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## **Ozone: A new controlled strategy for pest of stored grains**

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India has produced 255.36 million tonnes of food grains during 2012-13. Post-harvest losses of food grains are about 12 to 16 million metric tons each year. Around Rs. 50,000 crores every year are lost due to improper storage of food grains. Insects are a major problem in stored-grain ecosystems some of these insect pests are carried from the fields into stores. Both internal feeders and external feeders are very destructive to grain. The only way to eliminate pests completely from a food grain without leaving pesticide residues is fumigation. Loss of fumigants, resistance to remaining fumigants and a trend by consumers to move away from residual chemicals, necessitates the development of mitigates related environmental and safety issue. Using ozone gas as a fumigant has shown promise in controlling stored-grain insect pests. In addition to being toxic to insects, ozone gas is unstable and decays naturally into diatomic oxygen and must be continually replenished to maintain entomologically lethal concentrations in the grain mass. The effectiveness of ozone sterilization of empty storage and transportation containers used for food products and bulk grains depend on the ability to maintain high concentrations over a sufficiently long period of time.

### **Biography**

Pawar Savita Gangadharrao has completed her MTech at the age of 24 years from Vasantrao Naik Marahwada Agricultural University. She served as Assistant Professor in College of Food Technology, Naigaon (Bz), Nanded (MS) during 2010 to 2012. She is now PhD scholar in the Department of Agricultural Process Engineering, Dr. Panjabrao Deshmukh Krishi Vidhyapith, Akola.

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