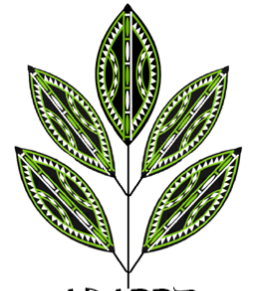




African Dryland Alliance for Pesticidal Plant Technologies:

A network for optimising and promoting the use of indigenous botanical knowledge for food security and poverty alleviation in Africa



ADAPPT
African Dryland Alliance for Pesticidal Plant Technologies

Funding from the European Union via the ACP Science and Technology Programme has been awarded to build a pan-African network of scientists and agricultural technologists developing and promoting pesticidal plants as alternatives to synthetic products particularly for poor farmers. Network members include NGOs, national agricultural research institutes, ministries and universities in Ghana, Kenya, Malawi, Namibia, South Africa, Tanzania, Zambia, Zimbabwe and the United Kingdom. For generations throughout Africa, farmers have used their knowledge about plants to protect field crops, stored grain and livestock from insects and mites. Pesticidal plants and botanical pesticides offer poor farmers an effective, low cost, sustainable pest management strategy with negligible environmental impact as plant breakdown products are environmentally benign. A few pesticidal plants are so effective they have been developed into commercial products, such as the rotenoid containing legumes (*Derris* spp.), Pyrethrum from *Crysanthemum cinerariaefolium* and Neem oils from *Azadirachta indica* and are accepted as organic pesticides. Pesticidal plants have most to offer the poorest farmers since many African farmers report that synthetic products are too expensive, unavailable, poorly labelled and frequently adulterated. Incorrect use of synthetic pesticides is unfortunately also common, endangering health of consumers, farm workers and wildlife. The indigenous knowledge about pesticidal plants is now increasingly supported by a wealth of scientific data about their efficacy and chemistry that could be better used to optimize their use by farmers and develop novel applications.



Project partners at the ADAPPT inception workshop held at the ARC headquarters, Pretoria, South Africa, 25-29 January 2010.

ADAPPT aims to bring together this expertise across Africa and develop effective and high calibre collaborations among multidisciplinary teams of scientists to make more effective use of pesticidal plants, and promote their use more widely. Seasonal or geographic availability and variation in efficacy will also be optimised through improved pesticidal plant harvesting and sustainable use. The threat of over harvesting can be avoided through the development of propagation and cultivation methods to help meet local demand as well as stimulate small enterprise development.

The ADAPPT project aims to:

- Strengthen scientific and technological capacity of African nations to support research, development and innovation in use of pesticidal plants and optimise their use for poor farmers.
- Establish a pesticidal plant network of agricultural scientists and technicians working at the national and international level across African nations as well as developing national networks in each target country that can influence science policy.
- Develop and optimise cost effective insect pest management technologies based on pesticidal plant materials, particularly for producing high value vegetable crops, protecting stored products for household food security, and promoting ecto-parasite control on livestock.
- Assist the small-scale farming sector across African dry-lands to deal with their pest problems by optimising their indigenous knowledge.



Tephrosia vogelii is promoted across Africa as a green manure and source of pesticides. But activity can vary depending on where and when the plant is collected. The ADAPPT project will assist farmers by providing them with information on how to grow, collect and process *Tephrosia* into a reliable option for pest control.

Further information about ADAPPT can be found at the project's website: www.nri.org/adappt or contact the project leader: Dr Phil Stevenson, Email: p.c.stevenson@gre.ac.uk

The ADAPPT project is a network of the following partners:

Natural Resources Institute, University of Greenwich, United Kingdom
Southern Alliance for Indigenous Resources, Zimbabwe and Zambia
Department of Agricultural Research Services, Malawi
Mzuzu University, Malawi
National Botanical Research Institute, Namibia
University of Zimbabwe, Zimbabwe

World Agroforestry Centre, Kenya
Royal Botanic Gardens Kew, United Kingdom
Agricultural Research Institute Naliende, Tanzania
Ministry of Food and Agriculture, Ghana
Egerton University, Kenya
ARC- Plant Protection Research Institute, South Africa

