

CELISE BIOPRODUCTS

HCM01-116mm Compost Field Testing Results



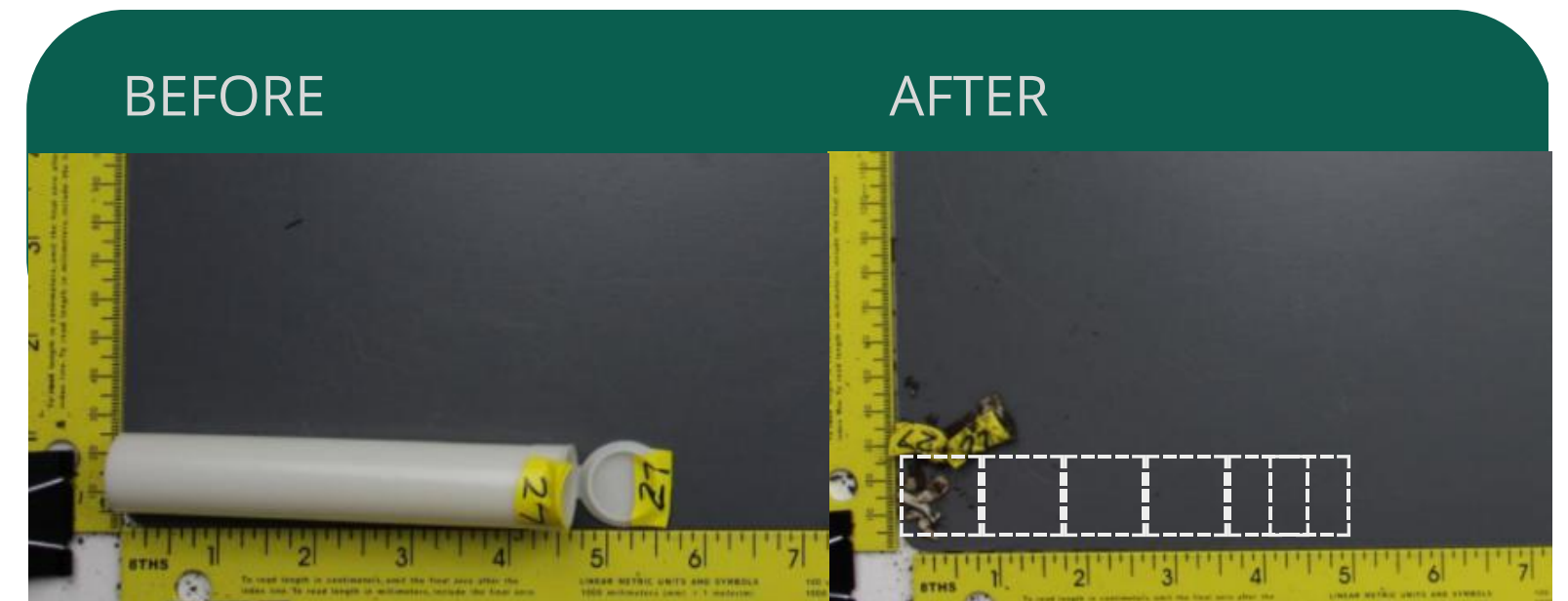
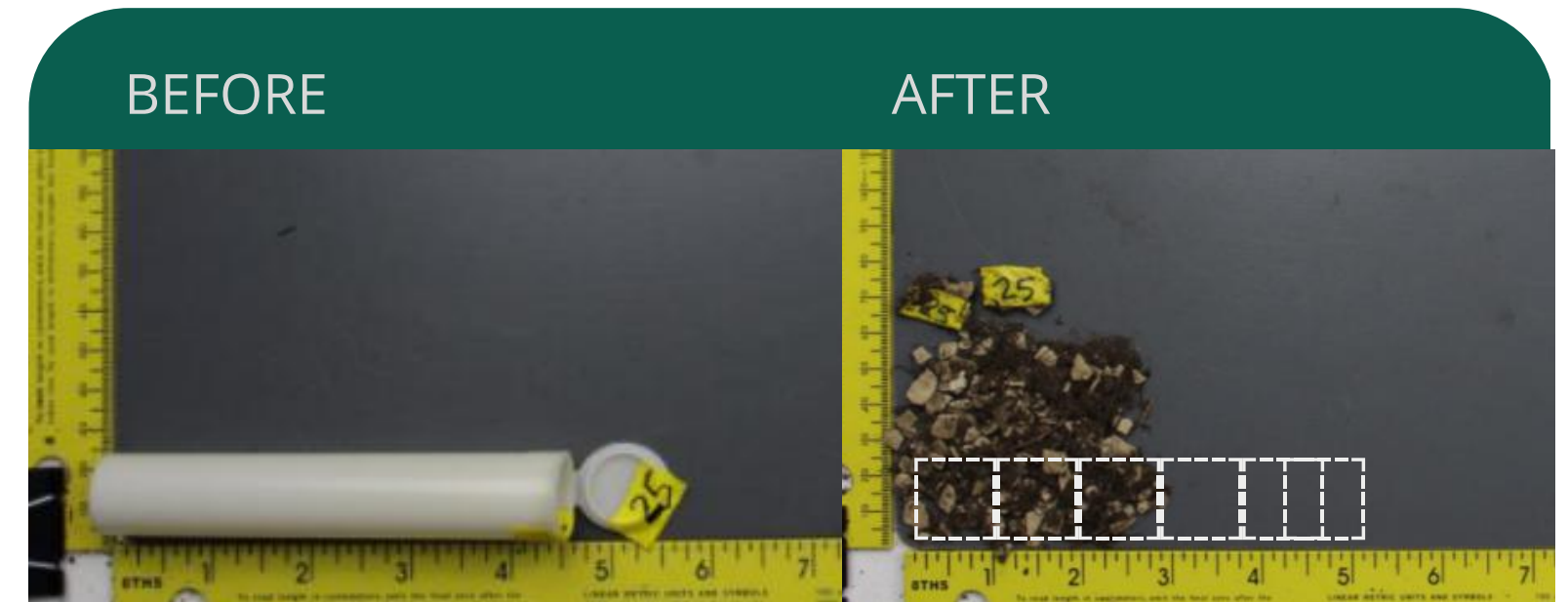
Field Test 1 Compostability Results

