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A CRISIL-NSIC RATED COMPANY
ISO 9001: 2008 COMPANY
AFFILIATED TO THE UNIVERSITY OF NOTTINGHAM
MEMBER OF AMICAL

DATE:16/07/2017

CLIENT: ADEPT IMPEX PVT LTD

APPLICATION: Microwave exposure to neem leaves to get crispy texture by removing moisture.

TRIAL SETUP:



PROCEDURE FOLLOWED:

1. Take neem leaves as it is without any treatment and placed on a conveyerised microwave system.
2. Intensity was set on 85% and frequency was 0.84 Hz, so the exposure time was 12 minutes in 1 pass
3. Pictures were taken to observe the texture of leaves.

TRIAL READINGS AND OBSERVATIONS:



Fresh green leaves of neem for trial
with layer of 50mm thickness



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After 1st pass in microwave, leaves showing some shrinking and colour change.



After 2st pass in microwave, leaves showing more shrinking and colour change of light brownish and dark greenish.

RESULT:

1. It took 2 nos of passes in conveyerised microwave to get crispy moisturefree texture of leaves.
2. So, 2 nos of passes is equal to total 24 minutes of microwave exposure.
3. Following are before and after pictures of trial showing the proper result.



BEFORE



AFTER



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This picture is showing the texture of leaves after microwave exposure. It get crushed easily by hand after microwave exposure.



MISS. KOMAL BHOITE
TESTING INCHARGE

MR. RAMESH SHINDE
CHECKED BY

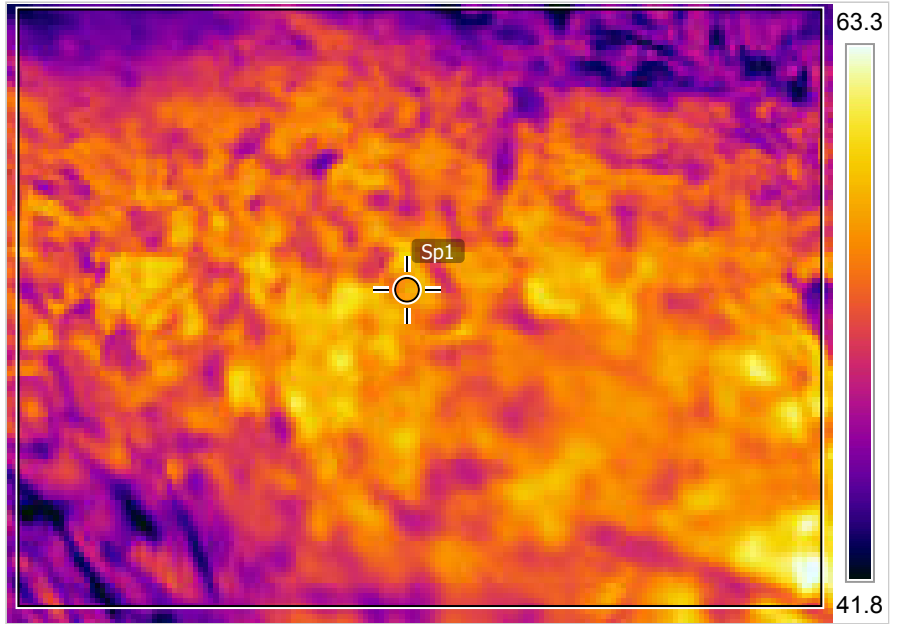
Measurements

°C 15/07/2017 3:51:32 PM

Ar1	Max	64.0
	Min	41.4
	Average	52.6
Sp1		56.7

Parameters

Emissivity	0.95
Refl. temp.	20 °C
Distance	2 m
Relative humidity	50 %
Atm. temp.	33 °C
IR window temp.	20 °C
IR window transmission	1



