

Soil Science Society of America Journal

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Cover: Micro x-ray fluorescence maps of Zn for soil incubated with granular Zn and fluid Zn. Area of map is 8000 $\mu\text{m} \times$ 5000 μm for granular Zn and 10,000 $\mu\text{m} \times$ 5000 μm for fluid Zn added soil. The color scheme employed ranges from white/yellow for high fluorescence signal to blue/black for low fluorescence signal. Back scattered electron micrograph of cross-section of granular Zn incubated for 5 wk in soil is also shown. As shown in the micro x-ray fluorescence maps most of the Zn in granular Zn fertilizer was retained in the granule whereas fluid Zn diffused further away from the point of application.

Differences in mobility of granular and fluid Mn fertilizers applied to soil was also observed. Our x-ray absorption spectroscopy data suggest that these small differences could significantly influence the reaction products of micronutrients applied to soils and their effect on micronutrient accessibility by plant roots.

Please see pages 98-110, "Evidence for Different Reaction Pathways for Liquid and Granular Micronutrients in a Calcareous Soil" by Ganga M. Hettiarachchi, Mike J. McLaughlin, Kirk G. Scheckel, David J. Chittleborough, Mathew Newville, Steve Sutton, and Enzo Lombi.