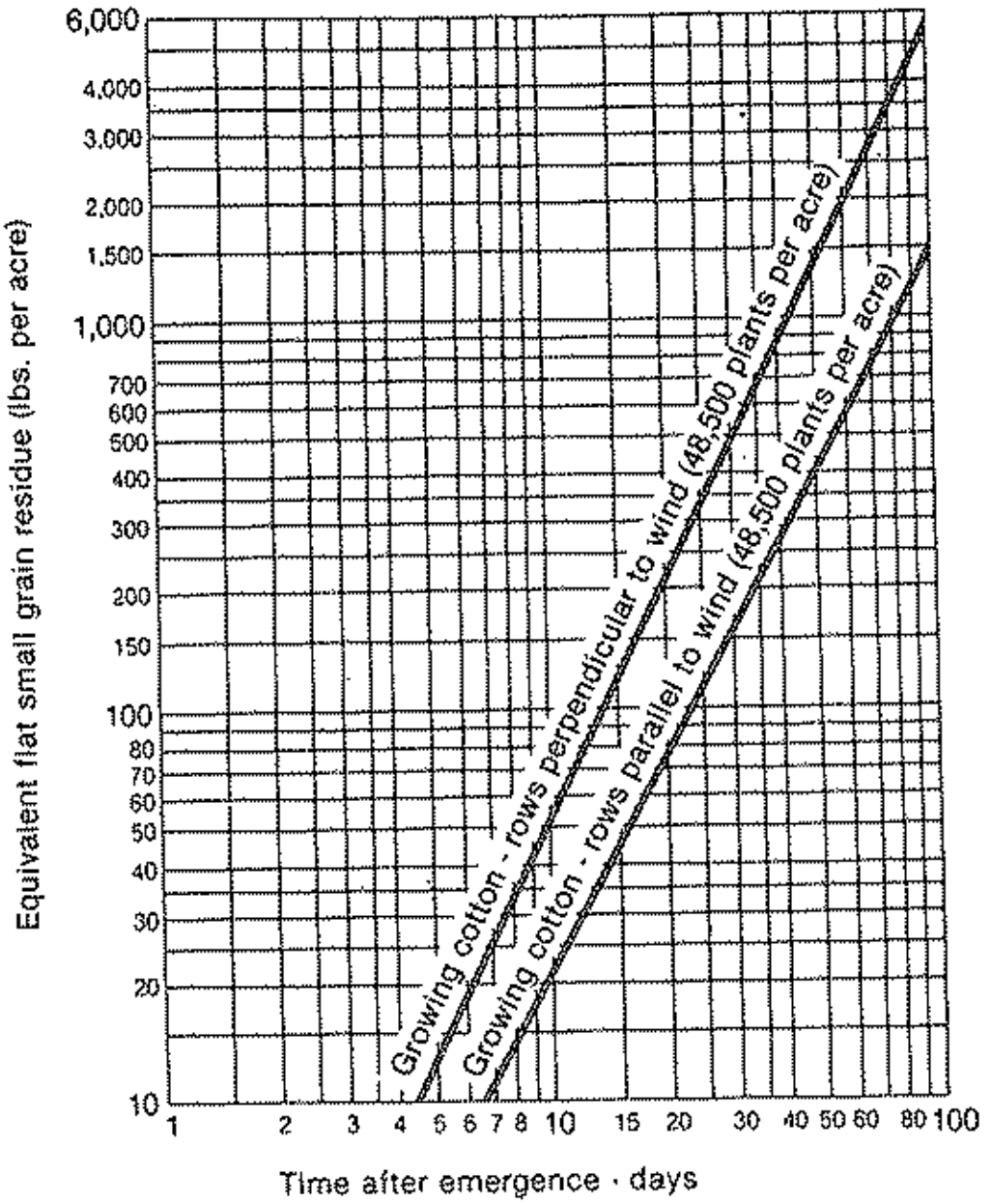
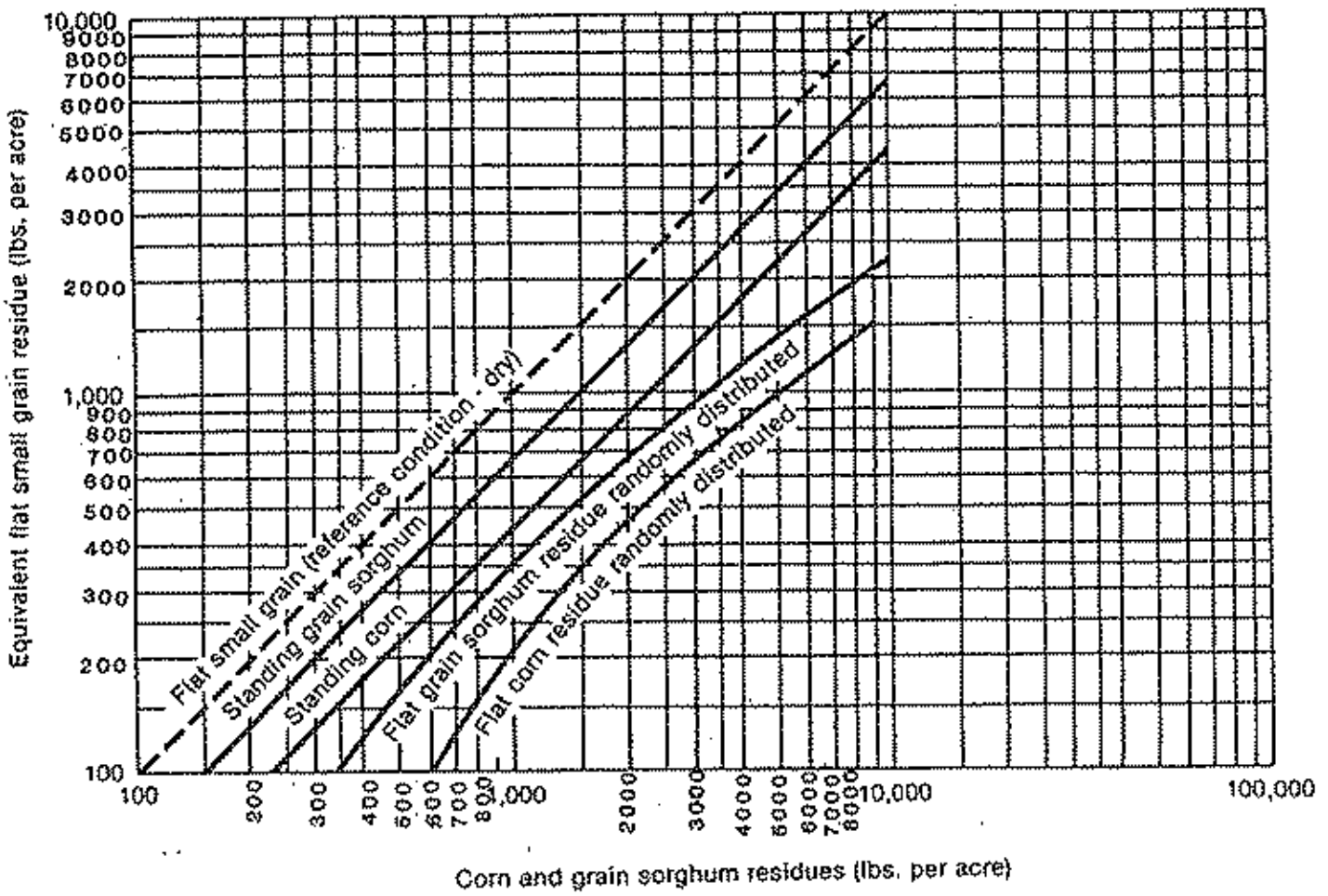
Flat Small Grain Equivalents of Growing Cotton: Days After Emergence



