

**Supplemental Table S1.** The TMR diet formula of dairy cows before parturition

Composition	Content (%)	Item	Unit (%)
Whole corn silage	32.01	Crude Protein	14.51
Soybean hulls	12.46	Starch	17.96
Alfalfa hay	5.88	NDF	39.01
Rice straw	8.51	Fat	3.81
Soybean meal-protein	9.02	NEL (MJ/kg)	5.78
Oat grass hay	12.54		
Premix <sup>1</sup>	4.25		
Cottonseed-whole	6.95		
Corn-fine	1.80		
Calcium carbonate	0.23		
Magnesium sulfate	0.35		
Sugar cane	1.97		
Methionine	0.19		
Puffed soy flour	2.86		
Yeast polysaccharide	0.98		

<sup>1</sup>Per kilogram of premix contains the following: VA 325 KIU, VE 2000 mg, VD 95 KIU, Co 18 mg, Se 10 mg, I 30 mg, Mn 1600 mg, Zn 800 mg, Cu 300 mg, Fe 400 mg, Ca 18.0%, P 6.8%.