

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020  
 DateRun: 09/22/2020  
 Experimenters: Zoe Lawson, Justin Kiander  
 ClientType: Cleaner Manufacturer  
 ProjectNumber: Project #1  
 Substrates: Food  
 PartType: Coupon  
 Contaminants: Dirt, Oil  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of the cleaner Fit Organic using a food based substrate.

Experimental Procedure: The soil mixture used a teaspoon of AATCC Carpet soil added to 50 ml of mineral oil and was shaken to mix it up. The soil was dispensed using a plastic squeeze pipette. Approximately 0.03 to 0.05 grams of soil was added to a pre-cleaned piece of fruit/vegetable. The fruit/vegetable was weighed with the dirt to determine the amount of soil added. The dirty fruit/vegetable was cleaned for 20 seconds using immersion and mild agitations (up and down dunking). Final weights were recorded and the percent soil removal was calculated. Test evaluation was run in triplicate. In addition, a ranking from best to worst was visually taken of the fruit/vegetables.

Results: Qualitative Assessment

| Cleaner     | Initial Weight | Final Weight | % Removed | Overall Average Removal |
|-------------|----------------|--------------|-----------|-------------------------|
| Fit Organic | 0.0419         | 0.0028       | 93.32     | 93.36                   |
|             | 0.0325         | 0.0028       | 91.38     |                         |
|             | 0.0476         | 0.0022       | 95.38     |                         |

Visual Ranking

| Cleaner     | Visual Rank 1 | Visual Rank 2 | Visual Rank 3 |
|-------------|---------------|---------------|---------------|
| Fit Organic | 1             | 1             | 1             |

Summary:

|                      |                                      |               |                    |                                     |                      |
|----------------------|--------------------------------------|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>   | Food                                 |               |                    |                                     |                      |
| <b>Contaminants:</b> | Dirt, Oil                            |               |                    |                                     |                      |
| <b>Company Name:</b> | <b>Product Name:</b>                 | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| Fit Organic          | Fit Organic Fruit and Vegetable Wash | 100           | 93.36              | <input checked="" type="checkbox"/> | Visual Rank 1        |

Conclusion: Fit Organic was effective in removing the soil from the food substrate with a removal average of 93.36%. This was slightly better than Rebel Green which averaged 92.79. However, the difference was not statistically different.