

## **Brazil's Use of Irradiation as an Alternative Treatment and Replacement for Methyl Bromide**

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### ***ABSTRACT***

Brazil is one of the largest agricultural producing countries in the world and produces a wide range of agricultural products including tropical fruits. Post harvest losses are significant, particularly in storage and transportation, and can amount to as much as 40 percent of total production. Storage facilities have been improved through technological and engineering advancements, but losses continue to occur due to insect infestations, molds and spoilage bacteria.

Up until now there were no food irradiation facilities in Brazil, but in October 1999 the first dedicated food irradiation facility is expected to open. Three additional facilities are scheduled for completion in 2000. The opening of these facilities makes available irradiation processing for many agricultural uses. It will replace many uses of chemical fumigants, particularly methyl bromide, which are currently used for control of quarantine and stored product insects and will provide an alternative treatment for many of Brazil's tropical fruits where no previous treatment methods have been available. Its added advantage for control of the maturation process for many products provides a longer shelf-life for many products. The overall objective for irradiation processing in Brazil is to cut post harvest losses and provide high quality, value-added products for Brazil's domestic and international markets. This presentation will address current and proposed uses of irradiation in Brazil; some applications on an array of agricultural products; and the targeted markets for irradiated commodities.