



## Kem LAC<sup>®</sup> brand and the CFU (Colony Forming Units) Counting Game

**SOURCE:** Research & Development, Kemin Industries, Inc.

To count the number of bacteria that Kem LAC is able to put on a ton of silage, the following facts are necessary.

- 1) One ton (2,000 lbs) of silage contains 908,000 grams (2,000 lbs/ton x 454 grams/lb).
- 2) After you make up Kem LAC, the solution contains 500,000,000 *lactobacillus*/gram. Thus,
- 3) If we apply 2 lbs of this solution per ton of silage, we add 908 grams of solution which is equal to 908 x 500,000,000 CFU/gram or 454,000,000,000 bacteria per ton of silage.
- 4) From this number concerning per ton of silage, we can calculate bacteria per gram of silage

$$\frac{454,000,000,000 \text{ CFU/ton}}{908,000 \text{ grams/ton}} = 500,000 \text{ CFU/gram of silage}$$

This ensures that Kemin's Kem LAC product places the largest number of viable CFU/gram of silage of any product.