

**THE
MASCHHOFFS**



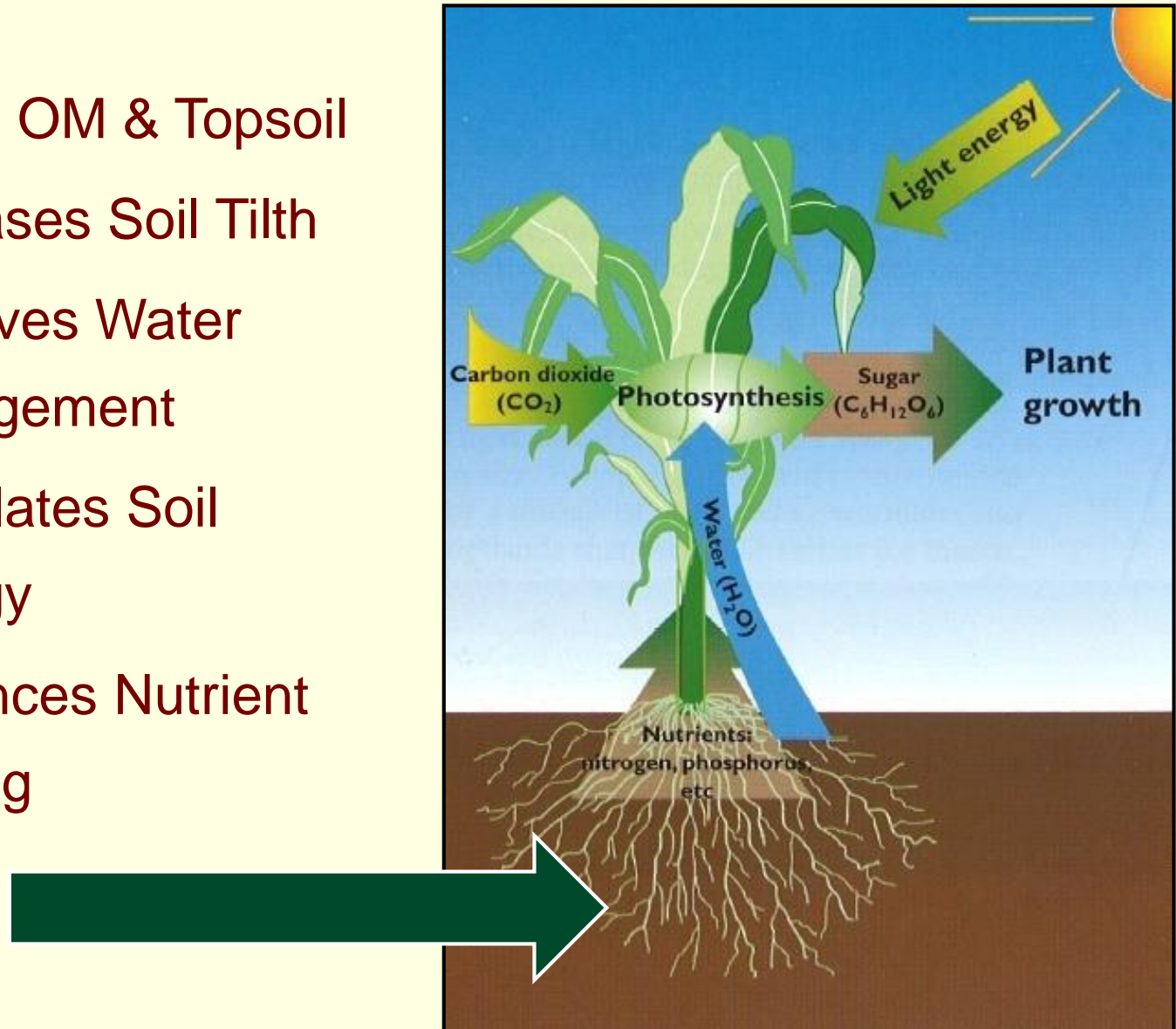
Progressive Farming. Family Style.

Nutrient Management

July 23, 2015

Swine Manure is an Organic Fertilizer

- Builds OM & Topsoil
- Increases Soil Tilth
- Improves Water Management
- Stimulates Soil Biology
- Enhances Nutrient Cycling



Strategic Nutrient Plan

Crop Need				
Crop Maintenance	Yield Goal (bu/ac)	Nitrogen (lbs/ac)	Phosphorus (lbs/ac)	Potassium (lbs/ac)
Corn	165	174.5	71	46
Soybeans	50	0	43	65
Total Need		174.5	113	111

Manure Nutrients				
	Plant Available Nitrogen	Phosphorus	Potassium	
Nutrient Availability (lbs/1000 gal)	42.6	28.8	33.9	
Nutrients Applied (lbs/ac)	174.5	118	139	

Land Requirements	
Maximum Application Rate (gal/ac)	4,096
Annual Manure Productions (gal)	1,752,000
Land Requirement Per Year (ac)	428

Agitation

- Solids Management
- Storage Duration
- Consistent Nutrient Application



Dragline Injection

- High Efficiency
- Low Disturbance
- Low Compaction
- Minimize Odor
- End Row Shutoff
- Emergency Shutoff
- Magnetic Flowmeters



MEDS Geographic Information System

- As Applied Manure Application Maps
- ID Sensitive Environmental Features
- Manure Application Setbacks

