

Banana and plantain. Effects of ethylene:

It accelerates the ripening and over-ripening

Softening. Loss of firmness

Yellowing of the firm green bananas

Increase of rots and microbial infection (*Musae Colletotrichum*, *Botrytis cinerea*, *Lasiodiplodia theobromae* ...).

More severe symptoms of chilling injury

Shrinkage and weight loss caused by the increased respiration

Low homogeneity of the batch after controlled maturation

Ripening of climacteric fruits initiated at low ethylene levels

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Abstract. Mature, unripe mango, peach, custard apple, kiwifruit and tomato were stored at 20°C in air containing ethylene at <0.005, 0.01, 0.1 1.0 and 10 µL/L. The time to ripen of all the climacteric fruits increased linearly with logarithmic decrease in ethylene concentration over the whole concentration range examined. Similar observations were also obtained with kiwifruit and custard apple held at 0 and 14°C, respectively. However, the sensitivity of fruits to ethylene varied with banana and kiwifruit > custard apple and mango > tomato, avocado and peach. Since the ethylene level around horticultural produce during marketing is always >0.005 µL/L, the time climacteric fruit can be held in an unripe condition is currently less than optimal but intervention to limit ethylene action would appear to be only warranted for the most sensitive fruits.



Banana is one of the most ethylene sensitive fruits. In fact, there is not a sensitivity threshold. Any amount, however small, leads to the maturation (in proportion to the concentration of ethylene)

