Parasitaemia would be taken daily, and the average parasitaemia over each week would be compared, to see if the herbal medicine had any impact on it.

The disadvantage of such an approach is that it only looks at the effect on parasitaemia, not on preventing or treating disease. The immune response to malaria is poorly understood, and the response of a healthy asymptomatic carrier to a treatment may not be the same as that of a patient who is ill with malaria. However such a system might be useful as a screening tool, or for evaluating herbal prophylactics. Discussions will continue on refining this suggested protocol.

The amazing thing, from our point of view, is that so many conventional doctors and malariologists are now actually seriously discussing clinical trials of antimalarials. This seemed unimaginable even 6 years ago, when RITAM was founded!

2. TDR takes interest in Traditional Medicine

The Special Programme for Research and Training in Tropical Diseases (TDR) has been facilitating an initiative on Product Research and Development in Africa (PRADA). Development of Traditional African Medicinal products is one of its priorities, decided in a workshop in Nairobi in August 2004. The challenge is to advance candidate products to clinical testing, manufacturing and access. A Task Force on Traditional African Medicines is undertaking a situational analysis to gather data for a product concept paper. Dr Andrew Kitua, chair of the RITAM clinical development group, is a member of the PRADA strategic planning group. [Source: TDR News, February 2005]

3. RITAM model replicated for TB

A new network is being formed, using a similar structure to RITAM, to investigate traditional medicines for TB. The network is a partnership between the Oxford International Biomedical Centre (OIBC), the Global Initiative for Traditional Systems of Health (GIFTS), and Kew Gardens. It was launched at the OIBC conference in Oxford in April, and has been christened “SOPAT” (Selection Of Plants Against Tuberculosis).

The project is planned in two phases. The first phase involves gathering ethnobotanical data on the traditional use of medicinal herbs for treatment of TB in different countries. The data will be compared and analysed to look for plant genera common to the lists for different countries, and it is anticipated that these will be most likely to contain active ingredients. The second phase will include bioassay and chemical investigations on plants short-listed in Phase 1.

Members are asked to contribute ethnobotanical data to the database, which will then be used to select plants for further study. If any RITAM members are interested in participating in this project, please contact merlinwillcox@doctors.org.uk

4. Global Atlas of Traditional Medicine

The WHO Global Atlas on Traditional, Complementary & Alternative Medicine, edited by Prof Gerry Bodeker, Chair of RITAM and GIFTS, has now been published by the WHO Kobe office. There are two volumes, one with maps showing the pattern of use of traditional medicines, and the regulatory situation in different countries; and a text volume with chapters on the traditional medicine situation in representative countries within each continent.

For more details, see:

<http://www.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=1&codcol=15&codcch=614#>

5. Book Review

Silvia Blair Trujillo, Beatriz Madrigal (2005). *Plantas antimaláricas de Tumaco, Costa Pacífica colombiana*. Medellín: Editorial Universidad de Antioquia.

Dr Blair is a medical doctor from the University of Antioquia in Medellin, Colombia, and a valued member of RITAM. She has dedicated much of her professional career to investigating Colombian herbal remedies for malaria. This book presents the results of an in-depth, high quality ethnobotanical and ethnomedical study conducted with traditional healers in the region of Tumaco on the Pacific Coast of Colombia. Although the study was initiated in 1988, the results have not been published until now in order to preserve the intellectual property rights of the healers. Sadly, many of them have now died, without finding heirs to their knowledge. This information has now been published in order to preserve their traditional knowledge, for the inhabitants of malaria-endemic areas of Colombia.

195 plant species are used for the treatment of malaria in this area, of which 122 are discussed in depth. Of these, 30 are used as foods, both to help treat and to prevent the disease. For each plant, botanical, ethnobotanical, chemical, and pharmacological information is presented. This includes the results of in vitro tests conducted by the research team themselves. The ethnobotanical information is detailed, including the parts of the plants used, the methods of harvest, preparation, dosage, and the name of the informant. It is clear that a medical doctor was involved in the research team, because the depth of information is much greater than in the majority of ethnobotanical studies. There are also copious references to previously published information on these plants. Many of the plants are illustrated with full colour photographs. There is a very good index of the plant species, and also of the chemical compounds in them.

Many of the plants are unique to Latin America, but some in fact originate from other countries, and are pantropical plants. Some are also used for malaria in Africa and Asia. Therefore this book is a gold-mine of information for anyone interested in ethnobotany and malaria. My one regret is that the authors have not presented a summary of the most frequently used plants, or given their opinion as to which of the plants are the best candidates for development as standardised herbal medicines.

The book, which is in Spanish, can be ordered direct from the publisher: www.editorialudea.com (e-mail: comunicaciones@editorialudea.com or ediudea@carios.udea.edu.co).

