

# alphajoule™ Biostimulant ROI Calculations



## Seed-Applied, Spring Seeded and Fed on Farm to Dairy\*

Seasonal** Tons/ Acre Without Treatment	With <i>alphajoule</i> Applied					
	Seasonal** Tons/Acre	Additional Tons/Acre	Additional Lbs Milk/Acre	Additional Milk Sales/Acre	Additional Seed Cost/Acre	Additional Margin/ Acre
6	6.84	0.84	2,224	\$359	\$10	\$349
5	5.70	0.70	1,870	\$299	\$10	\$289
4	4.56	0.56	1,496	\$239	\$10	\$229
3	3.42	0.42	1,122	\$179	\$10	\$169
2	2.28	0.28	748	\$119	\$10	\$109
1	1.14	0.14	374	\$59	\$10	\$49

## Foliar-Applied, Alfalfa Fed on Farm to Dairy\*

Seasonal Tons/ Acre Without Treatment	With <i>alphajoule</i> Applied				Number of <i>alphajoule</i> Applications and Additional Value/Acre						
	Seasonal Tons/Acre	Additional Tons/Acre	Additional Lbs Milk/Acre	Additional Milk Sales/Acre	1	2	3	4	5	6	7
10	11.40	1.40	3,740	\$598	\$578	\$558	\$538	\$518	\$498	\$478	\$458
9	10.26	1.26	3,366	538	518	498	478	458	438	418	398
8	9.12	1.12	2,992	478	458	438	418	398	378	358	338
7	7.98	0.98	2,618	418	398	378	358	338	318	298	278
6	6.84	0.84	2,224	359	339	319	299	279	259	239	219
5	5.70	0.70	1,870	299	279	259	239	219	199	179	159
4	4.56	0.56	1,496	239	219	199	179	159	139	119	99
3	3.42	0.42	1,122	179	159	139	119	99	79	59	39
2	2.28	0.28	748	119	99	79	59	39	19	-1	-21
1	1.14	0.14	374	59	39	19	-1	-21	-41	-61	-81

## Foliar-Applied, Alfalfa Sold as Dairy Quality Hay\*

Seasonal* Tons/Acre Without Treatment	With <i>alphajoule</i> Applied				Number of <i>alphajoule</i> Applications and Additional Income/Acre						
	Seasonal* Tons/Acre	Additional Tons/Acre	Total Hay Revenue/Acre	Additional Hay Sales/Acre	1	2	3	4	5	6	7
10	11.40	1.40	2,280	\$280	\$260	\$240	\$220	\$200	\$180	\$160	\$140
9	10.26	1.26	2,052	252	232	212	192	172	152	132	112
8	9.12	1.12	1,824	224	204	184	164	144	124	104	84
7	7.98	0.98	1,604	196	176	156	136	116	96	76	56
6	6.84	0.84	1,368	168	148	128	108	88	68	48	28
5	5.70	0.70	1,148	140	120	100	80	60	40	20	0
4	4.56	0.56	912	112	92	72	52	32	12	-8	-28
3	3.42	0.42	684	84	64	44	24	4	-16	-36	-56
2	2.28	0.28	456	56	36	16	-4	-24	-44	-64	-84
1	1.14	0.14	228	28	8	-12	-32	-52	-72	-92	-112

\*Assumptions: 14% linear seasonal yield per acre increase per 2019  
 On-Farm results (range 10% to 27% and 14% average)  
 14% linear seasonal milk per acre increase per 2019  
 On-Farm results (range 10% to 31% and 14% average)  
 \$16.00 per cwt milk  
 2,671 lbs milk per ton (Rock River Laboratory 4 year running average)  
 \$20.00 cost per acre for *alphajoule*, PRYMER for Alfalfa and application for foliar-applied  
*alphajoule* included in seed cost per bag  
 \$200 per ton selling price for dairy quality hay  
 All yields at 15% moisture

\*\*Alfalfa forage only, doesn't include nurse crop yield, if any.



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