



YEAST MIXED WITH ORGANIC MINERALS AFFECT LACTATION OF HOLSTEIN-FRIESIAN COWS

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INTRODUCTION



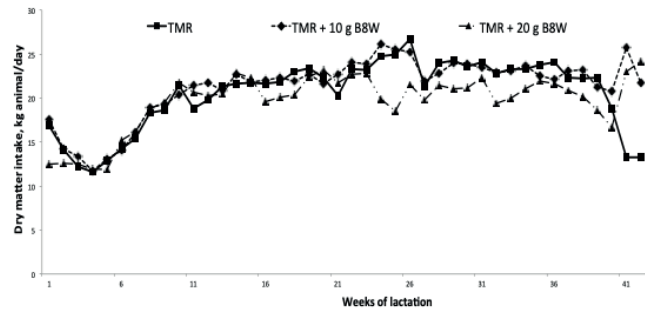
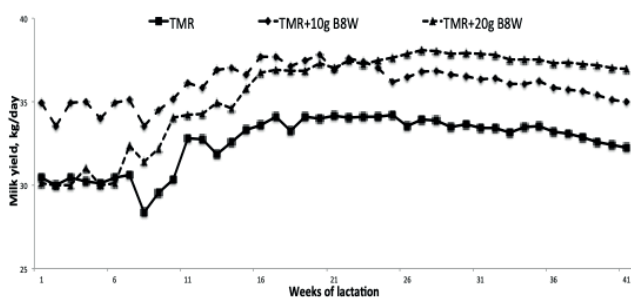
Saccharomyces cerevisiae yeast (SCE) improves food digestibility. Specific assumptions include stimulating the growth of bacteria digesting forage fibers and grains which means an increase in the degradation and disappearance of the rumen fiber. SCE supplementation of dairy cows during lactation improves milk yield, dry matter intake, and milk quality. Minerals such as Co, Cu, Fe, Cr, Mn, Se, I and Zn are best absorbed when added to diets in organic form. These minerals act as biological catalysts, enzymatic cofactors, and part of enzymes. The above suggests that supplementation of SCE plus minerals during the dry period will increase DMI and MY during lactation.

MATERIALS AND METHODS

Bovi-8-Ways™ is a supplement made with SCE living cells and eight organic minerals. Each 100 g of B8W contained 1.5×10^9 UFC g⁻¹ of SCE, and its mineral composition (g x 100 g) was: 0.05, 3.00, 12.00, 0.04, 10.00, 0.03, 0.20 and 11.00 of Co, Cu, Fe, Cr, Mn, Se, I and Zn respectively.

Thirty Holstein-Friesian (BW= 807.3 ± 1.1 kg) cows were assigned to one of three treatments: 1) total mixed ration (TMR; alfalfa-corn); 2) TMR+10.0 g of B8W (10B8W); and 3) TMR+20.0 g of B8W (20B8W). Treatments were evaluated from 4 weeks prepartal to 42 weeks postpartal.

| Item | Treatment (g of B8W) | | | SEM | P | | |
|---|----------------------|---------------------|---------------------|-------|---------------|------|----------|
| | TMR | TMR +10 | TMR +20 | | TREATMENT (T) | TIME | T X TIME |
| Body weight, kg | 739.84 ^A | 720.26 ^B | 716.69 ^B | 12.51 | 0.00 | 0.05 | 0.23 |
| NE _L Balance | 2.74 ^a | 2.73 ^a | 0.66 ^b | 0.01 | 0.04 | 0.33 | 0.01 |
| Milk yield, kg day ⁻¹ | 31.73 ^c | 34.60 ^B | 36.72 ^A | 0.86 | 0.001 | 0.00 | 0.00 |
| Protein yield, kg day ⁻¹ | 1.03 ^B | 1.11 ^B | 1.13 ^A | 0.02 | 0.004 | 0.08 | 0.12 |
| Fat yield, kg day ⁻¹ | 1.02 | 1.02 | 0.99 | 0.03 | 0.883 | 0.40 | 0.63 |
| Milk urea nitrogen, mg dL ⁻¹ | 10.00 | 11.58 | 9.55 | 0.59 | 0.090 | 0.01 | 0.18 |



CONCLUSIONS

Supplementing 20 g Of B8W to dairy cows during the peripartal period increase milk yield during lactation

