

Origin of High-Chroma Mottles in Well-Drained Soils

Jay Bell (PI), Doug Pribyl

Dept. of Soil, Water, and Climate, University of Minnesota

NNIN Facility utilized: Characterization Facility

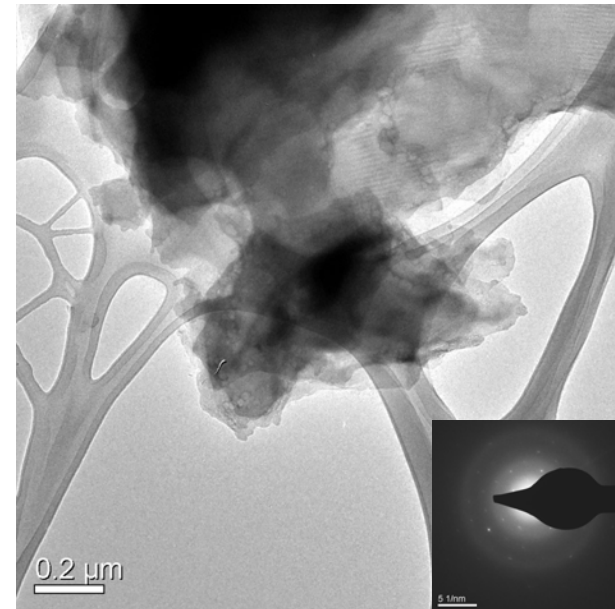
● DESCRIPTION OF WORK

- ◆ Use of SEM/TEM with EDS/SAED, and XRD to characterize features
- ◆ Mineralogy, crystallinity, and chemical composition give clues as to origin and formation activity
- ◆ Compare with features of known origin and at differing hillslope and landscape positions



● MAJOR OBSERVATIONS

- ◆ Features appear to have multiple origins
- ◆ Some features appear stable, some are or have been undergoing dissolution
- ◆ Much of the material appears poorly crystalline



● Publications

- ◆ This work is part of Doug Pribyl's on-going dissertation research.