

Orange Preservation Test



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Soak 2 oranges: one in tap and other in the ceramic ore water.

In order to promote decay, we have wrapped and sealed the two oranges with plastic wraps



First Month:

No visible changes were observed in the orange soaked in ceramic ore water. You can see some water coming out of the orange soaked in tap water.



Second Month:

No visible change observed in ceramic treated water soaked orange (center). Tap water soaked orange started to drip moisture out (right) and started to decay. We have added a unprocessed fresh orange



Third Month:

No visible change observed in ceramic treated water soaked orange (center). Tap water soaked orange has started its decay process. A visible mold can be seen. The unprocessed orange started to shrink due to dehydration.

The visible result of this experiment shows how ceramic treated water has a superior freshness and moisture preservation ability.



Fourth Month:

Slight visible moisture dripping was observed in orange with ceramic treated water(center).

Tap water soaked orange had progressively decayed.

The unprocessed orange had progressively dehydrated.



Fifth Month:

Not much visible change since the 4th month for ceramic treated orange (center).

Tap water soaked orange has progressively decayed (right).

The unprocessed orange has progressively dehydrated and shrunk from its original.



Sixth Month:

The orange (center) treated with ceramic water has dripped some water out but is still in an edible condition.

Tap water soaked orange progressed with so much decay (right) that obvious deformation is seen.

The unprocessed orange has progressively dehydrated and has obviously shrunk from its original size compared to when the test started.

In this experiment, the orange soaked in water treated with the ceramic ores retained its freshness for 6 months at room temperature.

This result was positively overwhelming.

Most freshness preservation methods normally would be to disinfect the surface and remove/disinfect bacteria. Usually for disinfection, orange producers would either use acid water, ozone-water and or liquid sodium hypochlorite. No matter which type of disinfection methods would be utilized the orange cells will eventually deteriorate and would not maintain freshness for more than a month or two. However, the ceramic water did not disinfect the orange cells but rather it seems that the orange cells were rejuvenated. The orange surface did not leak out its moisture or juice and thus protected itself from bacterial infestation. As a result, the orange ended up lasting for 6 months at room temperature and still incredibly in an edible condition 6 months after!

Bacteria usually cannot survive without 3 key elements: air, water, and nutrients. Both oranges, one soaked in tap water and one soaked in ceramic treated water should have had airborne bacteria adhere to its surface. The unprocessed orange just simply shriveled up since bacteria could not infest the surface without water. (This is exactly like dehydrated fruits.)

