NEW TECHNOLOGIES AND MODIFICATIONS TO EXISTING METHYL BROMIDE TREATMENT SCHEDULES

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The mission of the Agricultural Quarantine Inspection & Port Technology programs within the Center for Plant Health Science & Technology (CPHST), USDA, APHIS-PPQ, is to safeguard American agriculture and natural resources by developing, adapting and supporting technology to detect, identify and mitigate the risk posed by exotic pests in preclearance programs and ports of entry. The core activities in the AQI program are quarantine treatment development, treatment manual support for ports of entry, shipping container and vessel certification, methyl bromide use database maintenance, certification of international commodity treatment facilities in preclearance programs, and advanced detection technologies for port deployment such as chemical sensors, acoustical detectors and agricultural x-ray technology.

A number of alternative treatments have been explored and proven effective for quarantine use but because of the need to attain quarantine security for PPQ treatments, methyl bromide remains the only option for certain commodities and their associated pests. APHIS is committed to participating in the development of methyl bromide alternatives and to replace our existing methyl bromide treatments where suitable alternatives exist. The agency is also committed to making methyl bromide treatments more effective and efficient to reduce our dependence on the fumigant. CPHST is currently pursuing new technologies and modifying existing methyl bromide treatments to reduce fumigant use during tarpaulin and container fumigations. Implementation of these technologies will reduce the amount of methyl bromide released into the atmosphere and improve methyl bromide efficiency. Examples of technologies that will be discussed include refining concentration time (CT) requirements for treatments, elimination of tarpaulins from container fumigations, and recapturing and recycling methyl bromide from space fumigations.