



May 8, 2015

**Mail To:**

**Mr. Web Cowden**  
**Mirimichi Green Express**  
418 Hermitage Rd.  
Castle Hayne, NC 28429

email: web@mgpros.com

**Bill To:**

**<= Same**

Dear Mr. Cowden:

Thank you for consulting TRI/Environmental, Inc. (TRI) for your geosynthetics testing needs. TRI is pleased to submit this final report for laboratory testing.

TRI Job Reference Number: E2387-07-01  
Material(s) Tested: Mirimichi Green Nutri-Jump / Nutri-Release  
Test(s) Requested: Germination Enhancement (ASTM D 7322)

If you have any questions or require any additional information, please call us at 1-800-880-8378.

Sincerely,

Jarrett A. Nelson  
Technical Director  
Geosynthetic Services Division



### Germination / Vegetation Growth Summary

ASTM D 7322:

STANDARD INDEX TEST METHOD FOR the DETERMINATION of TEMPORARY DEGRADABLE RECP PERFORMANCE IN ENCOURAGING SEED GERMINATION AND PLANT GROWTH

Property	Units	Day	Control	Mirimichi Green Nutri Release/Jump
Seeds Germinated per Area	# per 4 sq.in.	0	0.00	0.00
		7	0.22	2.78
		14	4.44	10.11
		21	4.56	11.22
Average Plant Height	inch	0	0.00	0.00
		7	0.01	0.15
		14	0.26	1.01
		21	0.49	1.75
Plant Mass per Area	mg per 4 sq.in.	21	5.54	22.23

Property	Units	Day	Control	Mirimichi Green Nutri Release/Jump
Seeds Germinated per Area	% of Control	7	-	-
		14	1	228%
		21	1	246%
Average Plant Height	% of Control	7	-	-
		14	1	385%
		21	1	357%
Plant Mass per Area	% of Control	21	1	401%



HECP Germination

Date 8-May-15

Client Mirimichi Green Express  
 TRI Log # E2387-07-01

Top Thin layer of top soil  
175 seeds  
4" layer top soil  
 Bottom \_\_\_\_\_

HECP PROTECTED

Day 7									Day 14									Day 21								
Bucket 1			Bucket 2			Bucket 3			Bucket 1			Bucket 2			Bucket 3			Bucket 1			Bucket 2			Bucket 3		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Number of Germinated Seeds									Number of Germinated Seeds									Number of Germinated Seeds								
0	0	0	0	0	0	10	1	14	7	5	9	10	6	12	17	3	22	9	5	11	12	6	14	17	5	22
Average per square									Average per square									Average per square								
2.8									10.11									11.22								
Height of Germinated Plants									Height of Germinated Plants									Height of Germinated Plants								
0	0	0	0	0	0	0.5	1.5	1.5	0.2	1.9	2.3	1.8	1.8	0.9	1.7	2.2	1.7	0.2	3	3	3.5	2.7	1.3	3.2	3	2.7
0	0	0	0	0	0	0.4	0	0.7	1.1	0.4	0.1	1.5	2	1.3	2.5	3.3	3.8	1	1.9	0.2	3.1	3	2.3	2.4	4	4.1
0	0	0	0	0	0	0.3	0	0.4	1	1.7	1.8	0.9	1.6	0.8	1	1.6	2.7	2.7	0.6	2.9	2	2.2	2.9	2	1.7	3.3
0	0	0	0	0	0	0.9	0	1	0.8	2.1	1.9	2.7	1.8	0.1	1.6	0	1.7	3	3.1	3.8	4.2	3.4	3.7	2.4	0.9	2.4
0	0	0	0	0	0	0.5	0	1.4	0.5	0.3	2.2	1	1.4	2.8	1.8	0	2.7	2.4	3.6	1.6	2.4	2.9	0.2	2.4	2.8	3
0	0	0	0	0	0	0.1	0	1.5	0.2	0	0.8	1.4	1.5	1.4	1.4	0	3.5	1.4	0	1.9	2.7	3	3.4	1.4	0	3.9
0	0	0	0	0	0	0.6	0	1.1	0.9	0	1.1	1.5	0	1.6	3.4	0	3.2	2	0	3.5	0.6	0	2.9	3.7	0	2.6
0	0	0	0	0	0	0.8	0	0.1	0	0	0.6	1.6	0	1.6	0.7	0	2.6	2.3	0	2.7	1.4	0	1.5	1.4	0	4.5
0	0	0	0	0	0	0.3	0	0.8	0	0	1.3	0.5	0	2	2.3	0	1.1	0.5	0	1	2.4	0	2.9	3	0	4
0	0	0	0	0	0	1.5	0	0.6	0	0	0	2.2	0	0.7	2	0	2.8	0	0	2.2	3.3	0	3	2.6	0	3.6
0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	1.5	0.1	0	2.1	0	0	2.6	0.9	0	2.7	3.2	0	2.2
0	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0.3	1.7	0	1.3	0	0	0	3.9	0	2.1	0.4	0	2.7
0	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	2.5	0	2.2	0	0	0	0	0	0.5	2.9	0	2.7
0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	2.2	0	1.6	0	0	0	0	0	2.2	2.5	0	1.5
															2.6		2							3.1		3.3
															2.4		2.8							3.1		2.5
															3.2		1.6							3.2		3.6
																	2.7									2.9
																	1.6									2.2
																	0.2									1.6
																	1.1									2.6
																	1.8									1.1
Average height of plants in each 2" square									Average height of plants in each 2" square									Average height of plants in each 2" square								
0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.8	0.3	0.5	0.9	1.1	0.7	1.1	1.9	0.5	2.1	1.1	0.9	1.8	2.2	1.2	2.3	2.5	0.9	2.9
Average height of plants in each bucket									Average height of plants in each bucket									Average height of plants in each bucket								
0.0			0.0			0.4			0.6			1.0			1.5			1.3			1.9			2.1		
Average height of plants of Sample									Average height of plants of Sample									Average height of plants of Sample								
0.15									1.01									1.75								