Source: Armbrust & Lyles, 1984-unpublished.

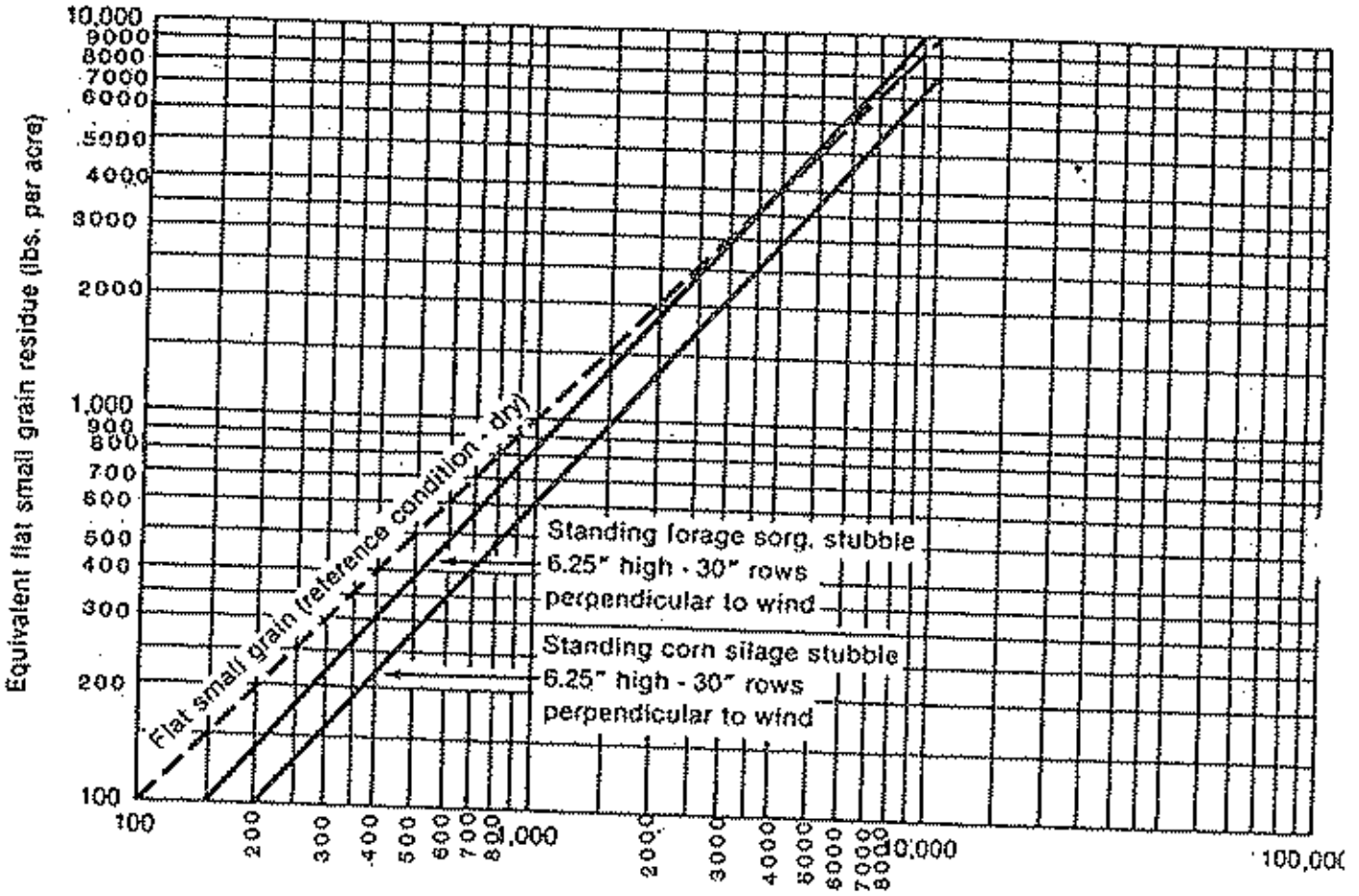
Flat Small Grain Equivalents of Corn and Grain Sorghum Residues



Source: Lyles and Allison, Trans. ASAE 1981, 24(2): 405-408.

