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NEWS

BACTERIA COME TO THE AID OF WOUNDED PLANTS

British botanists have developed a novel way to protect plants from attack by pests. Rather than breeding resistant strains of crop plants, the researchers, based at the University of Durham, have pressed into service a bacterium that produces a biological pesticide.

The bacteria live in close association with plants and produce their own pesticide only when stimulated by a plant at risk of attack. The bacteria produce the pesticide in small, controlled amounts, while in intimate contact with the plant. This form of protection will be cheap and eliminate the environ-

mental damage caused by conventional pesticides.

Protecting plants from pests and diseases, particularly insects and fungi, is a big part of agrobusiness worth an estimated \$5000million a year. Unfortunately, wastage is high, the chemicals break down or are leached away before they have a chance to act. Moreover, some pesticides have caused severe environmental problems. (New Scientist 2 April 1987) *News Monitor*, Vol. 2, No. 3, July 1987, p. 5 (Published by: Centre for Advancement of Biotechnology—Prof. K. S. Gopalakrishnan, 1276 32 G Cross, IV Block (T) Jayanagar, Bangalore 560 011)

CANCER FROM PESTICIDES

As many as 20,000 cases of cancer may result from pesticides that contaminate common foods, says a report issued on May 20 by the National Academy of Sciences (NAS). Foods posing the greatest risk include tomatoes, beef, potatoes, oranges, and lettuce. In its study the NAS made "worst-risk" assessments of 28 pesticides and assumed a daily consumption over 70 years of foods containing the maximum amount of pesticide residue. The risk is considered to be nearly equal to that of exposure to

asbestos and radon but far smaller than the risk from cigarette smoking. Pesticides evaluated by NAS include captan, chlordime-form, permethrin, and zineb. NAS panel members and EPA officials emphasized that because the worst-case estimates were used, the actual risks to consumers are much lower. (*Environment Science and Technology*, Vol.21, No.7, p. 616, 1987; American Chemical Society, 1155, 16th Street, N. W. Washington, D. C. 20036, USA.)
