

The Fifth Grade has Gone Bananas

Prediction

January 15, 2013

Based on our research we believe:

1. The quart size plastic Ziploc type bag will allow for the highest concentration of ethylene gas
2. The gallon size plastic Ziploc type bag will allow for high concentration of ethylene gas but due to its size will take slightly longer for the banana to ripen than that of the quart size bag
3. The paper bag will allow concentrations to rise slightly more than what is what could possibly be in the air outside the bag because of its size and the material being porous allowing gasses to escape.
4. The produce bag is a concern for us. This is not just a typical plastic produce bag taken from the rolls found near the grocery produce section but is a specially made Debbie Meyer Green Bag. The "instructions" page explaining the bags says this:

"They absorb and remove damaging gases: Most fruits, vegetables, and flowers release ethylene gases during the natural ripening process after harvest. Exposure of the produce to these gases accelerates aging and deterioration. Debbie Meyer Green Bags are made with a natural mineral that is known to extend the life of produce by absorbing and removing the ethylene gases that cause deterioration..."

(please see the attached documentation)

5. The banana placed in the open should have the lowest concentration of ethylene gas around it since the gas will raise and be mixed the room air.
-

Because of our beliefs stated above we predict that our bananas will ripen in the following order:

- | | |
|-----------|---------------------------|
| Banana #2 | (quart Ziploc) |
| Banana #3 | (gallon Ziploc) |
| Banana #5 | (paper grocery sack) |
| Banana #4 | ("Green Bag" produce bag) |
| Banana #1 | (No covering) |