

Does water make fruit rot faster?

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Purpose

I want to see if putting blueberries in water or spraying blueberries with water would make them last longer before rotting or not.

Hypothesis

I think that the water will make fruit rot faster.



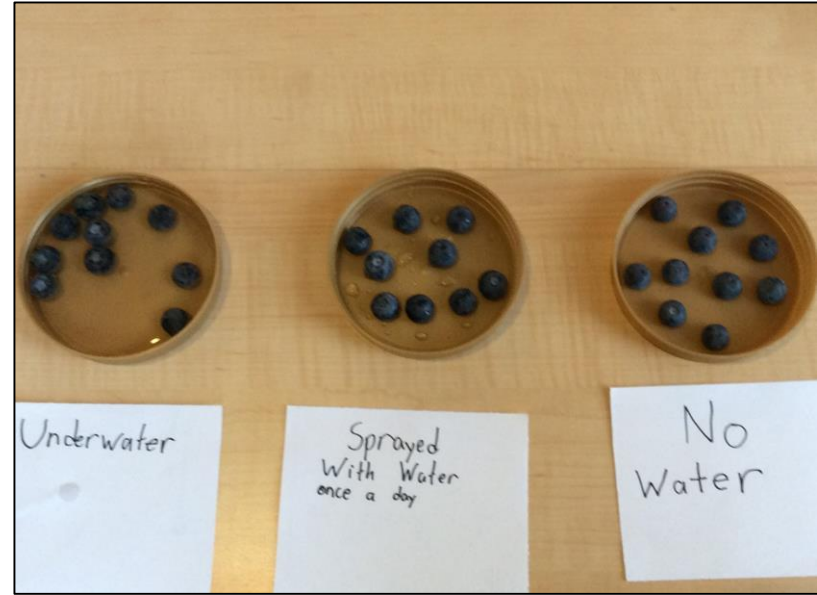
Materials

30 blueberries, 3 dishes, a spray bottle, Tap water



Procedure

1. Prepared 3 dishes.
2. Put 10 blueberries in each dish.
3. Filled up one dish with water.
4. Sprayed water on another dish.
5. Left the final dish dry.
6. Checked the 3 dishes at the same time every day to make observations.
7. Took pictures every 1-3 days to keep track of blueberries changes.