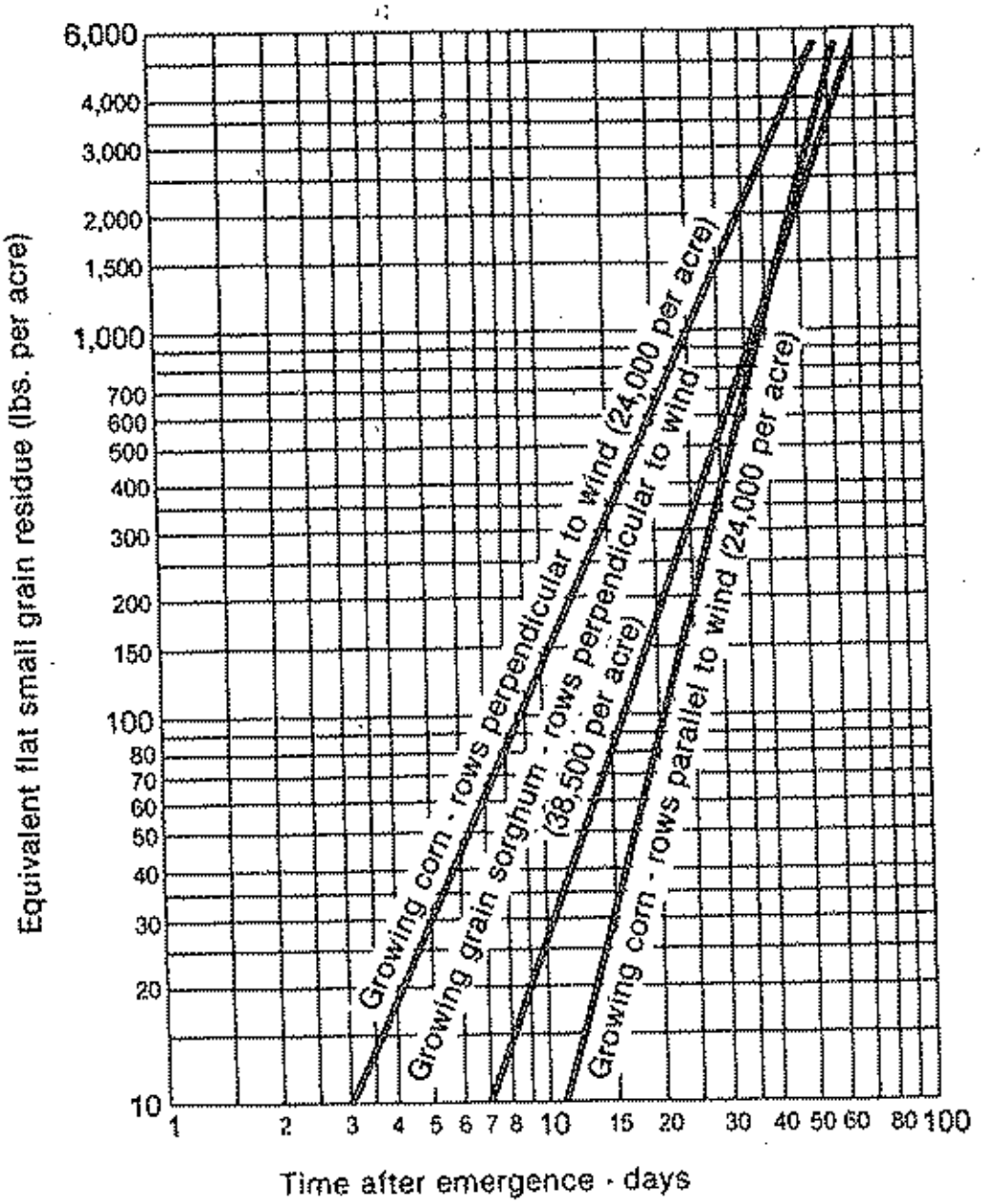
CHART 9

Flat Small Grain Equivalents of Corn and Grain Sorghum Silage Stubble



Source: Lyles and Allison, Trans. ASAE 1981, 24(2): 405-408.
Residue weights are washed, air dried, and placed as described for wind tunnel tests.

Small Grain Equivalents of Growing Corn and Grain Sorghum, Days After Emergence



Source: Armbrust & Lyles, 1984-unpublished.

TABLE 1

Descriptions of Wind Erodibility Groups

WEG	Predominant Soil Texture Class of Surface Layer	Dry Soil Aggregates Over 0.84 mm Percent	Wind Erodibility Index (I) T/Ac/Yr
1	Very fine sand, fine sand, sand, or coarse sand	1	310
2	Loamy very fine sand, loamy fine sand, loamy sand, loamy coarse sand, or sapric organic soil materials (refer to Soil Taxonomy for definition of sapric)	10	134
3	Very fine sandy loam, fine sandy loam, sandy loam, or coarse sandy loam	25	86
4	Clay, silty clay, noncalcareous clay loam, or silty clay loam with more than 35 percent clay content	25	86
4L	Calcareous loam and silt loam, or calcareous clay loam and silty clay loam	25	86
5	Noncalcareous loam and silt loam with less than 20 percent clay content, or sandy clay loam, sandy clay, or hemic organic soil materials (refer to Soil Taxonomy for definition of hemic)	40	56
6	Noncalcareous loam and silt loam with more than 20 percent clay content, or noncalcarous clay loam with less than 35 percent clay content	45	48
7	Silt, noncalcareous silty clay loam with less than 35 percent clay content and fibric organic soil material	50	38
8	Soils not suitable for cultivation due to coarse fragments or wetness, wind erosion not a problem	---	---

