

Receipt No.

2017-B0711002

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**Bio Research Institute**



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## Test Report

Test title	Electronic Tongue Analysis of Orange Juice		
Sample	- Orange juice made with Kuvings Vaccum Blender - Orange juice made with Traditional Kuvings Blender		
Date of Receipt	Jul 3, 2017	Date of Issue	Jul 11, 2017

### Preparation of sample

150 g of peeled orange is blended to create orange juice sample. It is then diluted 5 times with sterile water and filtered before testing.

### Electronic tongue equipment

E-tongue system used : ASTREE electronic tongue(Alpha M.O.S., Toulouse, France)

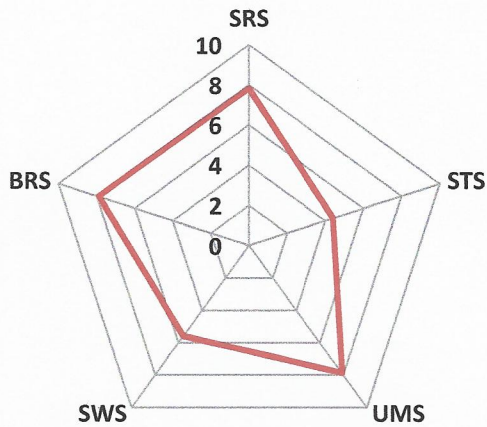
Sensor Set Tested : SRS(sourness), STS(saltiness), UMS(umami), SWS(sweetness), BRS(bitterness)

### Analytical conditions of Electronic tongue

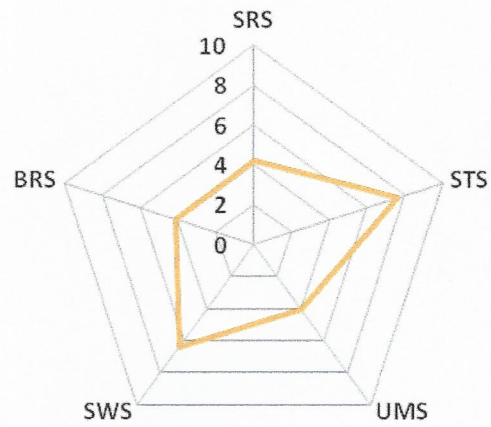
Items	Operating conditions
Sample volume	25 mL
Acquisition time	200 sec
Cleaning time	10 sec
Time per analysis	3 min
Sensor module	#5 (specific taste sensor module)
Number of repeats	5 replicates/sample

## Test Result

Radar graph of orange juice made with Kuving Vaccum Blender and Traditional Kuvings Blender.



Orange juice made with Kuvings Vaccum Blender



Orange juice made with Traditional Kuvings Blender

\* Sensor : SRS(sourness), STS(saltiness), UMS(umami), SWS(sweetness), BRS(bitterness)

## Conclusions

Generally, the wider the radar graph, the flavorful the juice taste.

The analysis showed that the radar graph was wider for orange juice made with Kuvings Vacuum Blender suggesting that it retained richer taste and flavor than the orange juice made with Traditional Kuvings Blender.

