Irradiation for Quarantine Disinfestation: Practical Aspects and Options

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Summary (Oral Presentation)

In the last two or three years there has been great progress in bringing into the realm of practical reality the option of radiation disinfestation of insects for quarantine security purposes. At present, regulations already are in place permitting the use of radiation disinfestation of Hawaiian fruits being shipped into mainland USA. Technical and marketing trials have shown that the process is very effective, and that irradiated fruit is readily marketable. Reflecting the current reality, an initiative is in progress to build a new commercial irradiation facility in Hawaii, to facilitate treatment of agricultural products grown there. As commercial use of radiation disinfestation technology increases it can be expected that additional clearances will allow its use with products from other countries engaged in trade with the USA, as well as with products in mainland interstate trade. Thus, this raises the question of how such treatment will be provided by a nascent food irradiation industry.

At the present time there are a limited number of facilities in the USA which can provide irradiation treatment for clients requiring disinfestation of imported agricultural products. This includes the FTSI facility in Mulberry, FL, which is dedicated to the treatment of food items. In addition, several of the contract irradiation facilities operated by two of this country's largest contract radiation service providers have also been qualified for food processing. There are some logistical problems however, since most of these plants are not optimally located with respect to treatment of traded produce, which would be most convenient at a port of entry or export. However, the fact that several facilities are available is noteworthy progress, since until very recently FTSI stood alone with food irradiation certification. Given the demonstrated commercial interest in providing service, it can be expected that as a need for additional treatment capacity is recognized, the radiation industry will respond by building new capacity. Such new facilities logically would be optimally located with respect to meeting the needs of food importers and exporters.

In this presentation various relevant features of the radiation processing industry will be summarized and the industry's response options for meeting the insect disinfestation requirements of food importers and exporters will be described.