

PICS Purdue Improved Cowpea Storage

Purdue Improved Crop Storage (PICS) bags use natural and synthetic chemicals to repel pests, protecting stored crops and extending the useful life of the bags.

Current bags used for storing grain and other crops are made of two inner layers of high density polyethylene and an outer layer made of woven materials such as nylon or polypropylene. However, the effectiveness of these bags is compromised when one of the layers is damaged or torn. Damage to the outer layer can allow penetration of the inner layers and holes and tears in the inner layers reduce the airtight status of the bag.

A Purdue University researcher has developed Purdue Improved Crop Storage (PICS) bags to protect grain and other commodities against insects or other pests. These bags apply natural and synthetic chemicals to the inner and/or outer layers of the bag. The chemicals repel insects and rodents so that they will not penetrate the storage bags and destroy the crops contained in the bags. This will also increase the useful life of the bags.

To view a video related to this technology, click on this link:

<https://www.youtube.com/watch?v=tW5VMEfcdkY&feature=youtu.be>

Advantages:

- Reduces grain storage bag penetration by insects and rodents
- Increases useful life of the storage bag

Potential Applications:

- Crop storage
- Crop protection from insects during storage

TRL: 9

Intellectual Property:

Technology ID

65481

Category

Chemicals & Advanced
Materials/Specialty &
Performance Chemicals

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Further information

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Trademark, 2010-01-25, United States | Trademark, 2013-10-23, United States | Trademark, 2013-10-23, WO | Trademark, 2014-02-20, Malawi | Trademark, 2014-03-07, OAPI | Trademark, 2014-03-10, Nigeria | Trademark, 2014-03-12, Cape Verde | Trademark, 2014-03-12, Gambia | Trademark, 2014-03-13, Tanzania | Trademark, 2014-03-19, Uganda | Trademark, 2016-09-29, Pakistan | Trademark, 2016-09-30, Sri Lanka | Trademark, 2022-03-16, Mozambique | Trademark, 2023-11-15, United States | Trademark, N/A, Ethiopia | Trademark, N/A, India | Trademark, N/A, Guatemala | Trademark, N/A, Burundi | Trademark, N/A, Bangladesh | Trademark, N/A, Nepal | Trademark, N/A, China