Source: Soil Survey Handbook

TABLE 2

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Alaga, LS, LFS	134	2
Alaga, FS	310	1
Alpin, FS, S	310	1
Alpin, LS	134	2
Altavista, L	56	5
Altavista, LS, LFS	134	2
Altavista, SL, FSL	86	3
Arapahoe, FSL	86	3
Arapahoe, LS, LFS	134	2
Arapahoe, L	56	5
Arapahoe, LS, LFS	134	2
Argent, SL, FSL	86	3
Argent, CL	86	4
Argent, SIL, L	56	5
Argent, SICL	38	7
Armenia, L, SIL	56	5
Armenia, SL	86	3
Armenia, CL	86	4
Augusta, SL, FSL	86	3
Augusta, SIL, L	56	5
Autryville, LS, LFS	134	2
Autryville, S	310	1
Axis, SL	86	3
Axis, SCL, SIL, L	56	5
Aycock, L, SIL	56	5
Aycock, VFSL	86	3
Ballahack, SL, FSL	86	3
Ballahack, L	56	5
Barclay, L, SIL	56	5
Barclay, VFSL	86	3
Bayboro, FSL	86	3
Bayboro, L	56	5
Bayboro, CL	86	4
Baymeade, FS, S	310	1
Belhaven, Muck	134	2
Bertie, LS, LFS	134	2
Bertie, SL, FSL	86	3
Bethera, FSL	86	3
Bethera, L, SIL	56	5
Bethera, CL	86	4
Bibb, L, SIL	56	5
Bibb, SL, FSL	86	3
Bladen, SL, FSL	86	3
Bladen, L, SIL	56	5
Blaney, S, COS	310	1
Blaney, LS, LCOS	134	2
Blanton, FS, S, COS	310	1
Bohicket, SICL, SIC, C	--	8

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Bojac, LFS, LS	134	2
Bojac, SL, FSL	86	3
Bojac, L	56	5
Bonneau, LS, LF	134	2
Bonneau, S, FS	310	1
Brookman, L	56	5
Brookman, CL	86	4
Buncombe, S	310	1
Buncombe, LS	134	2
Butters, LS, LFS	134	2
Butters, S, FS	310	1
Byars, SICL	38	7
Byars, CL	86	4
Byars, L, SIL	56	5
Byars, SL, FSL	86	3
Cainhoy, S, FS	310	1
Cainhoy, LFS	134	2
Cape Fear, FSL, VFSL	86	3
Cape Fear, SIL, L	56	5
Capers, SIC, C, SICL	---	8
Caroline, L, SIL	56	5
Caroline, CL	86	3
Caroline, SCL	56	5
Caroline, SL, FSL	86	5
Cartecay, L, SIL	56	5
Cartecay, SICL	38	7
Cartecay, VFSL, FSL	86	3
Cartecay, SL	86	3
Cartecay, LS	134	2
Carteret, S	---	8
Carteret, LS	---	8
Centenary, S, FS	310	1
Charleston, FSL, SL	86	3
Charleston, LFS, LS	134	2
Charleston, FS	310	1
Chastain, SIC, CL, C	86	4
Chastain, SICL	38	7
Chastain, SIL, L	48	6
Chenneby, SIL, L	56	5
Chenneby, SICL	38	7
Chewacla, FSL, SL	86	3
Chewacla, SIL, L	56	5
Chipley, S, FS	310	1
Chowan, SIL	48	6
Conaby, Muck	134	2
Conetoe, S, FS	310	1
Conetoe, LS, LFS	134	2
Congaree, L, SIL	56	5

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Congaree, FSL, SL	86	3
Corolla, S, FS	310	1
Cowarts, FSL, SL	86	3
Cowarts, LS, LFS	134	2
Coxville, FSL, SL	86	3
Coxville, L	56	5
Craven, FSL	86	3
Craven, L, SIL	56	5
Croatan, SP	134	2
Currituck, Muck	134	2
Currituck, MPT	134	2
Dare, Muck	134	2
Deloss, L	56	5
Deloss, LFS	134	2
Deloss, SL, FSL	86	3
Dogue, FSL, SL	86	3
Dogue, L, SIL	56	5
Dogue, VFSL	86	3
Dorovan, MPT	134	2
Dothan, FSL, SL, GR-FSL, GR-SL	86	3
Dothan, GR-LS, GR-LFS, LS, LFS	134	2
Dragston, LFS, LS	134	2
Dragston, FSL, SL	86	3
Dragston, L	56	5
Duckston, S, FS	310	1
Dunbar, FSL, SL	86	3
Dunbar, L	56	5
Duplin, SL, FSL	86	3
Duplin, LS	134	2
Echaw, LFS, LS	134	2
Echaw, S, FS	310	1
Emporia, FSL, SL	86	3
Emporia, LFS, LS	134	2
Emporia, L	56	5
Exum, VFSL	86	3
Exum, L, SIL	56	5
Faceville, LS, LFS	134	2
Faceville, SL, FSL	86	3
Faceville, SCL	56	5
Foreston, S, FS	310	1
Foreston, LS, LFS	134	2
Fortescue, L, SIL	56	5
Fortescue, MK-L	134	2
Fripp, S, FS	310	1
Fuquay, LFS	134	2
Fuquay, S, FS	310	1
Fuquay, L	56	5
Gilead, LS, GR-LS	134	2
Gilead, SL, GR-SL	86	3
Goldsboro, LS	134	2

