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BOOK REVIEW

Induced Mutations Against Plant Diseases. Proceeding Series STI/PUB/462. International Atomic Energy Agency, Vienna 1977, 481 pp. US \$ 42.00.

According to FAO/IAEA reports more than 10% of world's crop production is lost every year owing to plant diseases. This value, which can be in some years and places much higher, demonstrates the need of investigating the most effective means of combatting these losses. It is quite clear that there is no other more effective and less hazardous means of controlling crop plant diseases than the use of disease-resistant cultivars. A Symposium dealing with mutation breeding for plant disease resistance, held from 31 January—4 February 1977, was organized by the Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture with the co-operation of the Swedish International Development Authority (SIDA). Participants from 42 countries and international organizations presented 52 papers, which are mostly published in full. Three papers were delivered in French, 2 in Spanish and 1 in Russian. The proceedings are divided into 8 sections: 1) Germ-plasm sources for improving disease resistance of plants, 2) Host/pathogen interactions and concepts of breeding for resistance, 3) Resistance to fungal and bacterial diseases in rice, 4) Disease resistance in vegetatively propagated plants and woody perennials, 5) Disease resistance in legumes and vegetables, 6) Disease resistance in barley and wheat, 7) Methodology of mutation breeding for disease resistance, 8) Cytogenetics and disease resistance. Most papers are accompanied by a discussion on the methods of induction and evaluation of resistant cultivars. The utilization of induced disease resistant plants is mostly time limited by the evaluation of new races of pathogens. Nevertheless, the induction of resistant cultivars by various kinds of mutagenic treatments has to be included in all integrated plant protection schemes. The Proceedings can be recommended to all interested in plant breeding, phytopathology and mutation genetics.

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