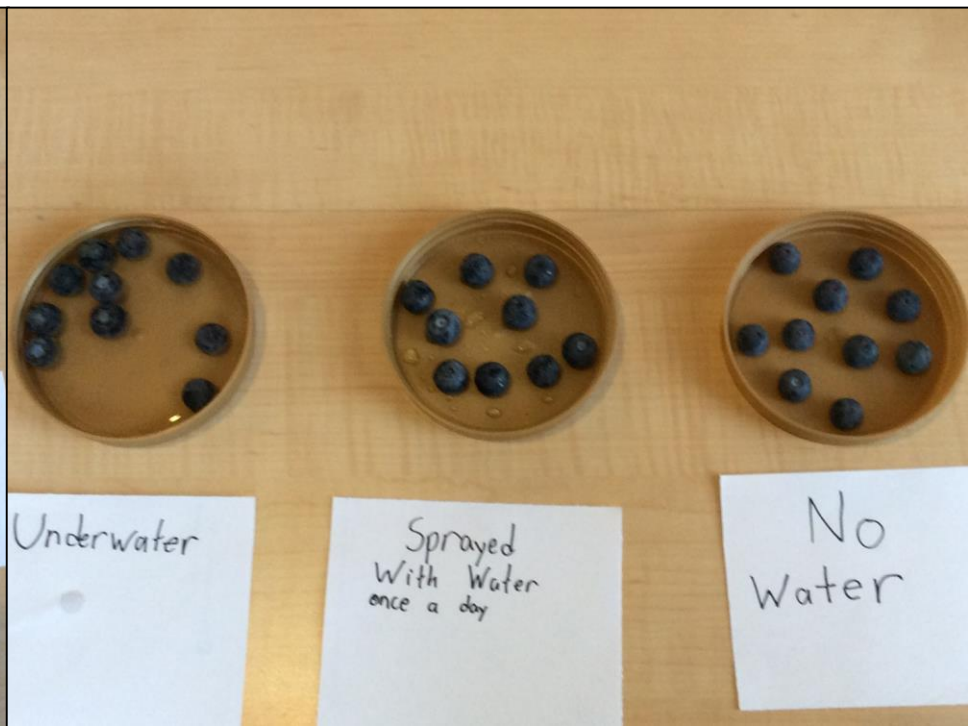
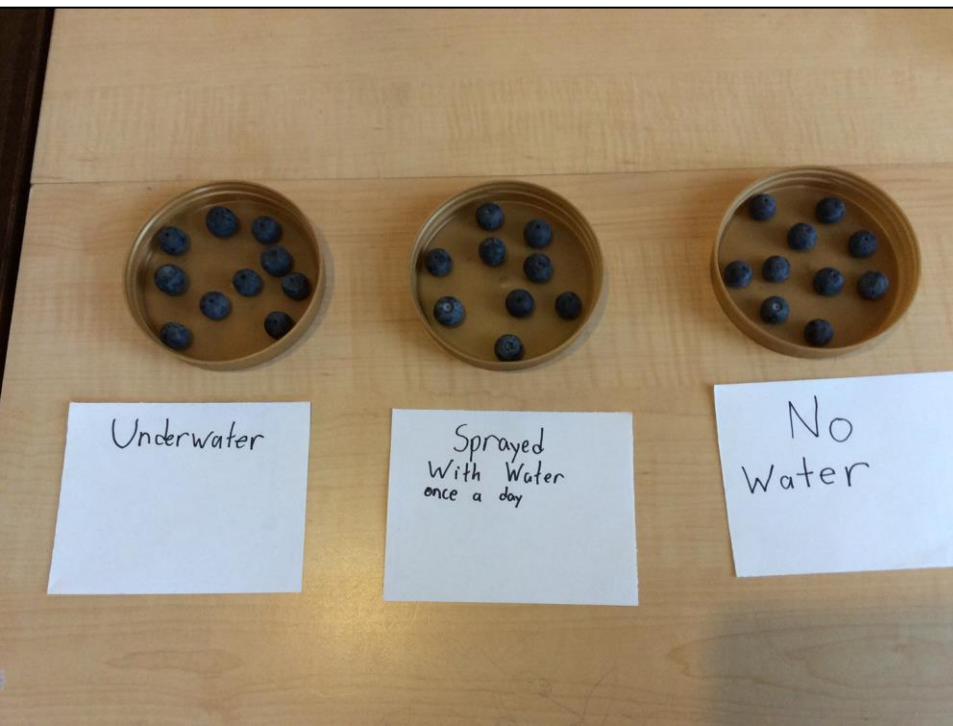
Variables

- Independent variable: the amount of water used in the bowls
- Dependent variable: the amount of mold that grows in the blueberries
- Controlled variable: the amount to of blueberries and the look of the blueberries (same colour and size.)

Day 0 status

Before adding water

After adding water



Day 6 status

Underwater

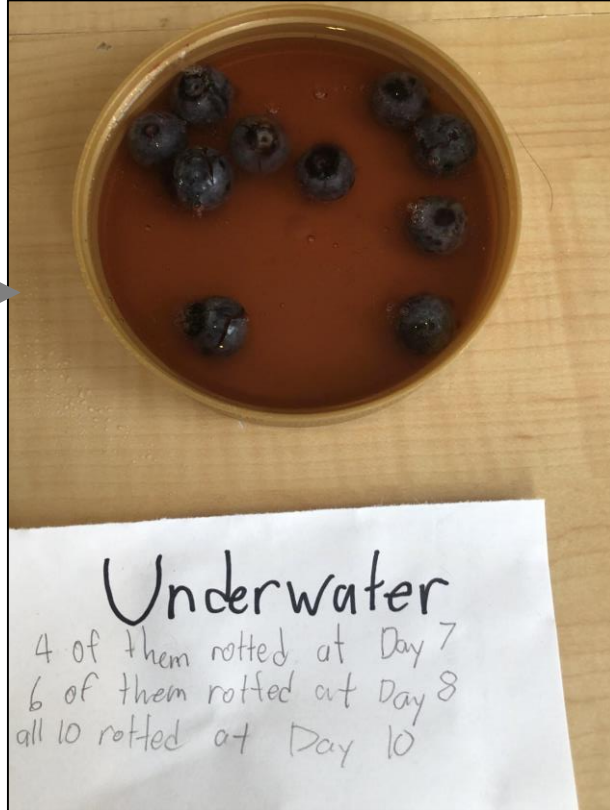


Rotten areas
(black color)

Day 10 status

no rotten blueberries

The rotten →
material spread
out the whole
dish, and melled
bad. I had to
discard it.



