Use of Phosphine to Control Storage Insects in Rice

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Three different treatments of phosphine were applied to RD23 rice seed and, following treatment, weight loss, number of infested seeds, germination, and vigour of the seed were measured. The first treatment applied one furnigation at 2.0 g of active ingredient per cubic metre 7 days before storage, the second applied funigation at monthly intervals for 6 months, and the third a single fumigation and covering of the sacks with plastic sheeting for a period of 6 months. In addition, a control of untreated seed was used. In general, phosphine gave better results in terms of minimal weight loss and the number of infested seeds, with fumigation and covering with plastic sheeting. There was no difference between the treatments and the control as far as seed germination and vigour were concerned.