## PRESS RELEASE

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## Effect of an Organic-Certified Treatment (Optimum UterFlush) for Toxic Puerperal Metritis on Cure and Reproductive Performance of Dairy Cows.

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The objective was to evaluate the efficacy of an organic-certified product (Optimum UterFlush, Van Beek Natural Science) on the treatment of toxic puerperal metritis (TPM) in cows in an organic dairy farm. Evaluation included clinical cure, survival, and reproductive performance. The TPM was defined as an abnormally enlarged uterus and fetid watery redbrown vaginal discharge, associated with systemic illness and fever (rectal temperature > 39.5°C), within 12 d postpartum. Cows diagnosed with TPM (n = 220) were randomly assigned to 2 intrauterine treatments (every other day for a total of 3 treatments): 1) Control (CON) = 200 mL of Povidone iodine diluted in 2 L of distilled water (n = 113) and 2) UterFlush (UF) = 3.75 mL diluted in 116.25 mL of distilled water (n = 107). All treated cows received hypertonic solution (500 mL of 25% calcium borogluconate IV) and oral aspirin (5 boluses/d). Outcome variables for treatment efficacy included fever and presence of fetid vaginal discharge at d 6 and 14 after diagnosis, survival at d 6, 14, and 30, and reproductive performance. Control variables were parity, BCS at enrollment, and calving season. Logistic regression and ANOVA were used for the

analyses (PROC GLIMMIX and PROC GLM, SAS). The odds of surviving at d 6, 14, and 30 for cows in the UF treatment were 4.7 (95%, CI = 1.4 to 15.8), 2.8 (95%, CI = 1.3 to 6.1), and 3.6 (95%, CI = 1.7 to 7.7) times the odds of cows in the CON treatment. Occurrence of fever at d 6 and 14 was not different between the 2 treatments. Presence of a fetid vaginal discharge at d 6 and 14 was lower in cows treated with UF compared with cows in the CON group [11% vs. 28% (P < 0.001) and 1% vs. 8% (P = 0.017)]. The odds of breeding until 150 d in milk (DIM) and the time to first breeding were not different for the 2 treatments. The odds of pregnancy at the first breeding and at 300 DIM for cows treated with UF were 2.2 (95%, CI = 1.1 to 4.4) and 2.0 (95%, CI = 1.1 to 3.5) times the odds of cows in the CON group. Days to pregnancy were similar in both treatments. The number of breedings per pregnancy was 1.96 vs. 2.58 for cows in the UF and CON treatments (P = 0.01), respectively. Results indicated that cows with TPM treated with Optimum UterFlush had higher odds of recovering and improved reproductive performance, compared with cows treated with Povidone iodine.

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