

of bean pathogens. Overall, essential oils extracted from these spices could play an important role in stored bean protection and reduce the risk associated with the use of synthetic insecticides.

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Sustained effective use of phosphine in stored product protection in India: Role of UPL Limited

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DOI 10.5073/jka.2018.463.203

Phosphine has a predominant role in stored products protection in India since more than 4 decades. Its use has gained further prominence ever since methyl bromide has been withdrawn (except QPS applications) on environmental concerns. Accordingly, the use of phosphine is being expanded to QPS treatment of certain commodities. Phosphine has several merits and as a stored product fumigant. However, there is a concern about occasional failure to achieve desired 100% mortality of insect pests during phosphine treatment in the country. Hence the factors contributing for control failures have been identified. Also there are reports about need to improve existing fumigation practices and to create awareness about the required parameters to ensure successful treatments. In this context UPL Limited, a leading manufacturer of metal phosphide formulations in the world took important steps: A. To create awareness about proper sealing of fumigation enclosures, phosphine dosage, exposure period and target terminal concentration parameters B. To impart practical demonstrations to the stakeholders in across the country details of phosphine fumigation workshops, demonstrations and industry & end user & farmers interactions conceptualized, funded and executed by UPL Limited in coordination with other lead agencies, will be discussed. Furthermore, focus on the use of on-site phosphine generators which has the advantage of rapid generation and even distribution of the gas facilitating successful treatments by way of demonstration to different end users has also been presented.

Recent Developments in the Global Application of ECO2FUME® and VAPORPH3OS® Phosphine Fumigants

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