Testing Parameters: Field Test 1

- Testing Period
 - 49 Days
- Testing Type
 - CMA-1, in-vessel
- Testing Place
 - Cedar Grove
- Placement Period
 - 03/17/2021 - 05/05/2021
- Temperature Range (Period)
 - 130 - 180 F

Least Disintegration
~ 21 - 24% remaining
Bag A Placement

Most Disintegration
< 5% remaining
Bag C Placement



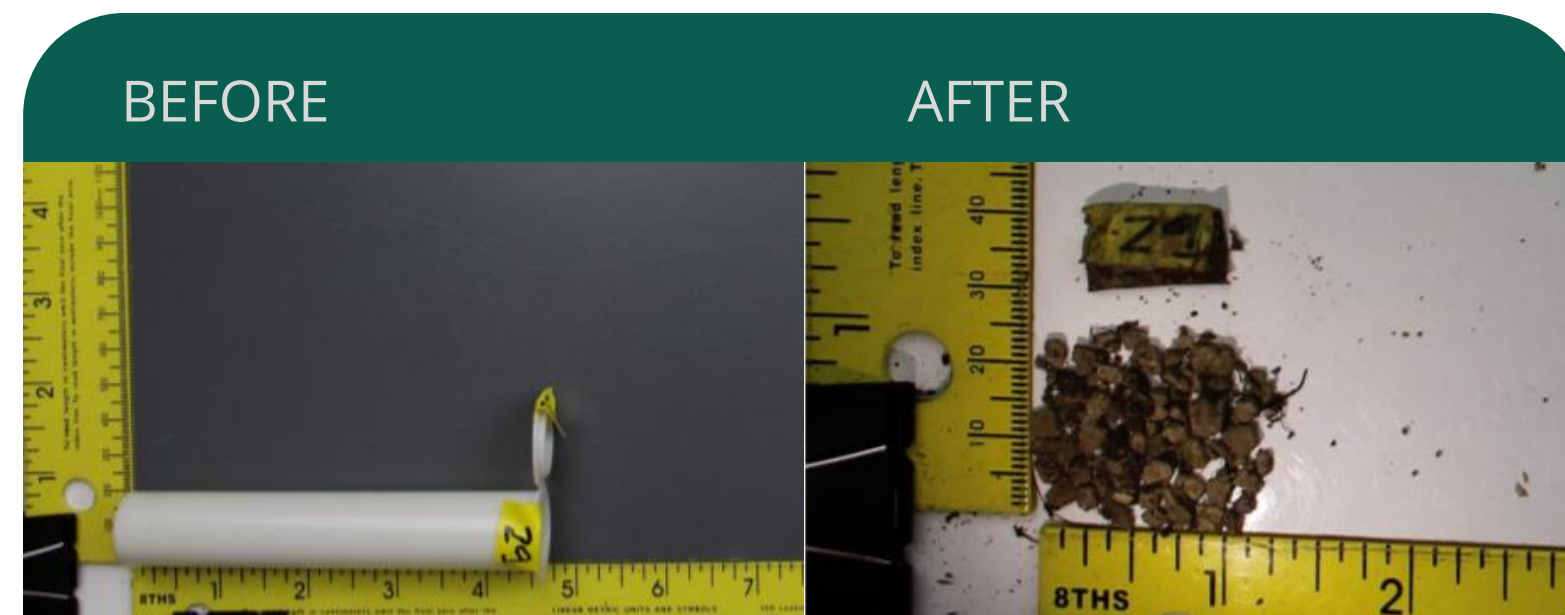
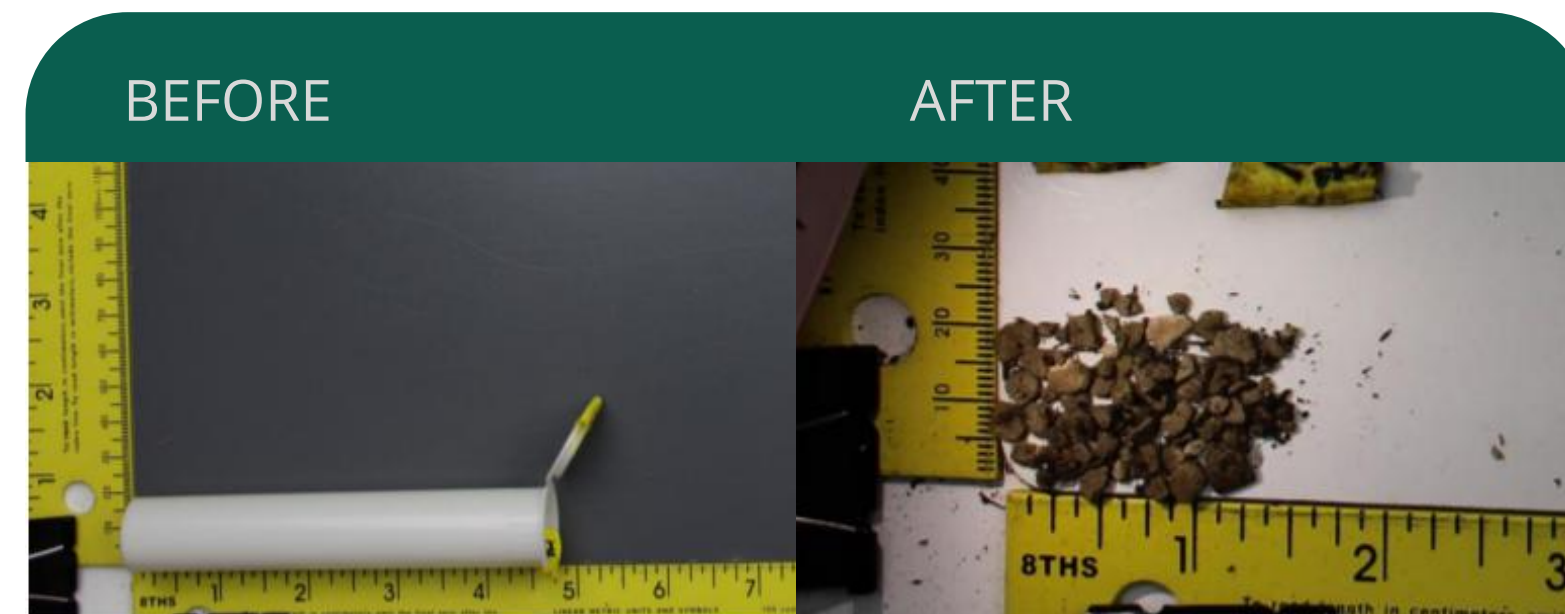
Field Test 2 Compostability Results

Testing Parameters: Field Test 2

- Testing Period
 - 46 Days
- Testing Type
 - CMA-1, in-vessel
- Testing Place
 - Cedar Grove
- Placement Period
 - 07/07/2021 - 08/22/2021
- Temperature Range (Period)
 - 130 - 180 F

Least Disintegration
~ 12-14% remaining
Bag D Placement

Most Disintegration
10-12% remaining
Bag E Placement



Internal 12 month Biodegradation Testing

Time lapse of Celise HCM01 pre-roll tube degradation in non-composting environment. The tube was placed in a static, non-aerated garden bed with minimal disturbance other than photo documentation.

January 1, 2021



Placed in elevated home garden bed in generic brand compost. Covered by 4-6 inches topsoil.

June 1, 2021



The tube walls have hollowed and are thriving with microbial activity. The lid has decomposed.

September 1, 2021



The tube is brittle, able to disintegrate by touch. The walls are brown with decay and collapsing.

January 31, 2022



A collapsed, ashy tube subsection remains in thawing soil.

HCM01-116mm Compostability

- Celise HCM01-116mm containers are made from biodegradable and renewable inputs, all achieving ASTM-D6400 commercial compostability certifications
- The product: HCM01-116mm has achieved select compost facility acceptance with Prince George County's Organic Compost facility in Maryland
- The material blend has created a product with the ability to achieve home compostability in active composts within 12 months
- Please contact us for return information or help with collected tubes for composting due to the federal status of cannabis ancillary products