Day 17 status

Sprayed with water



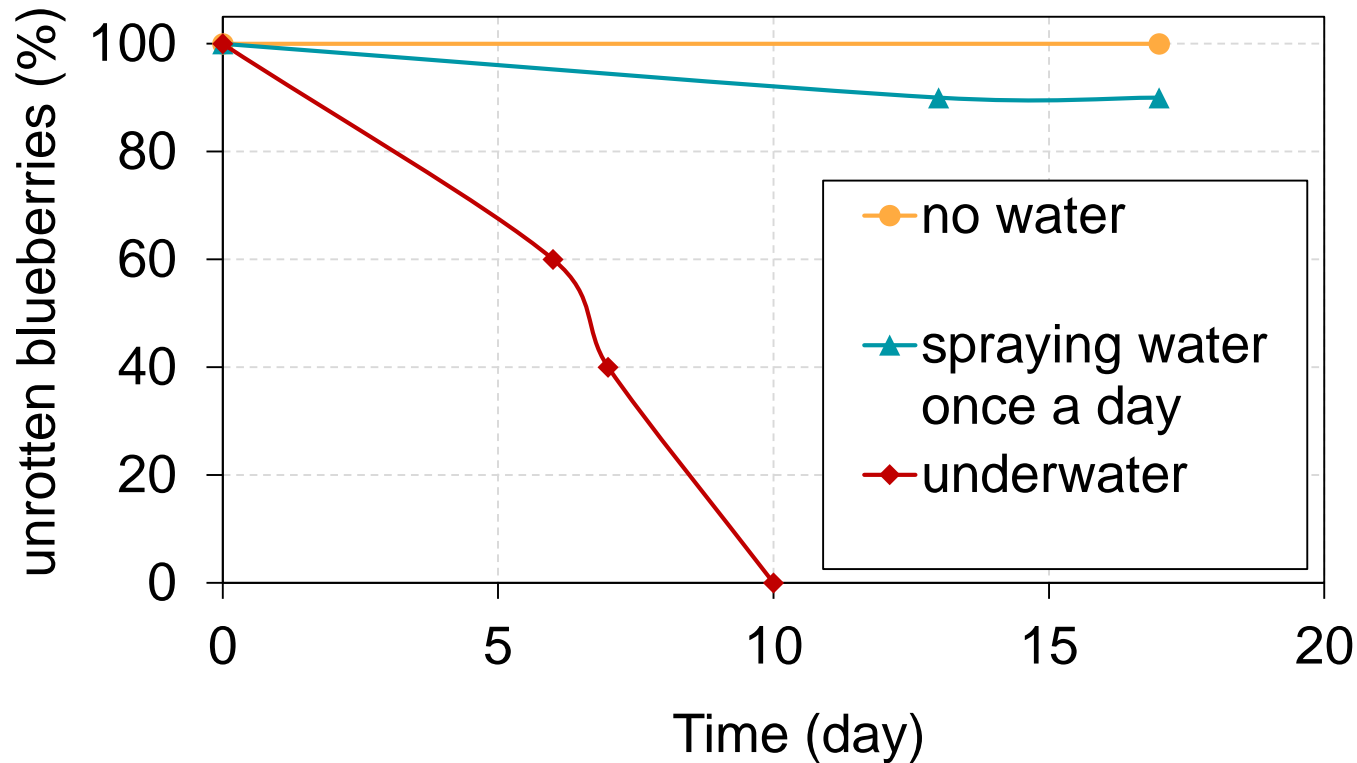
no rotten blueberries



Observation summary table

Test ID	Time (day)	# of rotten blueberries	# of unrotten blueberries
underwater	0	0	10
	6	4	6
	7	6	4
	10	10	0
sprayed water once a day	0	0	10
	13	1	9
	17	1	9
no water	0	0	10
	17	0	10

Observation summary plot



Results

- The blueberries with water rotted faster than the blueberries without water.
- The blueberries underwater rotted much faster than those sprayed with water once a day.
- The rotten area had a white color for blueberries sprayed with water, but the rotten area underwater had a black color.

Conclusion

- Water makes fruits rot faster, and you cannot preserve them by putting them underwater.
- Based on my research, fruits rot because of growth of microorganisms. In my experiment, microorganisms grow faster in wet environments. Don't try to soak fruit in water if you want them to last longer.