

Trial Design

- Trial conducted by Alfonso Lago at DairyExperts Inc., Tulare, CA 93274
- 30 Holsteins in each control and treatment group
 - Animals blocked into groups of 3 using average milk yield during covariate period
 - Random assignment to control, Galaxis 1.0, or Galaxis Frontier
 - All animals kept in the same pen equipped with multiple feed mangers with access restricted by group
- All animals in 2nd or 3rd lactation
- Animals started on treatment between 40-60 DIM
- Animals milked twice daily

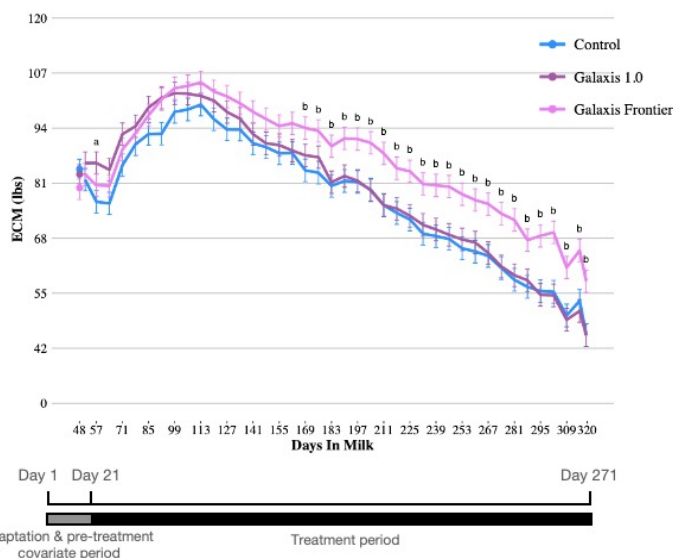
Diet

Ingredient	% of DM	Nutrient Composition	% of DM
Alfalfa hay	18.36	CP	17.65
Corn silage	25.55	Ether extract	5.54
Almond hulls	6.39	ADF	17.97
Processed corn	15.97	Ash-free NDF	27.05
DDG	8.78	NFC	42.13
Molasses	1.6	Starch	21.24
Wheat mill	1.6	NE _L 3X (Mcal/kg)	1.67
Soybean meal	4.79		
Canola meal	4.79		
Soy plus	0.8		
cottonseed	7.98		
Rumen protected fat	0.64		
Palmitic oil	0.64		
Vitamins & minerals	2.1		
Water	0.01		

Statistical Analysis Method Mixed-Effects REML Regression Model

Incorporated in the results model:

- Fixed effect of mean of the covariate
- Fixed effect of the time (week or study day)
- Fixed effect of treatment
- Random effect of cow
- Interaction of time and treatment
- Residual



Galaxis 1.0 vs. Control

	Control*	Galaxis 1.0*	Frontier*	Diff.	% Diff.	p-value
Milk Yield (lbs)	75.44 ± 2.15	75.43 ± 2.11	82.17 ± 2.15	-0.015	-0.02	0.9249
ECM (lbs)	78.57 ± 2.17	78.74 ± 2.13	86.52 ± 2.17	0.169	0.21	0.7972
Fat (%)	3.87 ± 0.05	3.94 ± 0.05	3.78 ± 0.05	0.070	1.82	0.3496
Fat (lbs)	2.86 ± 0.09	2.86 ± 0.08	3.15 ± 0.09	0.002	0.08	0.8820
Protein (%)	3.18 ± 0.02	3.23 ± 0.02	3.17 ± 0.02	0.058	1.81	0.4968
Protein (lbs)	2.36 ± 0.07	2.39 ± 0.07	2.58 ± 0.07	0.032	1.36	0.8927
DMI (lbs)	57.12 ± 1.09	57.81 ± 1.08	60.72 ± 1.09	0.688	1.2	0.3973
FE (ECM:DMI)	1.35 ± 0.05	1.35 ± 0.05	1.39 ± 0.05	-0.002	-0.17	0.6248
Body Weight (lbs)	1570 ± 14	1547 ± 14	1544 ± 14	-22.596	-1.44	0.9055
Body Condition	3.26 ± 0.04	3.28 ± 0.04	3.19 ± 0.04	0.021	0.66	0.7083

Galaxis Frontier vs. Control

	Diff.	% Diff.	p-value
Milk Yield (lbs)	6.725	8.91	0.6403
ECM (lbs)	7.951	10.12	0.4766
Fat (%)	-0.087	-2.24	0.1480
Fat (lbs)	0.294	10.28	0.4617
Protein (%)	-0.008	-0.25	0.8438
Protein (lbs)	0.223	9.47	0.7460
DMI (lbs)	3.599	6.3	0.9962
FE (ECM:DMI)	0.040	2.93	0.9102
Body Weight (lbs)	-25.439	-1.62	0.9811
Body Condition	-0.076	-2.34	0.9880

Trt * Time

p-value
< 0.001
< 0.001
0.606
< 0.001
< 0.001
< 0.001
< 0.001
0.585
0.689

*over entire treatment period