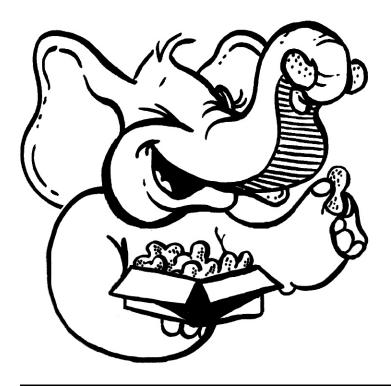
BIODEGRADABLE PACKING PEANUTS





Materials

- 1 package frozen corn
- Potato masher
- Bowl
- Slotted spoon
- Cheesecloth
- lodine
- Tablespoon and teaspoon
- 1 teaspoon water
- Paper cups
- Stir stick

DIRECTIONS

These packing peanuts are almost entirely made of corn! They are totally water soluble and biodegradable.

- 1. Place frozen corn in a bowl and thaw.
- 2. Crush thawed corn with a potato masher and cover with 6. The starch has dried and water. Let stand for 24 hours.
- 3. Remove corn from the bowl with a slotted spoon. Allow water to stand an additional 15 minutes.
- 4. Pour the water through the cheesecloth. This traps the cornstarch in the cloth.
- **5.** Allow students to see and feel the starch left in the cloth. Demonstrate the presence of

starch on the cloth by placing a small drop of iodine on an area near the edge of the cloth. If starch is present, the iodine will change from reddish-brown to blue-black.

Let the cloth dry overnight.

turned into powder. Let students feel and taste it.

Mix 1 tablespoon cornstarch with the water in a paper cup, stirring until it forms a workable paste.

Microwave the paste on High for 15 seconds to provide a more consistent product for examination. Congratulations! You now have a biodegradable packing peanut!

Observations:

Have students place their peanut and a traditional packing peanut in separate glasses of water and observe the two.

- Which peanut would be best for the environment? Why?
- Bury both peanuts in soil to compare biodegradability. Track and compare results.

Credit: Kentucky Corn Growers