Oregano against MRSA • India

Turning a sustainably harvested essential oil into an antimicrobial agent for use in hospital hand-soaps and surface disinfectant

Himalayan Oregano Oil against MRSA has won one of five 2008 SEED Awards for its potential to improve health and its work to provide a sustainable source of income for herb collectors and reduce villagers’ dependency on the collection of endangered herbs, thereby contributing towards conservation of those herbs in their natural habitat.

This partnership aims to provide a sustainable source of income to herb collectors through the collection of wild oregano and distillation of its essential oil. Backed up by strong research, the partners intend to develop a fair-trade product that will use the oregano oil as an antimicrobial agent to prevent the spread of hospital-acquired infections, including *methicillin-resistant Staphylococcus aureus* (MRSA).

Scaling up impacts

As part of the Award, SEED is supporting Oregano Oil against MRSA in their efforts to grow and develop their fair-trade, sustainably harvested product.

The valuable medicinal herbs in the local area risk over-exploitation in order to meet increasing demand in the herb industry as well as the livelihood needs of local herb collectors. Oregano, however, is currently not collected - but is relatively common at high altitudes in remote areas. It can easily be harvested sustainably and has very promising market potential.

MRSA is a type of bacteria that has developed resistance against a number of antibiotics. During the last decade this ‘superbug’ has become a major global health concern. Tests have shown that Himalayan oregano essential oil is effective at killing MRSA at concentrations of as little as 1 in 2000.

Planned activities include:

- Publish a paper in a scientific journal to raise awareness, using research conducted by partners
- Implement a Wild Harvest Management Plan which sets quality production standards

- Perform a cost-benefit analysis, exploring production costs for Himalayan oregano oil and assessing the price needed for the raw material in order to provide an incentive to collect oregano instead of endangered herb species
- Develop the marketing strategy, focussing on its scientifically demonstrated effectiveness

How you could help

To ensure the long-term future of this innovative, locally-led partnership for sustainable development, additional contacts, financing opportunities and communication and marketing networks are important. In particular, the following support is needed:

- capacity building for local business planning
- appropriate partners to develop an oregano oil-based antimicrobial product
- expertise in small scale technology for renewable energy and essential oil production
- funding for further research into oregano collection and habitat, and comparisons with other anti-microbial agents.
About the SEED Initiative

The SEED Initiative identifies, profiles and supports promising, locally-led start-up enterprises working in partnership to improve livelihoods, tackle poverty and marginalisation, and manage natural resources sustainably in developing countries. SEED develops learning tools for the broad community of social and environmental entrepreneurs, informs policy- and decision-makers, and aims to inspire innovative entrepreneurial approaches to sustainable development.

SEED is a global network founded in 2002 by IUCN, UNDP and UNEP to contribute towards the goals in the UN’s Millennium Declaration and the commitments made at the Johannesburg World Summit on Sustainable Development.

Partners in the SEED Initiative are IUCN (the International Union for Conservation of Nature); (UNDP); the United Nations Environment Programme (UNEP); and the governments of Germany, the Netherlands, South Africa, Spain, the United Kingdom and the United States of America.

Contacts

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Lead partners in *Oregano against MRSA*

- **Biolaya Organics Pvt Ltd**: sustainable production and conservation of endangered Himalayan medicinal herbs. [www.biolaya.com](http://www.biolaya.com)
- **Jagriti** (NGO): sustainable livelihoods and women’s empowerment in a remote mountainous area of Kullu. [www.jagritikullu.org](http://www.jagritikullu.org)

Additional supporters:

- **Faculty of Health and Life Science, University of the West of England, Bristol**: university research group monitoring effectiveness of novel antimicrobials. [www.uwe.ac.uk](http://www.uwe.ac.uk)
- **SGS India** (Regional unit of the SGS Group): conducts routine tests of oregano to assess its efficacy as an antimicrobial and carries out further research. [www.in.sgs.com](http://www.in.sgs.com)
- **G.B. Plant Institute of the Himalayan Environment and Development** (autonomous institute): Works on the conservation of natural resources and ensures environmentally sound development in the entire Indian Himalayan Region. [www.gbpihed.gov.in/Himachal_unit.htm](http://www.gbpihed.gov.in/Himachal_unit.htm)

The 2008 SEED Award Winners are:

- From Relief to Self Reliance • Thailand
- Guiding Hope • Cameroon
- Lighting up Communities • Nicaragua
- *Oregano against MRSA* • India
- Pintadas Solar • Brazil

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