Mass(mg) of plants in each 2" square								
9.0	8.4	19.0	20.1	9.7	20.4	40.0	12.6	60.9
Average per square								
22.23								
Total mass(mg) of plants in each bucket								
36.4			50.2			113.5		
Total mass(mg) of plants for sample								
200.1								



RECP Germination

Date 8-May-15  
 Client Mirimichi Green Express  
 TRI Log # E2387-07-01  
 Sample ID Control

Top Thin layer of top soil  
175 seeds  
4" layer top soil  
 Bottom \_\_\_\_\_

Control

Day 7									Day 14									Day 21								
Bucket 1			Bucket 2			Bucket 3			Bucket 1			Bucket 2			Bucket 3			Bucket 1			Bucket 2			Bucket 3		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Number of Germinated Seeds									Number of Germinated Seeds									Number of Germinated Seeds								
0	2	0	0	0	0	0	0	0	3	9	3	6	8	4	4	2	1	3	11	3	6	8	3	5	1	1
Average per square									Average per square									Average per square								
0.2									4.44									4.56								
Height of Germinated Plants									Height of Germinated Plants									Height of Germinated Plants								
0	0.3	0	0	0	0	0	0	0	1.1	2.2	1	1	0.5	0.8	1.2	0.3	0.3	2	3.5	1.9	1.5	2.7	0.8	0.3	1.9	1.3
0	0.8	0	0	0	0	0	0	0	1	3	1	1	1.6	0.6	0.1	1.1	0	1.1	2.9	1.8	1.5	0.7	1	0.1	0	0
0	0	0	0	0	0	0	0	0	0.3	0.7	1.1	2.1	0.2	0.3	0.1	0	0	1.9	0.7	1.8	1.1	1.4	1.7	1.3	0	0
0	0	0	0	0	0	0	0	0	0	0.6	0	0.1	0.2	0.1	0.2	0	0	0	1.5	0	1.5	1.6	0	0.4	0	0
0	0	0	0	0	0	0	0	0	0	0.4	0	1.1	0.4	0	0	0	0	0	1.2	0	2.2	2.3	0	2.3	0	0
0	0	0	0	0	0	0	0	0	0	0.6	0	0.6	1.2	0	0	0	0	0	1.6	0	0.9	1.7	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0.8	0	0	0.9	0	0	0	0	0	0.9	0	0	1.1	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0.6	0	0	1.6	0	0	0	0	0	1.2	0	0	2.6	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1.1	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average height of plants in each 2" square									Average height of plants in each 2" square									Average height of plants in each 2" square								
0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.2	0.4	0.5	0.1	0.1	0.1	0.0	0.4	1.2	0.4	0.6	1.0	0.3	0.3	0.1	0.1
Average height of plants in each bucket									Average height of plants in each bucket									Average height of plants in each bucket								
0.0			0.0			0.0			0.4			0.3			0.1			0.7			0.6			0.2		
Average height of plants of Sample									Average height of plants of Sample									Average height of plants of Sample								
0.01									0.26									0.49								

Mass(mg) of plants in each 2" square											
5.1	16.5	2.8	9.2	8.2	3.1	1.8	1.9	1.3			
Average per square											
5.54											
Total mass(mg) of plants in each bucket											
24.4				20.5				5			
Total mass(mg) of plants for sample											
49.9											

The testing herein is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.