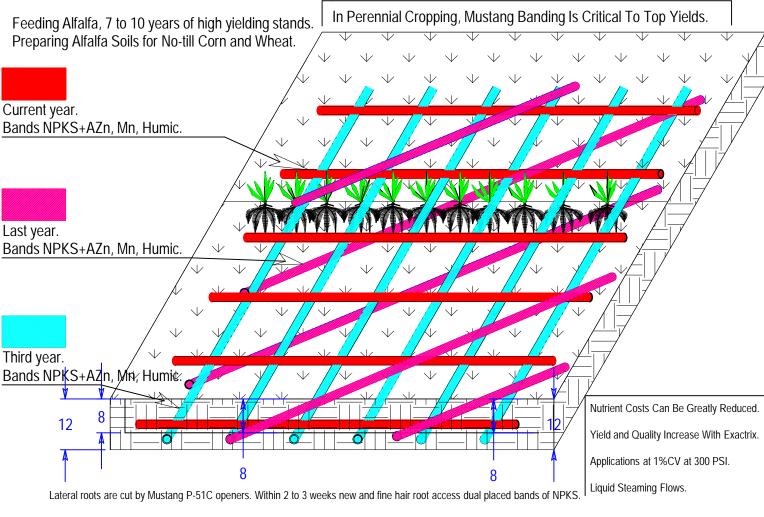
Alfalfa Production And Quality Under No-Till Systems, Banding Deep and Cutting Lateral Roots.

Residual Placed Bands of Non-Mobile Nutrients Remain Chemically and Positionally Available for Present and Future Crops.

A Unique Soil Chemistry Phenomeon of Rotational Band Loading Occurs using TAPPS and TAPPKTS with Micros.



Alfalfa can be fertilized with non-mobile P K and Micronutrients in established stands.

Low rates of Nitrogen as NH3 is always applied to cauterize the Alfalfa Roots.

Sulfur is applied to stabilize the nitrogen in the band with Thio-sulfates.

Positionally placed TAPPKTS with AZn and chelated Mn are No-tillage placed in bands about 4" to 8" in depth.

The banding depth is a rooting plant geometry technique that plays a big role in nutrient efficiency.

Placed nutrients remain highly available for future crops using no-tillage.

Old bands maintain a higher chemical availability since the bands are not disturbed.

Maximum root uptake occurs when bands are positionally located at 4" to 8" below the soil surface.

Roots find placed nutrients better because geometric access is maximized.

Placed soil nutrients remain in soil solution longer under drought stress following harvesting operations.

Shank tillage destroys band integrity and inverts nutrients to the drier soil surface reducing geometric root access.

Optimum band centers are between 10", 12" or 15" spacing with all commodity crops.

Corn responds best on 15" centers pre-plant and DN spring wheat responds best on 10" to 15" centers. Winter wheat performs best at 15" centers due to timing.