

Abstract

One of the greatest grocery frustrations is related to purchasing bananas. As you consider all the possible bunches you work to find those which have begun the ripening process but are still green enough NOT to turn so brown just a couple of days later that nobody wants to eat them. This project seeks to determine if there is a way to control the ripening process of bananas by controlling the ethylene gas concentrations in the environment around a banana. It is hypothesized that bananas which have a higher concentration of ethylene gas in their environments will ripen faster than those left in the open.

One banana will be the control and will be left in the open. One banana will be put into a quart size Ziploc type bag assuming that the baggie traps the ethylene gas. One banana will be put into a gallon size Ziploc type bag assuming that baggie traps the gas but due to its larger size has a concentration of ethylene that is less than the quart size bag. One banana will be put into a Debbie Meyer "Green Bag" and one banana will be put into a paper grocery sack. Each day observations would be charted as to the ripeness of each.

This procedure was conducted over 5 trials. The data showed that the bananas left in the open and placed in the grocery sack ripened nearly identically over time and significantly faster than those put into one of the plastic bags. Those in the Ziploc style bags ripened nearly identically over time.

The data tends not to support the hypothesis.