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Goldsboro, SL, FSL	86	3
Grantham, VFSL	86	3
Grantham, L, SIL	56	5
Grifton, SL, FSL	86	3
Grifton, LS, LFS	134	2
Gritney, SL, FSL	86	3
Gritney, LS, LFS	134	2
Hobonny, L, SIL	56	5
Hobonny, SICL	38	7
Hobonny, SIC	86	4
Hyde, VFSL	86	3
Hyde, L, SIL	56	5
Icaria, FSL	86	3
Invershiel, LS, LFS	134	2
Invershiel, SL, FSL	86	3
Johns, LS, LFS	134	2
Johns, SL, FSL	86	3
Johnston, L	56	5
Johnston, MK-L	134	2
Johnston, SL, FSL	86	3
Kalmia, LS, LFS	134	2
Kalmia, FSL	86	3
Kempsville, SL, FSL	86	3
Kempsville, L	56	5
Kenansville, FS, S	310	1
Kenansville, LS, LFS	134	2
Kinston, FSL	86	3
Kinston, L, SIL	56	5
Kureb, S, COS, FS	310	1
Lafitte, SF, Muck	134	2
Lakeland, S, FS	310	1
Leaf, L, SIL	48	6
Leaf, VFSL, FSL	86	3
Lenoir, VFSL	86	3
Lenoir, SIL, L	56	5
Leon, FS	134	1
Liddell, VFSL	86	3
Liddell, L, SIL	56	5
Lillington, GR-SL	86	3
Lillington, GR-LS	134	2
Lucy, S.	310	1
Lucy, LS, LFS	134	2
Lumbee, LS	134	2
Lumbee, SL, FSL	86	3
Lynchburg, LS, LFS	134	2
Lynchburg, SL, FSL	86	3
Lynchburg, L	56	5
Lynn Haven, S, FS	310	1
Mandarin, FS, S	310	1
Mantachie, SIL	56	5

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Mantachie, CL	86	4
Mantachie, FSL, SL	86	3
Mantachie, L	56	5
Marlboro, LS, LFS	134	2
Marlboro, SL, FSL, VFSL	86	3
Marvyn, LS	134	2
Marvyn, SL	86	3
Mattamuskeet, Muck	134	2
Maxton, SL, FSL	86	3
Maxton, LS, LFS	134	2
Meggett, SL, FSL	86	3
Meggett, L	56	5
Meggett, CL	86	3
Meggett, LS	134	2
Monacan, SIL, L	56	5
Monacan, FSL, SL	86	3
Muckalee, SL	86	3
Muckalee, LS	134	2
Muckalee, L	56	5
Munden, LS, LFS	134	2
Munden, SL, FSL	86	3
Munden, L	56	5
Murville, FS, S	310	1
Murville, LFS	134	2
Myatt, FSL, SL	86	3
Myatt, L, SIL	56	5
Nahunta, VFSL	86	3
Nahunta, L, SIL	56	5
Nankin, SL, FSL	86	3
Nankin, LS, LFS	134	2
Newhan, FS	310	1
Nimmo, FSL, SL	86	3
Nimmo, L	56	5
Nimmo, LS, LFS	134	2
Nixonton, VFSL	86	3
Nixonton, L, SIL	56	5
Norfolk, SL, FSL	86	3
Norfolk, LS, LFS	134	2
Ocilla, S	310	1
Ocilla, LS, LFS	134	2
Olustee, FS	310	1
Onslow, LFS, LS	134	2
Onslow, FSL, SL	86	3
Orangeburg, S	310	1
Orangeburg, LS, LFS	134	2
Orangeburg, SCL	56	5
Orangeburg, SL, FSL	86	3
Osier, S, FS	310	1
Osier, LFS, LS	134	2
Osier, FSL	86	3
Ousley, S, FS	310	1

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Ousley, LFS	134	2
Pactolus, S	310	1
Pactocus, LS, LFS	134	2
Pamlico, Muck	134	2
Pantego, MK-L, L	56	5
Pantego, FSL, SL	86	3
Pasquotank, VSL	86	3
Pasquotank, SIL, L	56	5
Paxville, LS, LFS	134	2
Paxville, SL, FSL	86	3
Paxville, L	56	5
Pettigrew, Muck	134	2
Pender, SL, FSL	86	3
Pender, LS, LFS	134	2
Perquimans, SIL, L	56	5
Perquimans, VFSL	86	3
Plummer, S	310	1
Plummer, FS	86	3
Plummer, LS	134	2
Pocalla, S	310	1
Pocalla, LS	134	2
Polawana, LFS, LS	134	2
Polawana, FS	86	3
Ponzer Muck	134	2
Portsmouth, SL, FSL	86	3
Portsmouth, L	56	5
Pungo, Muck	134	2
Rains, LS, LFS	134	2
Rains, SL, FSL	86	3
Rimini, S, FS	310	1
Roanoke, FSL	86	3
Roanoke, SIL, L	56	5
Roanoke, CL	86	4
Roanoke, SICL	38	7
Roper, Muck	134	2
Rumford, LFS, LS	134	2
Rumford, FSL, SL	134	3
Ruston, GR-FSL, GR-SL	86	3
Ruston, GR-L	56	5
Ruston, FSL, SL	86	3
Ruston, LFS	134	2
Rutledge, LS, LFS	134	2
Rutledge, S	310	1
Scuppernong, Muck	134	2
Seabrook, LS, LFS	134	2
Seabrook, FS	86	3
Seagate, FS, S	310	1
Stallings, FS	310	1
Stallings, LS, LFS	134	2
Stallings, SL, FSL	86	3
State, LS, LFS	134	2

