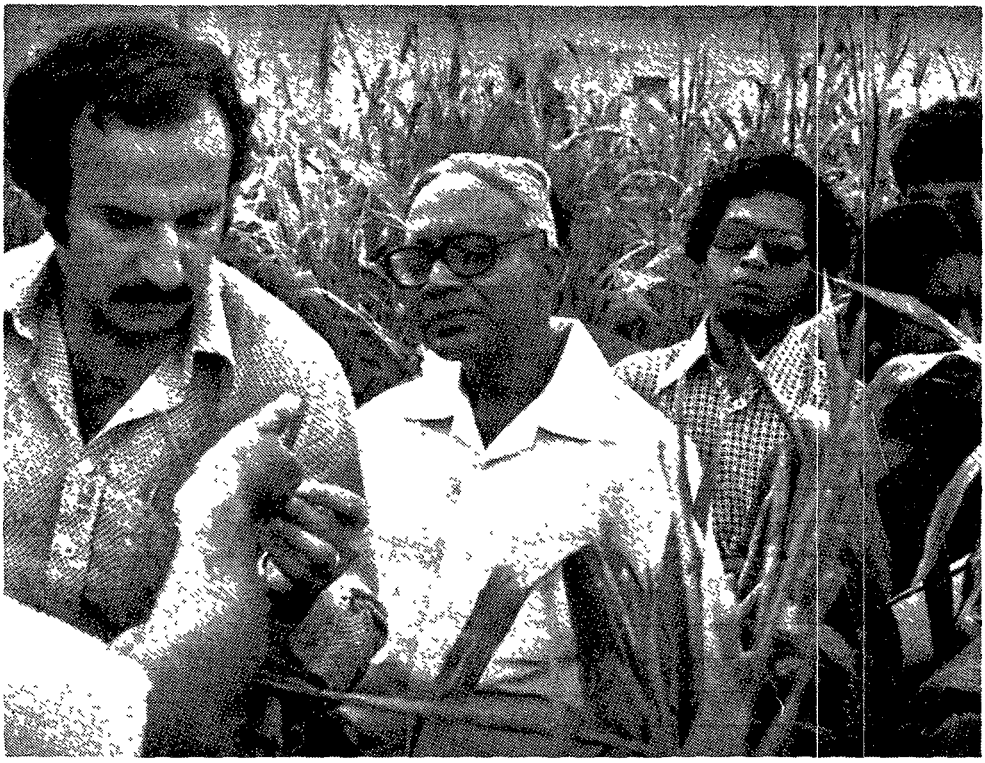
The Use of Induced Mutants in Breeding Crop Plants for Better Disease Resistance

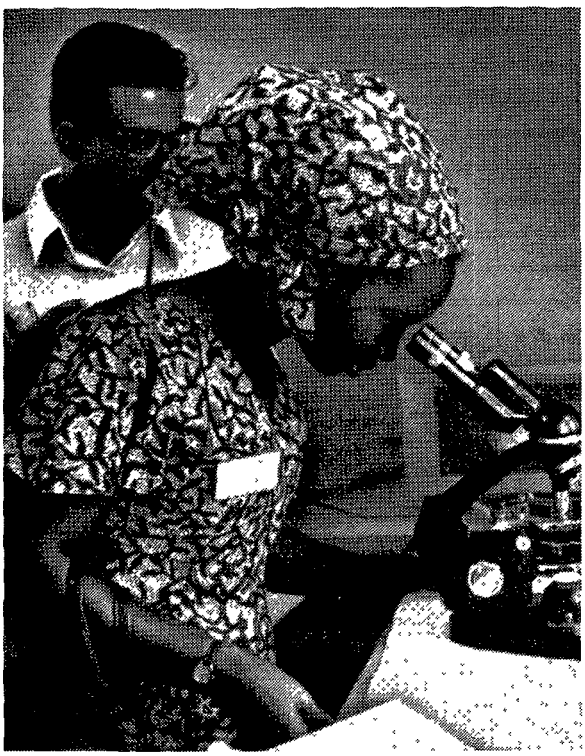
A one-month course on plant breeding for disease resistance including the use of induced mutation techniques was held at the end of 1977 at the Indian Agricultural Research Institute (IARI) in New Delhi. The training course was organized jointly by the IAEA and FAO, and was financed by a grant from the Swedish International Development Authority. Twenty scientists, all experienced plant breeders or plant pathologists, participated in this interdisciplinary course. Indian scientists provided the bulk of the course and enthusiastically shared their knowledge and experience with their colleagues from abroad. Specialists from Denmark, the Netherlands, and USA supplemented the Indian staff. The course consisted of lectures, laboratory demonstrations, practical experiments and field excursions. Among the highlights were visits to plant breeding institutes, the All-India Co-ordinated Rice Improvement Programme (AICRIP), the All-India Co-ordinated Sorghum Improvement Programme (AICSIP), and the International Crop Research Institute for Semi-Arid Tropics at Hyderabad, and the Bhabha Atomic Research Centre near Bombay.

Course participants visit the International Crop Research Institute for Semi-Arid Tropics (ICRISAT) at Hyderabad Photos IAEA/Micke.

Screening of rice for disease resistance at AICRIP


SORGHUM GERMPLASM





Investigation of disease reactions in sorghum grown in nurseries at AICSIP

Participant from Ghana views a plant pathogen.

Participant from Indonesia inoculates a cotton plant with pathogenic bacteria