

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2026
 DateRun: 06/15/2026
 Experimenters: Ashar Khan, Evan Hebert
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Food
 PartType: Coupon
 Contaminants: Dirt, Oil
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric

Purpose: To evaluate the effectiveness of Rebel Green's Fruit and Veggie Clean product against the comparative product, Beaumont Product's Veggie Wash and water as a control, in removing a soil-and-oil mixture from produce.

Experimental Procedure: Initial weights were recorded for nine snow peas and nine cherry tomatoes, with three replicate substrates tested per product and tap water as a control. Produce samples were contaminated by placing them in a container with a soil mixture of five teaspoons of Miracle-Gro Organic Potting Soil, 500 mL of water, and one milliliter of mineral oil, then shaking the container for 30 seconds. Dirty weights were recorded after contamination. The contaminated snow peas and cherry tomatoes were then cleaned in a 1:10 dilution of each cleaner for 30 seconds using immersion and mild agitation with a stir bar to simulate swishing. The produce air dried at room temperature (68F) before final weights were recorded, and percent soil removal was calculated.

Initial weights were recorded for nine snow peas and nine cherry tomatoes, with three replicates of each substrate tested per cleaner and for the tap water control. Produce samples were contaminated by placing them in a container with a soil mixture consisting of five teaspoons of Miracle-Gro Organic Potting Soil, 500 mL of water, and one milliliter of mineral oil. The container was shaken for 30 seconds to coat the produce, and dirty weights were recorded after contamination.

The contaminated snow peas and cherry tomatoes were cleaned for 30 seconds using immersion and mild agitation with a stir bar to simulate swishing. Samples treated with Rebel Green and Veggie Wash were cleaned using a 1:10 dilution of each cleaner, while control samples were cleaned with tap water under the same conditions. The produce was allowed to air dry at room temperature, approximately 68 °F, before final weights were recorded. Percent soil removal was then calculated.

Results:

Product	Substrate	Initial wt of cont.	Final wt of cont.	% Cont Removed	Average % Removal	Overall % Removal
Rebel Green	Snow Peas	0.5645	0.0319	94.35	96.19	95.74
		0.5595	0.0239	95.73		
		0.6134	0.0092	98.50		
	Tomatoes	0.1410	0.0069	95.11	95.28	
		0.2051	0.0101	95.08		
		0.1339	0.0058	95.67		
Veggie Wash	Snow Peas	0.5929	0.0319	94.62	95.32	95.32
		0.6206	0.0223	96.41		
		0.5295	0.0269	94.92		
	Tomatoes	0.1659	0.0079	95.24	95.33	
		0.1972	0.0092	95.33		
		0.1873	0.0086	95.41		
Tap Water	Snow Peas	0.3139	0.0418	86.68	89.30	81.53
		0.3735	0.0160	95.72		
		0.2111	0.0306	85.50		
	Tomatoes	0.0491	0.0128	73.93	73.76	
		0.0366	0.0096	73.77		
		0.0454	0.0120	73.57		

Summary:

Substrates:	Food				
Contaminants:	Dirt, Oil				
	Product Name:	Conc.:	Efficiency:	Effective:	Observations:

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Company Name:					
Rebel Green	Fruit and Veggie Clean	1:10 Dilution	95.74	<input checked="" type="checkbox"/>	
Beaumont Products	Veggie Wash Fruit and Vegetable Wash	1:10 Dilution	95.32	<input checked="" type="checkbox"/>	
Water	Water	100%	81.53	<input checked="" type="checkbox"/>	

Conclusion:

Rebel Green performed as well as the comparative product, Veggie Wash, and demonstrated greater contaminant removal than the tap water control under the conditions tested.