



# Super Bag extends shelf life of grains and seeds

COMPANY/  
ORGANIZATION



FOOD CHAIN  
AREA



ISSUE  
ADDRESSED

Post-harvest losses of crops occur due to mishandling, spoilage, and pest infestation.

SOLUTION

IRRI'S Super Bag is a farmer-friendly storage bag for grains and seeds that fits as a liner inside existing storage bags (e.g., woven polypropylene or jute bags). Using MAP, it reduces the flow of both oxygen and water between the stored grain or seed and the outside atmosphere. When properly sealed, respiration of grain and insects inside the bag decrease oxygen levels from 21% to 5%. This reduction reduces insects to less than 1 insect/kg of grain without using insecticides – often within 10 days of sealing. In addition, the stability of controlled grain moisture inside the bag prevents wetting or drying of grain. This stability reduces the degree of grain cracking and so head rice recoveries are higher upon milling.



EXPECTED  
BENEFITS

**Reduced food waste:** The bag can improve the head rice recovery of stored grain by 10%.

**Improved food safety:** It can control insect grain pests without using chemicals.

**Convenience:** It can extend the germination life of seed for planting from 6 to 12 months.

CASE LINK

[www.irri.org/irri-glance](http://www.irri.org/irri-glance)

CONTACT  
INFORMATION

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