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
State, FSL, SL	86	3
State, SIL, L	56	5
Stockade, FS	310	1
Stockade, LFS	134	2
Stockade, FSL	86	3
Stockade, L	56	5
Suffolk, FSL, SL	86	3
Tarboro, S	310	1
Tarboro, LS	134	2
Tetotum, FSL, SL	86	3
Tetotum, L, SIL	56	5
Toisnot, LS	134	2
Toisnot, SL	86	3
Toisnot, L	56	5
Tomahawk, S	310	1
Tomahawk, LFS, LS	134	2
Tomotley, LS, LFS	134	2
Tomotley, SL, FSL	86	3
Tomotley, SIL, L	56	5
Torhunta, LFS	134	2
Torhunta, FSL	86	3
Torhunta, L	56	5
Torhunta, MK-L	134	2
Trebloc, FSL	86	3
Trebloc, SIL, L	56	5
Troup, S, FS	310	1
Troup, LS, LFS	134	2
Tuckerman, FSL	86	3
Una, C, SIC	86	4
Una, L, CL, SCL	56	5
Una, SICL	38	7
Valhalla, LFS, LS	134	2
Valhalla, S, FS	310	1
Varina, GR-LS	134	2
Varina, GR-SL	86	3
Vaucluse, GR-S, S	310	1
Vaucluse, GR-LS, GRV-LS, LS	134	2
Vaucluse, GR-SL, GRV-SL, FSL, SL, GR-FSL	86	3
Wagram, S, FS	310	1
Wagram, LS, LFS	134	2
Wahee, VFSL, FSL, SL	86	3
Wahee, L, SIL	56	5
Wakulla, S, FS	310	1
Wakulla, LS, LFS	134	2
Wando, FS	310	1
Wando, LFS	134	2
Wasda, Muck	134	2
Weeksville, VFSL	86	3
Weeksville, SIL, L	56	5
Wehadkee, FSL, SL	86	3

TABLE 2 (Continued)

"I" Values of North Carolina Soils

SOIL SERIES & TEXTURE	"I" VALUE	WEG
Wehadkee, SICL	38	7
Wehadkee, L, SIL	56	5
Weston, SL, FSL	86	3
Weston, LFS	134	2
Wickham, LS	134	2
Wickham, SL, FSL	86	3
Wickham, L	56	5
Wilbanks, FSL	86	3
Wilbanks, SIL, L	56	5
Winton, FSL, SL	86	3
Winton, LFS, LS	134	2
Woodington, LS, LFS	134	2
Woodington, SL, FSL	86	3
Wrightsboro, LS, LFS	134	2
Wrightsboro, SL, FSL	86	3
Wysocking, VFSL	86	3
Wysocking, SIL	56	5
Wysocking, SI	38	7
Yaupon, FSL	86	3
Yaupon, L, SIL	56	5
Yaupon, SICL	38	7
Yonges, LFS	134	2
Yonges, FSL	86	3

TABLE 3

"C" FACTORS FOR EASTERN NORTH CAROLINA

COUNTY	JAN	FEB	MAR	APR	MAY	JUNE
Anson	4	3	4	10	2	2
Beaufort	7	6	9	8	4	5
Bertie	5	5	7	6	4	5
Bladen	4	3	5	5	3	2
Brunswick	5	5	7	7	5	4
Camden	10	10	10	10	6	6
Carteret	9	9	10	9	6	6
Chowan	7	7	9	8	5	5
Columbus	5	4	6	6	4	3
Craven	5	5	7	7	4	4
Cumberland	4	3	5	10	2	2
Currituck	10	10	10	10	7	6
Dare	10	10	10	10	7	7
Duplin	4	4	5	5	3	3
Edgecombe	4	4	5	8	3	3
Gates	7	7	9	7	4	5
Greene	4	4	5	7	3	2
Halifax	4	4	5	10	3	3
Harnett	4	3	5	10	2	2
Hertford	5	5	7	7	4	5
Hoke	4	3	5	10	2	2
Hyde	10	10	10	10	5	6
Johnston	4	3	5	10	2	2
Jones	5	5	7	7	4	4
Lee	4	3	5	10	2	2
Lenoir	4	4	5	5	3	3
Martin	5	5	7	7	4	4
Moore	4	3	5	10	2	2
Montgomery	4	3	4	10	2	2
Nash	3	3	5	10	3	2
New Hanover	5	6	7	7	5	4
Northampton	4	4	6	8	3	4
Onslow	5	5	7	7	4	4
Pamlico	7	7	9	8	4	5
Pasquotank	10	10	10	10	5	6
Pender	5	5	7	7	4	4
Perquimans	8	8	10	10	4	4
Pitt	4	5	6	5	3	3
Richmond	4	3	4	10	2	2
Robeson	4	3	5	8	3	2
Sampson	4	3	5	7	2	2
Scotland	4	3	5	10	2	2
Tyrrell	10	10	10	10	5	6
Wake	3	3	5	10	2	2
Washington	7	7	10	9	4	5
Wayne	4	3	5	8	2	2
Wilson	4	3	5	9	2	2

Adapted from Agriculture Handbook No. 346.

TABLE 4

Prevailing Wind Erosion Direction, In Degrees Clockwise From North For April

Anson	225
Beaufort	203
Bertie	203
Bladen	225
Brunswick	225
Camden	203
Carteret	203
Chowan	203
Columbus	225
Craven	203
Cumberland	225
Currituck	203
Dare	203
Duplin	225
Edgecombe	203
Gates	203
Greene	203
Halifax	203
Harnett	225
Hertford	203
Hoke	225
Hyde	203
Johnston	225
Jones	203
Lee	225
Lenoir	225
Martin	203
Moore	225
Montgomery	225
Nash	225
New Hanover	203
Northampton	203
Onslow	203
Pamlico	203
Pasquotank	203
Pender	203
Perquimans	203
Pitt	203
Richmond	225
Robeson	225
Sampson	225
Scotland	225
Tyrrell	203
Wake	225
Washington	203
Wayne	225
Wilson	203

Source: Supplement to Agriculture Handbook No. 346.

