



NSF International

1341 Redwood Way
Petaluma, CA 94954 USA

CERTIFICATE OF ANALYSIS

Genetic Testing

Client:	NSF International	Report Number:	01-771-4-dna
Client Address:	1341 Redwood Way Petaluma, California 94954, United States	Received Date:	05/21/2018
Client Sample Number:	Template	Testing Date:	05/21/2018 - 06/04/2018
Client Description:	Blended material	Report Date:	11/14/2018
Client Target Species:	<i>Camellia sinensis</i> , <i>Citrus</i> <i>sp.</i> , <i>Rubus occidentalis</i> , <i>Brassica oleracea</i>		

Testing Information

Method: DNA Species Identification SOP 17236

Instrument: Ion torrent Personal Genome Machine Next Generation DNA Sequencer

References: Proprietary HERB™ reference DNA sequence database

Tests: FP-4 – Universal plant test, FP-53 – Specific *Citrus* test, FP-1 – Universal plant test

Universal Testing Results

Species	Number of sequences
<i>Rubus sp.</i>	180
<i>Camellia sinensis</i>	6002
<i>Brassica oleracea</i>	6
<i>Other plants</i>	80

Specific Testing Results

Species	Number of sequences
<i>Citrus sp.</i>	9542

Sample Notes

Camellia sinensis, Brassica oleracea, and a Rubus species were identified in the sample. The sequences identified as Rubus sp. were consistent with Rubus occidentalis but could not be further identified due to genetic similarities among species. Other plant sequences were also detected. No Citrus species were detected in the universal testing. Therefore, a specific Citrus test was used. Sequences of Citrus were detected in the sample. These sequences were consistent with species of oranges but could not be further identified due to genetic similarities among species.

Authorization



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