

ECO2FUME PHOSPHINE FUMIGANT AS A PRIMARY ALTERNATIVE TO METHYL BROMIDE FOR QPS APPLICATION IN INDONESIA

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ABSTRACT

The ASEAN member countries led by Indonesia are aggressively pursuing the methyl bromide phase out as embodied in the Montreal Protocol. In the search for alternative to methyl bromide, ECO2FUME phosphine fumigant is recognized by the Indonesia Agricultural Quarantine Agency (AQA) as a primary choice to replace methyl bromide for quarantine and pre-shipment application. Indonesia is implementing a methyl bromide phase out plan to drastically reduce its use for quarantine and pre-shipment application from the original 500 tons a year to zero by 31 December 2015.

The Indonesian Applied Research Institute of Agricultural Quarantine (ARIAQ) in collaboration with CYTEC and Tropical Biology Institute (BIOTROP) has established phosphine fumigation protocols using ECO2FUME for QPS treatment of major commodities in the country such as rice and other stored grains, coffee, cacao, tobacco, pineapple, and mangosteen. Additional phosphine fumigation protocols are currently being developed for other commodities such as wood chips, cut flowers and other export fruits and vegetables. The Indonesian AQA is also working on bilateral agreement with importing countries in the adoption of ECO2FUME for QPS treatment.

A comprehensive “Technical Manual for Liquid Phosphine (ECO2FUME)” in Bahasa Indonesia and English version was produced and later approved for implementation by the Indonesia AQA. The said technical manual will serve as a reference guide for all Indonesian fumigators involved in QPS treatment of different import and export commodities using ECO2FUME. Product stewardship training program on ECO2FUME is also being conducted to local fumigators who will be using ECO2FUME for QPS application.

Other ASEAN member countries such as the Philippines, Thailand, Malaysia, Singapore, Vietnam and Brunei are implementing their own methyl bromide phase out program. In the “July 2012 ASEAN Workshop on Application of Phosphine Fumigation” participated by key quarantine officials of ASEAN member countries and hosted by Indonesia ARIAQ, all participants agreed to a collective recommendation to establish and implement a unified regional program to substantially replace methyl bromide with alternative fumigant by 31 December 2014.

This paper describes the series of activities undertaken in Indonesia in the adoption of ECO2FUME as a primary alternative to methyl bromide for QPS application.