

A monthly features service about science, technology, and development

IDRC-F246e

SCIENCE WORLD

(a collection of development-oriented science news briefs that may be used as a column, or as separate items)

PATENT RIGHTS THREATEN MALARIA VACCINE RESEARCH

(approx. 110 words)

(IDRC) - Malaria immunologist Sydney Cohen, at London's Guy Hospital Medical School, has appealed for a moratorium on all patent rights relating to the development of a human malaria vaccine.

At present, all research is in the hands of a few Western-based pharmaceutical and genetic engineering firms. With some 150 million cases of malaria annually -- and the number growing as mosquito-control methods fail -- the need for an effective vaccine is urgent.

The problem, argues Cohen, is that research scientists and their sponsors are rushing to patent the individual aspects of their work and this could significantly impede research progress.

But given the current political climate in the West in favour of private enterprise, adds Cohen, there is little likelihood of an international concensus against patents amongst researchers.

OBSCURE LEGUME MAY BOTH FEED AND CONTROL WORLD POPULATION

(approx. 115 words)

(IDRC) - Increasing demand for the oral contraceptive tablet (the Pill) has led to a discovery in Britain that could make a major contribution towards helping the world both feed and control its population.

According to Bath University's Dr Roland Hardman, fenugreek (*Trigonella*

foenum-graecum), a relatively obscure legume, is rich in diosgenin, a raw steroid that is an essential component of the Pill.

In the past the tubers of the wild yam, collected mainly in the Mexican rain forest and the lower slopes of the Himalayas, supplied almost 90 percent of the diosgenin needed in the world.

But supply simply could not keep up with demand. And after 20 years of exhausting research, Hardman finally identified five fenugreek varieties as critical alternative sources.

The legume can be harvested for seed within months, compared to four or five years for yam, and fixes its own nitrogen. The latter makes it an ideal break then between successive cereal crops. And when not cropped for its seed, fenugreek is a palatable and digestible high protein forage for cattle, sheep, and horses. Dr. Hardman says that the legume can be grown easily in the Middle East, the Far East, and Southern and East Africa.

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CO-OP MOVEMENT TO BE STUDIED

(approx. 90 words)

(IDRC) - The growth of the cooperative movement has been striking in recent years, particularly in agriculture, industry, housing and credit.

The question, however, is whether co-ops can remain effective locally when they expand into centralized national organizations.

With funding from Canada's International Development Research Centre (IDRC), a team of Canadian and Tanzanian researchers will look into the strengths and weaknesses of 16 cooperative systems in their respective countries. They will examine what strategies co-ops in each country use to act effectively at the national level, while promoting genuine development and cooperation at the local level. The study will be carried out at York University (Toronto).

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NEW WEAPON AGAINST FRUITFLY

(approx. 100 words)

(IDRC) - Egypt is about to deploy a peaceful nuclear weapon to eradicate the Mediterranean fruitfly, a major threat to food production in the country.

The project springs from a recent symposium on the use of radiation in genetic insect control, held in Germany under the joint auspices of the United Nations' International Atomic Energy Agency (IAEA) and the UN's Food and Agriculture Organization (FAO).

By releasing billions of irradiated, and therefore sterile insects, Egypt expects that the fruitflies will go forth and not multiply. Within four years, the fruitfly population is expected to virtually disappear : And without causing terrible damage to the environment, which could be the case with conventional pesticides.

The technique has already proved valuable in controlling various noxious flies and other insects in parts of Italy, Central America, and Mexico.

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March/April 1983