

## Registration

Title: (Prof/Dr/Mr/Ms/Mrs, etc.)

Family name:

Given names:

Date of birth:

Work Address:

Country:

Telephone No:

Facsimile No:

Email address:

Please advise if you will be seeking funding from

- UNDP, FAO or UNESCO Projects
- Asian Development Bank
- The Australian Agency for International Development (AusAID)
- World Bank or regional development banks
- The Crawford Fund
- Other sources, please specify

### Send Completed Registration Form to:

Tropical Weed Science Program Secretariat  
The Tooth Agricultural Research Institute (TARI)  
School of Land and Food Sciences  
The University of Queensland  
St Lucia 4072  
Queensland Australia

Telephone: (07) 3365 2062

International: 61 7 3365 2062

Fax: (07) 3365 1188

International: 61 7 3365 1188

Email: r.gutteridge@mailbox.uq.edu.au

## Funding Support

If a participant cannot be funded from his or her own organization, funding from international donor agencies may be sought.

- Participants should contact the local offices of agencies such as UNDP, FAO and UNESCO in this regard.
- Funding may also be available through projects associated with the World Bank, the Asian Development Bank or other development banks.
- The Australian Agency for International Development (AusAID) may be able to fund some participants. AusAID can be approached through its regional and/or country representatives (usually located in the Australian Embassy or High Commission) for funding assistance for candidates nominated by their organizations.

Intending participants must initiate requests for funds themselves and should do so as early as possible to ensure success. Applications must be lodged through official channels to the training, manpower and administration authority in your country.

## Further Information

- A visa is necessary for entry into Australia. A Confirmation of Enrolment Form issued by The University of Queensland and a medical clearance from local authorities are required prior to issue of a visa by Australian Embassies.
- Flight details are required by the Program Secretariat at least 2 weeks prior to program commencement.
- Confirmation of a place on the program is subject to written advice that funds are available.

### Further details can be obtained by contacting:

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The Tooth Agricultural Research Institute (TARI)  
School of Land and Food Sciences  
The University of Queensland  
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Queensland Australia

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# Tropical Weed Science



The School of Land and Food Sciences and the School of Agriculture and Horticulture at The University of Queensland are offering a short term training program in methodologies in tropical weed science.

**Mid-July to mid-November each year**  
(Second Semester of The University of Queensland Academic Year)



THE UNIVERSITY  
OF QUEENSLAND

## Background

The program introduces via lectures and experimental methods each of the major areas of investigation involved in tropical weed science. Each lecture and practical demonstration is devoted to a separate aspect of tropical weed science and the program is arranged in order of increasing technical complexity.

The opening lectures give a brief historical overview of tropical weed science, characters of weeds and control. Various control methods are examined and instructions given for the various methods of weed control.

The remainder of the program involves special aspects of weed science. Molecular ecology and species identification methods (such as CFLP and RAPD) will be used to study genetic identity of weeds and their relationships to others. Computer assisted spread modelling, risk assessment and 3 dimensional weed-crop interactions will be undertaken.

The program will include several visits to other research and commercial laboratories working on a wide range of tropical and subtropical weed species and using a number of control techniques.

The program will be based in the Faculty of Natural Resources, Agriculture and Veterinary Science's Tropical and Subtropical Weeds Research Unit which has nodes at both St Lucia (city) and Gatton (country) campuses.

## Eligibility

- The program secretariat assumes participants will have a background in some aspect of weed science.
- A University degree or equivalent in agriculture or related science is essential.
- The program requires a reasonable level of competence in English. (Pre-program English training can be arranged.)

## Program Content

### 1 Lectures, and tutorials on the following topics:

- Introduction to weed science
- Characters of weeds
- Major weeds of the world
- Regulatory aspects
- Problems caused by weeds
- Herbicide groups
- Plant/herbicide interactions
- Herbicide damage to crops
- Herbicide resistance
- Herbicide/Environmental interactions
- Biological weed control
- Preventative weed control
- Physical weed control
- Integrated Weed Management

### 2 Practical experiments and training in weed science:

- Chemical weed control
- Herbicide resistance
- Seed dormancy
- Seed bank analysis
- Biological control using insects and pathogens
- Weed distribution using computer modelling
- Allelopathic crops
- Weed identification using CD-ROM based keys

### 3 Research projects that may be selected during the program. Topics include:

- Seed bank analysis
- Mechanisms of weed seed dormancy
- LucID keys for weeds
- CLIMEX distribution analysis
- Weed risk assessment
- Allelopathy
- Biological control
- Herbicide resistance
- Weed molecular identification
- Weed molecular ecology
- 3 dimensional weed-crop interactions

### 4 Field Tours

Visits will be made to several institutes undertaking other aspects of weed science including two Queensland Department of Primary Industries laboratories.

## Program Costs

The tuition fee for the program will be \$A9,000

This fee includes:

- text books, lecture notes and program materials
- laboratory expenses
- all program related transport in Australia
- liaison with Australian diplomatic posts overseas on visa matters
- health insurance

Living allowance costs will be \$A7,000

This cost includes:

- an establishment allowance
- share accommodation and a daily meal and incidentals allowance
- Australian departure tax
- 10kg baggage allowance on departure from Australia

Participants can elect not to pay the living allowance, and cover these costs themselves, but they must demonstrate to the Program Secretariat that they have sufficient funds to meet the cost of living in Australia.

The fee does not include airfares to and from Australia.

Funding agencies can be provided with a breakdown of costs if required.

The fee is payable in full to The Tooth Agricultural Research Institute (TARD), The University of Queensland, prior to program commencement.

## Course Co-ordinators

### Dr Steve Adkins

Dr Adkins is an Associate Professor in the School of Land and Food Sciences and Executive Manager of the Faculty's Tropical and Subtropical Weed Research Unit. He has extensive experience in tropical weed science, particularly seed biology, herbicide resistance, and non-chemical weed control. His current research interests are seed dormancy and molecular ecology of weeds. He has extensive experience in undertaking short programs and workshops for International Development Programs.

### Dr Helen Ogle

Dr Ogle is a Lecturer in the Schools of Land and Food Sciences and Agriculture and Horticulture. Helen has extensive experience in weed taxonomy and biological control of weeds using pathogens. Her current research interests include the biology and control of Parthenium weed.

### Mrs Kathryn Bullen

Mrs Bullen is a Lecturer in the School of Agriculture and Horticulture. Kathryn has extensive experience in weed biology, ecology and extension. Her current research interests include the biology of certain subtropical weeds and herbicide resistance.