



## **Stability and evenness of micronutrients in dry blends – some good news and some bad news**

This bulletin includes results from trials that show traditional granular zinc and boron can vary in the blend by 35 to 50%.

Wolf Trax DDP Micronutrients consistently and evenly coat each prill of dry fertilizer assuring you of excellent blend consistency.

When you add zinc or boron to your dry fertilizer blend, do you assume the micronutrient stays well distributed in the blend? Wolf Trax has data on this issue and the results should either ease your mind or worry you – depending on what type of micronutrient you are using.

### **Trial 1: Full scale retail blend analysis**

In this trial, we monitored a commercial scale blending operation and took samples as the fertilizer mix was being augured, handled and trucked from the blending tub to the farmer’s field. The dry fertilizer mix consisted of an NPK blend with a Zinc DDP® coating. Samples of the dry fertilizer mix were pulled at three spots: (a) at the blender, (b) in the truck and (c) as the mix moved from truck to applicator.

**Results: Zinc levels stayed within 2.6 percent of the average** of 764 parts per million throughout the process. (In comparison, the nitrogen level from sample to sample varied by 5.7 percent.)

<b>Sampling location</b>	<b>N (%)</b>	<b>Zinc DDP level (ppm)</b>
Blender	31.4	785
Truck	30.0	764
Applicator	33.6	745
Average	31.7	764
Std dev	1.8	20
Variation in load	<b>5.7%</b>	<b>2.6%</b>

**Conclusion:** Wolf Trax DDP Micronutrients stayed true to blend in the field. This grower received an even application of Wolf Trax Zinc DDP throughout his field.

(continued)

### **Trial 2: Twelve mile trucking trial with traditional granular micronutrients**

In these trials, granular zinc sulphate and granular boron were each thoroughly mixed into a dry blend of urea and MAP, loaded into containers, placed on a truck, and driven over 12 miles of paved and gravel roads. On completion of the drive, samples were pulled from the top, middle and bottom of both loads.

**Results: The granular boron levels in the blend varied by 36 percent** from point to point in the blend. **The zinc sulphate granular varied by 50 percent** from point to point in the blend. Further examination showed that the granular tended to move down and into the back corners of the load as the load moved forward.

	Variation in boron granular in load		Variation in zinc granular in load	
	Boron (ppm)	Urea (%N)	Zinc (ppm)	Urea (%N)
Average	2.44	43.60	5,997	42.87
Std dev	0.88	1.38	3,014.55	1.77
Variation in load	<b>36%</b>	<b>3%</b>	<b>50%</b>	<b>4%</b>

**Conclusion:** A grower receiving a blend with this amount of variation would not be able to evenly apply the zinc or boron across his field.

*You and Wolf Trax...Growing Forward<sup>®</sup> together.*

For more information on the Wolf Trax DDP family of Innovative Micronutrients, please call 204-237-9653, or visit us at [www.wolftrax.com](http://www.wolftrax.com).