[Review in press, Journal of Tropical Medicinal Plants]

6. Funding opportunities

TWAS RESEARCH GRANTS (Academy of Sciences for the Developing World, TWAS)

Research grants of up to US\$10,000 each are offered to scientists from developing countries of proven ability for research projects in Biology, Chemistry, Mathematics and Physics. The grants are intended to cover the cost of specialised equipment, essential consumable material and scientific literature. Grants are normally provided for a period of one year, but requests for additional grants to allow for an extension of a successful project will be considered by the Academy.

Applicants should be nationals of developing countries with an advanced academic degree and some research experience. They should hold positions at universities or research institutions in developing countries. Preference is given to young scientists under the age of 45 years from those developing countries where basic tools of research are seriously lacking.

DEADLINES: 1 July and 1 December each year.

CONTACT DETAILS: TWAS c/o ICTP, Strada Costiera 11, Trieste 34140, Italy

Tel: +39 040 2240 327 Fax: +39 040 224 559 Email: info@twas.org

Click here for more information: http://www.twas.org/mtm/RG_Form

7. Recent Publications of Interest

The following are recent publications by RITAM members:

Adzu B, Abbah J, Vongtau H, Gamaniel K (2003). Studies on the use of *Cassia singueana* in malaria ethnopharmacy. J Ethnopharm 88: 261-7.

Asase A, Oteng-Yeboah AA, Odamtten GT, Simmonds MSJ (2005). Ethnobotanical study of some Ghanaian anti-malarial plants. J Ethnopharmacol 99(2): 273-9.

M. Vigneron, X. Deparis, E. Deharo, G. Bourdy (2005). Antimalarial remedies in French Guiana: A knowledge attitudes and practices study. Journal of Ethnopharmacology 98(3): 351-360

The following are other recent publications of interest:

Heinrich M (2005). Book review of "Traditional Medicinal Plants and Malaria". Journal of Ethnopharmacology 96: 341-343.

Philippe G et al (2005). In vitro screening of some Strychnos species for antiplasmodial activity. Journal of Ethnopharmacology 97: 535-539.

G.N. Zirihi, L. Mambu, F. Guede-Guina, B. Bodo, P. Grellier (2005). In vitro antiplasmodial activity and cytotoxicity of 33 West African plants used for treatment of malaria. Journal of Ethnopharmacology 98(3): 281-285.

8. Websites and Internet Resources of Interest

UNICEF/WHO WORLD MALARIA REPORT 2005

<http://rbm.who.int/wmr2005/>

The World Malaria Report 2005 is the first comprehensive effort by the Roll Back Malaria Partnership to take stock of where the world stands in relation to one of its most devastating diseases. It reveals that the tide may be beginning to turn against malaria as control and prevention programmes start to take effect. During the past 5 years real progress has been made in scaling up malaria control and prevention efforts. Over 3 billion people live under the threat of malaria. It kills over a million each year – mostly children. But the means to turn this tragedy into a global success story could now be made available to those in need.

9. Future Meetings of Interest

A. The 11th NAPRECA on Natural Products and Drug Discovery, Antananarivo, Madagascar, 9-12 August 2005

For further information, see: <http://takelaka.dts.mg/rafita>

B. Women's Health and Asian Traditional Medicine conference, 23-25 August 2005, Kuala Lumpur Convention Centre, Malaysia.

For more information, see: www.whatmedicine.org

C. Medicine and Health in the Tropics, Marseille, France, 11-15 Sept 2005

There will be a special symposium on "Natural anti-parasitic agents", chaired by Dr Gerry Bodeker (RITAM Chair) and Dr Milijaona (Institut Pasteur de Madagascar). Dr Ben Gilbert from Fiocruz,

Brazil, will be the keynote speaker. Further information on the conference is on the website at www.iftm-pharo2005.org

D. Fourth MIM Pan-African Malaria conference, Yaoundé, Cameroon. 13-18 November 2005.

For further information see www.mim.su.se/conference2005 Negotiations are underway to organise a RITAM side-meeting.

10. New members

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

Bulus Adzu, PhD student, NIPRD, Abuja, Nigeria. Working on bioassay guided evaluation of plants used for malaria.

Deepak Bhattacharya, running malaria prevention programme using herbal medicine in Indian villages with the Indian Red Cross.

Dr Simon Challand, General Practitioner, has conducted clinical trials of *Vernonia amygdalina* in Uganda.

Dr Tin Tin Thein, Research Scientist/ Head, Pathology Research Division, Department of Medical Research (Upper Mynamar)

Yours sincerely,

Merlin Willcox (Secretary, RITAM)