TABLE 5

Percentage of the Average Annual Erosive Wind Energy (EWE) Which Normally Occurs During Certain Months in Selected Areas of North Carolina

Location	Percent of Annual EWE					
	January	February	March	April	May	June
Cape Hatteras	11	15	13	12	5	5
Charlotte	14	13	18	17	2	2
Cherry Point	10	13	15	16	7	4
Elizabeth City	12	13	12	11	7	5
Fayetteville	13	18	19	16	5	3
Fort Bragg	14	14	20	14	5	2
Goldsboro	14	16	20	15	5	2
Raleigh	11	11	22	23	5	2
Rocky Mount	11	11	17	13	4	7
Wilmington	9	11	16	16	7	4

Derived from information supplied by South NTC, November 2, 1983

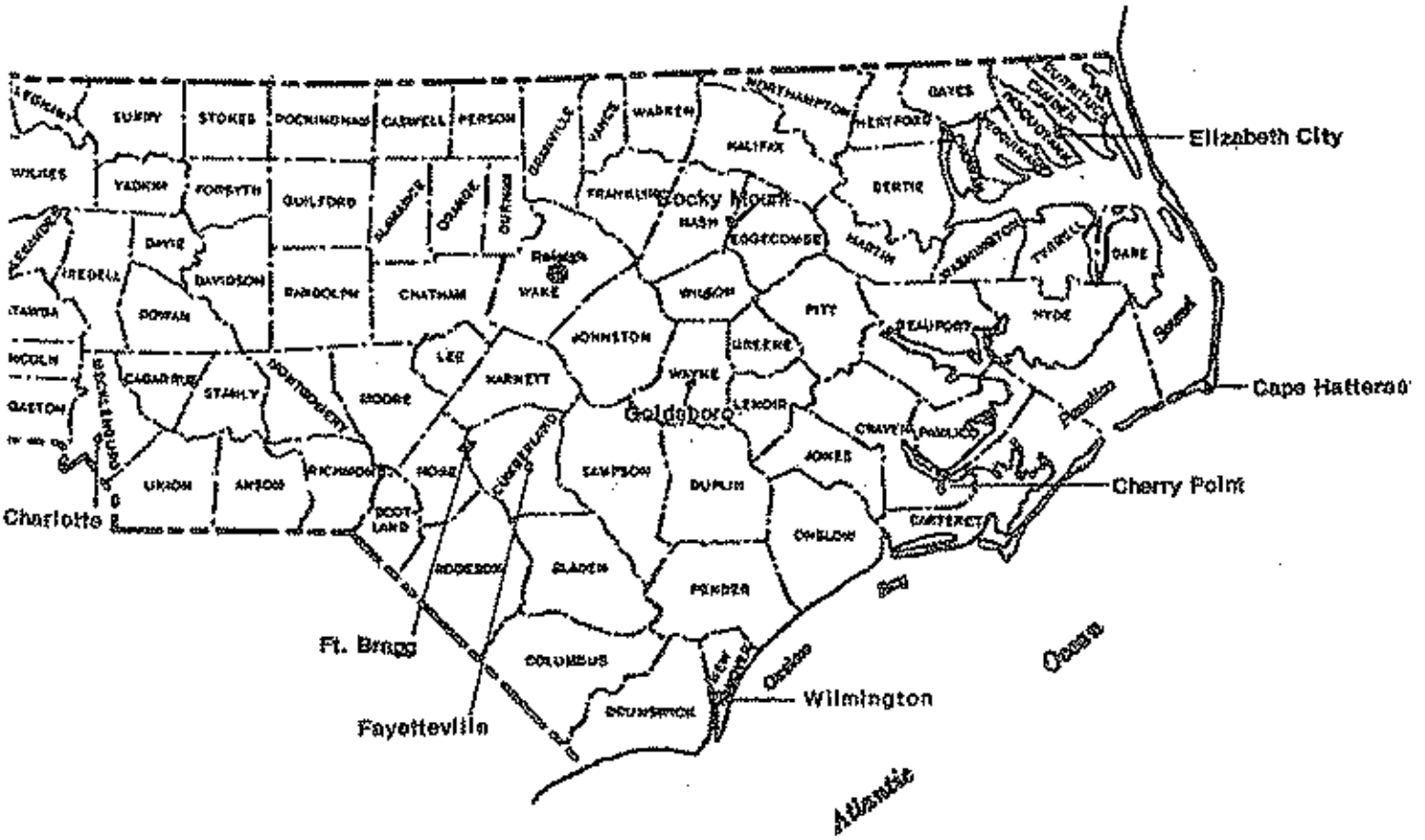


TABLE 6

ESTIMATED CROP TOLERANCES TO SOIL LOSS (BLOWING)

CROP	ESTIMATED CROP TOLERANCE 1/
1. Asparagus	1.0
2. Barley	2/
3. Broccoli	1.0
4. Cabbage	1.0
5. Cantaloupes	0.5
6. Carrots	0.0
7. Collards	0.5
8. Corn	2.0
9. Cotton	0.25
10. Cucumbers	0.0
11. Egg plant	1.0
12. Green peas	0.5
13. Irish potatoes	1.0
14. Lettuce	0.0
15. Lima beans	0.5
16. Mustard greens	0.0
17. Oats	2/
18. Okra	0.5
19. Onions	0.0
20. Peanuts	1.0
21. Rye	2/
22. Snap beans	0.5
23. Soybeans	1.0
24. Spinach	0.0
25. Squash	0.0
26. Sweet corn	2.0
27. Sweet peppers	1.0
28. Sweet potatoes	1.0
29. Tomatoes	0.5
30. Tobacco	1.0
31. Turnips	1.0
32. Turnip greens	0.0
33. Watermellons	1.0
34. Wheat	2/

1/ Crop tolerances are expressed as tons per acre. The system should be designed to prevent soil loss from exceeding crop tolerance during the first month of crop growth, or when crop damage is most likely to occur.

2/ Crop will probably tolerate wind erosion equal to or greater than the allowable soil loss (T).