IR_0134.jpg

15/07/2017 3:45:48 PM



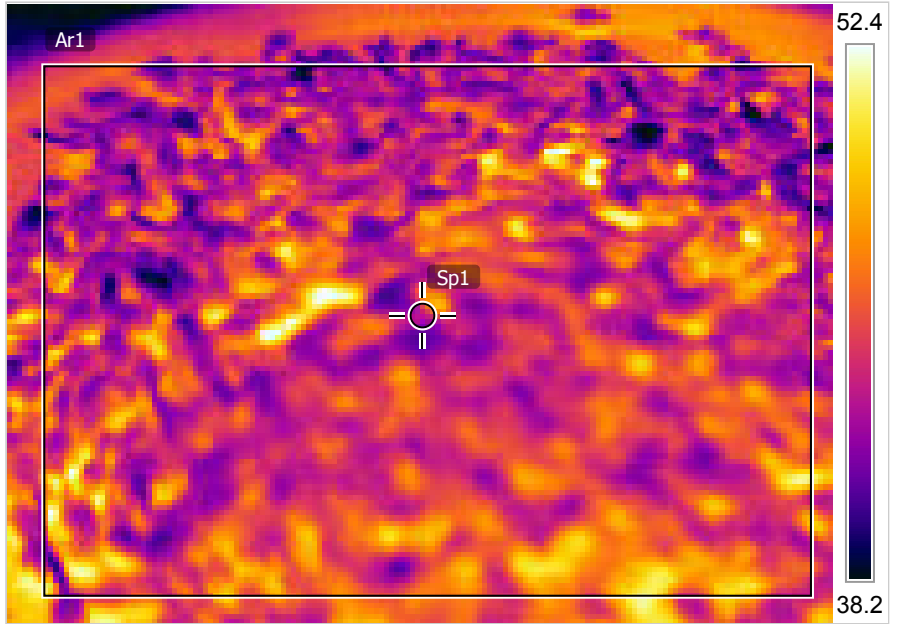
DC_0133.jpg

Measurements °C 15/07/2017 3:56:11 PM

Ar1	Max	53.3
	Min	37.7
	Average	44.4
Sp1		43.0

Parameters

Emissivity	0.95
Refl. temp.	20 °C
Distance	2 m
Relative humidity	50 %
Atm. temp.	33 °C
IR window temp.	20 °C
IR window transmission	1



IR_0136.jpg

15/07/2017 3:51:32 PM



DC_0135.jpg

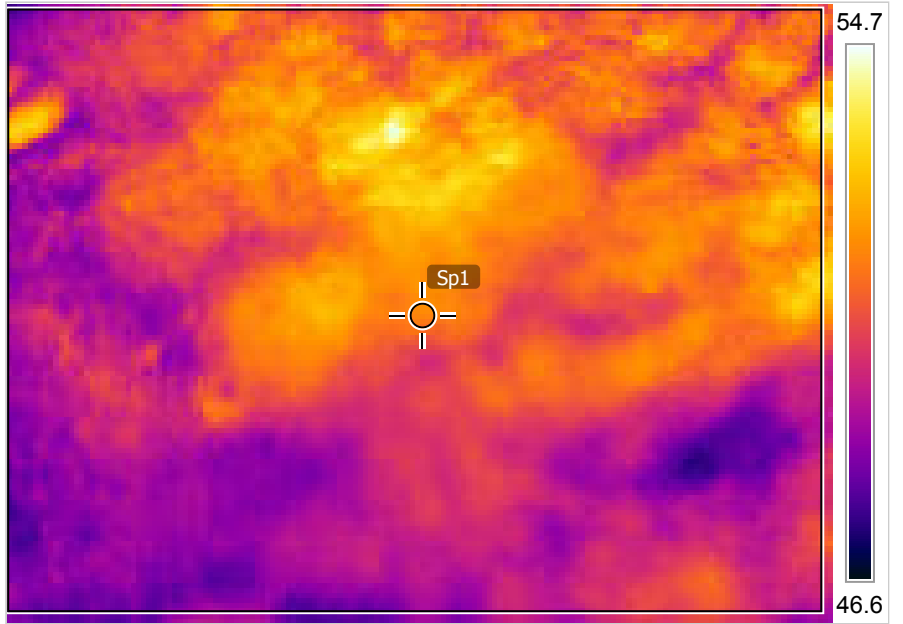
Measurements

°C 15/07/2017 5:34:37 PM

Ar1	Max	54.7
	Min	47.4
	Average	50.3
Sp1		51.6

Parameters

Emissivity	0.95
Refl. temp.	20 °C
Distance	2 m
Relative humidity	50 %
Atm. temp.	33 °C
IR window temp.	20 °C
IR window transmission	1



IR_0146.jpg

15/07/2017 4:54:10 PM



DC_0145.jpg