



Microbial reduction in a fresh produce Cool Room

This trial was conducted in a cool room in which cartons of pineapple were stored. The purpose of the test was to determine the impact of Bluezone® Fresh Preservation Technology on microbial load within the room. It was decided that the operational method to measure microbial load would be to swab the walls of the cool room. The walls of the room were swabbed using hand held swabs provided by the testing laboratory. For the initial readings swabs were taken at two points in the test room and also in another room that had had a Bluezone® Fresh Preservation Technology Model 2400 unit operating for at least 14 days. The results of these initial tests were as follows:

date	room	contents	position	Total Bacterial Count	Yeast Count / swab	Mould Count / swab
1/11/2012	15A	Pineapple	front wall	41	0	13
1/11/2012	15A	Pineapple	back wall	210	3	18
1/11/2012	16A	Kiwifruit	front wall	0	0	0
1/11/2012	16A	Kiwifruit	back wall	78	0	0

After taking the initial samples one Bluezone® Fresh Preservation Technology Model 2400 unit was placed in the room and switched on. Thirteen days later as the rear wall of the cool room under test had the highest bacterial count the rear wall of the room (15A) was swabbed again and the samples sent for analysis. During the thirteen days no actions were taken that might influence the outcome of the trial other than the installation of the Bluezone® unit within the room. Produce type, room temperature etc. all remained the same. The results obtained from this test were as follows:

date	room	contents	position	Total Bacterial Count	Yeast Count / swab	Mould Count / swab
13/11/2012	15A	Pineapple	back wall	13	1	2

Conclusion

The Bluezone® Fresh Preservation Technology had reduced total bacterial count, yeast and moulds in just 13 days and this can be expected to increase shelf life as well as reduce bacterial contamination around fans and walls within the cool room.