

## Maximum Residue Levels for Technically Adequate Plans for Dryland mulch till and no-till planting/tillage systems

Crop to be planted	Residue Type	Tillage System	1/ 2/ 3/ Maximum Residue cover after planting	Notes:
Corn/Sorghum	Soybeans	NT	55%	
Corn/Sorghum	Soybeans	NT with anhydrous or injected N solution	45%	Low disturbance N placement with knives spaced at 30 inches.
Corn/Sorghum	Soybeans	ST	20%	
Corn/Sorghum	Soybeans	FT	15%	
Soybeans	Corn/Sorghum	NT	70%	
Soybeans	Corn/Sorghum	ST	45%	Single pass light mulch tillage
Soybeans	Corn/Sorghum	FT	40%	Single pass light mulch tillage
Continuous Corn	Corn	NT	70%	
Continuous Corn	Corn	NT with anhydrous or injected N solution	65%	Low disturbance N placement with knives spaced at 30 inches.
Continuous Corn	Corn	ST	45%	Single pass light mulch tillage
Continuous Corn	Corn	FT	40%	Single pass light mulch tillage
Any spring crop	Wheat	NT	75%	Allows for baling the straw that comes out of the combine.
Any spring crop	Wheat	NT with anhydrous or injected N solution	65%	Allows for baling the straw that comes out of the combine. Low disturbance N placement with knives spaced at 30 inches.
Any spring crop	Wheat	ST	40%	
Any spring crop	Wheat	FT	35%	
Wheat	Corn/Sorghum	NT	60%	Wheat drilled immediately following short season corn harvested in early October
Wheat	Corn/Sorghum	FT	40%	Wheat drilled immediately following short season corn harvest in early October
Wheat	Soybeans	NT	50%	Wheat Drilled immediately following harvest
Wheat	Soybeans	FT	20%	Wheat Drilled immediately following harvest

Wheat	Wheat Fallow	ST	30%	No tillage occurs until late spring or summer following wheat harvest
Wheat	Wheat Fallow	FT & ST	10%	Two tillage operations with first tillage in the fall after wheat harvest and tilled again the following spring/summer
Any spring crop	Sunflowers	NT	25%	
Any spring crop	Sunflowers	ST	10%	

NT = No-Till Planting System

ST = Spring Mulch Tillage (non-inversion)

FT = Fall Mulch Tillage system (non-inversion)

1/ No-till (NT) maximum residue cover values are for continuous No-Till, reduce maximum residue cover values by 5% if a continuous no-till system is not used. No row cultivation is allowed for no-till systems.

2/ Incidental grazing that removes more than 25% of stover will lower maximum residue cover after planting even further.

3/ Maximum residue cover values for mulch tilled (ST, FT) soybean residue are based on field cultivators or harrows. If more aggressive mulch tillage equipment is used such as a disk system the maximum residue cover will be less. Maximum residue cover values for mulch till (ST, FT) corn, sorghum, and wheat residues are based on disk or chisel systems and do not include inversion tillage such as moldboard plow systems.

When running erosion calculations and developing conservation plans, planned residue levels should not exceed those shown on the table. **These values do not preclude running soil loss calculations to determine adequate residue levels required to meet soil loss objectives.**

## Maximum Residue Levels for Technically Adequate Plans for Irrigated mulch till and no-till planting/tillage systems

Crop to be planted	Residue Type	Tillage System	1/ 2/ 3/ Maximum Residue cover after planting	Notes:
Corn	Soybeans	NT	65%	For field beans: multiple soybean max. residue by 0.2
Corn	Soybeans	NT with anhydrous or injected N solution	50%	Low disturbance N placement with knives spaced at 30 inches.
Corn	Soybeans	ST	30%	
Corn	Soybeans	FT	25%	
Soybeans	Corn	NT	75%	Slightly less cover than continuous corn/no till
Soybeans	Corn	ST	50%	Single pass light mulch tillage
Soybeans	Corn	FT	45%	Single pass light mulch tillage
Continuous Corn only	Corn	NT	85%	
Continuous Corn only	Corn	NT with anhydrous or injected N solution	70%	Low disturbance N placement with knives spaced at 30 inches.
Continuous Corn only	Corn	ST	50%	Single pass light mulch tillage
Continuous Corn only	Corn	FT	45%	Single pass light mulch tillage
Any spring crop	Sunflowers	NT	30%	
Any spring crop	Sunflowers	ST	15%	

NT = No-Till Planting System

ST = Spring Mulch Tillage (non-inversion)

FT = Fall Mulch Tillage system (non-inversion)

1/ No-till (NT) maximum residue cover values are for continuous No-Till, reduce maximum residue cover values by 5% if a continuous no-till system is not used. No row cultivation is allowed for no-till systems.

2/ Incidental grazing that removes more than 25% of stover will lower maximum residue cover after planting even further.

3/ Maximum residue cover values for mulch tilled (ST, FT) soybean residue are based on field cultivators or harrows. If more aggressive mulch tillage equipment is used such as a disk system the maximum residue cover will be less. Maximum residue cover values for mulch till (ST, FT) corn, sorghum, and wheat residues are based on disk or chisel systems and do not include inversion tillage such as moldboard plow systems.

When running erosion calculations and developing conservation plans, planned residue levels should not exceed those shown on the table. **These values do not preclude running soil loss calculations to determine adequate residue levels required to meet soil loss objectives.**