



XA9951630

FAO/IAEA Int. Conf. on Area-Wide
Control of Insect Pests,
Penang, May 28 to June 2, 1998

D-19

**SUB-STERILIZING DOSE OF 100Gy IN SUGARCANE BORER
(*Diatraea saccharalis* (Fab.)).**

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The sterile insect technique and the F-1 sterility is a widely used control method for several kinds of plague insects. In Cuba this method is being implemented for the control of the borer of sugar cane *Diatraea saccharalis*. This is the most important pest that assaults this crop and causes damages several to our large country from the economic point of view.

The objective of this work was the evaluation of a sub-sterilizing dose that permits the transmission of the sterility to the F-1 descendants, that will permit the elaboration of a releasing strategy in the control of this pest. The *Diatraea saccharalis* male chrysalises, approximately 24 hours before emergence, were submitted to an irradiation process, with a source of Co-60 with a 100Gy dose. Irradiated males were mated to normal females and the fertility of the descendants was determined.

The results were non-fertile eggs 42,77%; dominant lethal mutations 20,7% and non-viable eggs 54,56%.