

TABLE 19.1. Conservation tillage techniques that may benefit cracking Blackland Prairie soils in Alabama and Mississippi

Technique	Relative importance 0=low 5=high	Benefits	Potential problems
Fall chisel or light fall disking	5	Reduces erosion; leaves soil surface rough; leaves residue on surface; disrupts cracking; best on sloping land	Some erosion risk
Raised beds/ridge till in fall	5	Drainage; warmer soils in spring; early planting; best on flat lands	Erosion on sloping land
Stale seedbed planting	4	Early planting; fuel and labor savings	Pathogen carryover
No-till corn	3	High returns and low cost; low erosion	Highly variable yields
Small-grain cover crop	2	Reduces winter erosion; adds organic residues	Keeps soil wet in spring
Planting no-till into sod	2	Reduces erosion; fuel and labor savings	Complete kill of sod; appropriate equipment for planting; seed depth; closure of seed furrow
Small grain in furrows between raised beds	2	Controls in-row erosion	Pythium; insects; delayed planting; difficult to manage
Spring chiseling or disking	1	More uniform stand; disrupts cracking	Erosion; clods; not very timely in wet weather
Legume cover crop (e.g., Balansa clover)	1	Reduces erosion; adds nitrogen	Diseases; most legumes are not suitable for these soils; keeps soils wet in spring
In-row subsoiling/paratill	0	Unnecessary except on sandy soils	High energy requirement