DNA Damage Linked to Pesticide

By David Loyn

PATIALA (May 20, 2008): New research in India suggests exposure to pesticides could have damaged the DNA of people in farming communities, leading to higher rates of cancer.

Scientists at Patiala University, Punjab state, did the study, tracking a group of farmers for several months. But a spokesman for the crop industry trade association said a causal link between pesticide use and cancer could not be established. There have been concerns about potential links for several years.

This new study discovered that the DNA of farmers in Punjab has been altered, making them susceptible to cancer. Professor Satbir Kaur said the study ruled out other factors such as age, alcohol intake and smoking, concluding that the probable cause of this fundamental change in the building block of life was use of pesticide sprays.

“We found significant change in the DNA, so the cancer risk is greatly increased when the extent of DNA damage is very high,” he said. Salil Singhal of the industry trade association, the Crop Care Federation of India, said that this causal link could not be possible. “There is no pesticide in use today which can cause cancer,” he said. Mr Singhal said farmers use sprays only a few times each season. But this correspondent found farmers who needed to use them far more than that in order to keep ahead of the pests.

One farmer, who said that he was spraying night and day, does have cancer. As the world struggles to find its way back to securing affordable food supplies, new crop varieties have not kept up the promise of the early days of the green revolution in Asia. Meanwhile, yields have gone down. And these disturbing indications of a potential threat to human health raise questions over whether intensive farming like this is sustainable.

Courtesy BBC News