Summary:

Stored product insect pests that infest seeds can cause substantial economic and quality losses. Since these insect pests can be found anywhere within the storage facilities, localized treatment or physical methods may not adequately control the pests. Therefore, fumigation is the preferred method of control. Phosphine, and to a lesser degree, methyl bromide, are the fumigants of choice for insect control in seeds. However, phosphine can cause corrosion of metals in a fumigated facility, and methyl bromide can negatively impact the seed germ and is also being phased out under the Montreal Protocol. ProFume gas fumigant, developed by Dow AgroSciences as an alternative to methyl bromide was granted registration by USEPA in January 2004. Because of ProFume's attributes it is represents another potentially useful tool for fumigating seeds. This paper summarizes the germination impact of ProFume fumigation of several seed varieties, under several sets of fumigation dosages, times and temperatures.

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