TABLE 7

Approximate amounts of Residues Produced by Various Crops

Crops	Residues Produced/Unit of Yield
corn (grain)	56 lbs/bu.
Soybeans	85 lbs./bu.
Wheat	100 lbs./bu.
Barley	70 lbs./bu.
Rye	110 lbs./bu.
oats	60 lbs./bu.
cotton	3,000 lbs./bale
sorghum	1 lb./lb. grain

Source: SCS Technical Guide

TABLE 8

Amount of Residue Left on the Surface After Each Tillage Operation

Tillage Type	Percent of Residue Retained
Moldboard Plow	0
Disk (24 -25 inch)	50
Disk (18-22 inch)	60
Chisel plow (shanks are less than 12" apart)	75
Chisel plow (shanks are greater than 12" apart)	80
Chisel plow (helical shovel)	25
Chisel plow (twisted shovel)	50
Subsoiler	60
Rotary mower	100
Paraplow	95 (estimate)
No-Till planter	95 (estimate)
Ro-Til planter	50 (estimate)

Source: SCS Technical Guide, industry publications and judgment estimates.

TABLE 9

Soil Loss From Wind Erosion
In Tons Per Acre Per Year

Use the following pages to determine wind erosion rates. Refer to examples for instructions.

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

SURFACE - K = 1.0 C = 10 I = 38

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.8	3.0	1.8	0.9									
8000	3.8	3.0	1.8	0.9									
6000	3.7	2.9	1.8	0.9									
4000	3.4	2.6	1.6	0.8									
3000	3.1	2.4	1.5	0.7									
2000	2.5	2.0	1.2	0.5									
1000	1.8	1.3	0.7										
800	1.6	1.2	0.6										
600	1.3	1.0	0.5										
400	0.5	0.5											
300	0.8	0.5											
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

SURFACE - K = 0.9 C = 10 I = 38

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.4	2.7	1.6	0.8									
8000	3.4	2.7	1.6	0.8									
6000	3.3	2.5	1.6	0.7									
4000	2.9	2.2	1.4	0.6									
3000	2.9	2.0	1.2	0.5									
2000	2.1	1.6	0.9	0.4									
1000	1.5	1.1	0.6										
800	1.4	1.0	0.5										
600	1.0	0.6											
400	0.8	0.5											
300	0.7	0.4											
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

SURFACE - K = 0.8 C = 10 I = 38

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.0	2.4	1.4	0.7									
8000	3.0	2.4	1.4	0.7									
6000	2.9	2.2	1.4	0.6									
4000	2.5	1.9	1.1	0.5									
3000	2.2	1.7	1.0	0.5									
2000	1.8	1.4	0.8										
1000	1.3	1.0	0.5										
800	1.1	0.8	0.4										
600	0.9	0.5											
400	0.7	0.4											
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS FOR VALUES WHERE 'E' IS LESS THAN 0.1 OR GREATER THAN 44000 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, NOT 'V'.

TABLE 9 (E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 38

SURFACE - K = 0.7

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	2.7	2.0	1.2	0.6									
8000	2.7	2.0	1.2	0.6									
6000	2.4	1.9	1.1	0.5									
4000	2.0	1.6	0.8										
3000	1.8	1.4	0.7										
2000	1.6	1.2	0.7										
1000	1.1	0.8	0.4										
800	0.9	0.5											
600	0.7	0.4											
400	0.5	0.3											
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 38

SURFACE - K = 0.6

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	2.3	1.7	1.0	0.5									
8000	2.3	1.7	1.0	0.5									
6000	2.0	1.5	0.8										
4000	1.8	1.4	0.8										
3000	1.6	1.2	0.7										
2000	1.4	1.1	0.6										
1000	0.9	0.5											
800	0.8	0.5											
600	0.6	0.4											
400													
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 38

SURFACE - K = 0.5

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	1.9	1.4	0.8										
8000	1.9	1.4	0.8										
6000	1.7	1.3	0.7										
4000	1.4	1.2	0.7										
3000	1.4	1.0	0.6										
2000	1.2	0.9	0.5										
1000	0.1	0.4											
800	0.6	0.4											
600													
400													
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS FOR VALUES WHERE "F" IS LESS THAN 0.1 OR GREATER THAN 440.0 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, NOT "V"

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 48

SURFACE - K = 1.0

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	4.8	3.8	2.4	1.3	0.5								
8000	4.8	3.8	2.4	1.3	0.5								
6000	4.8	3.8	2.4	1.3	0.5								
4000	4.5	3.5	2.2	1.2	0.4								
3000	4.2	3.3	2.1	1.1	0.4								
2000	3.8	3.0	1.8	0.9									
1000	2.8	2.2	1.3	0.6									
800	2.3	1.8	1.1	0.5									
600	1.9	1.4	0.8										
400	1.5	1.1	0.6										
300	1.2	0.9	0.5										
200	0.8	0.5											
150	0.6	0.4											
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 48

SURFACE - K = 0.9

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	4.3	3.4	2.1	1.1	0.4								
8000	4.2	3.4	2.1	1.1	0.4								
6000	4.3	3.4	2.1	1.1	0.4								
4000	4.0	3.1	1.9	0.9									
3000	3.7	2.9	1.8	0.9									
2000	3.2	2.5	1.5	0.7									
1000	2.2	1.7	1.0	0.5									
800	1.9	1.4	0.8										
600	1.6	1.2	0.6										
400	1.2	0.9	0.5										
300	0.9	0.5											
200	0.7	0.4											
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 48

SURFACE - K = 0.8

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.8	3.0	1.9	0.9									
8000	3.8	3.0	1.9	0.9									
6000	3.8	3.0	1.8	0.9									
4000	3.4	2.7	1.6	0.8									
3000	3.1	2.4	1.5	0.7									
2000	2.6	2.0	1.2	0.6									
1000	1.8	1.4	0.7										
800	1.6	1.2	0.7										
600	1.3	1.0	0.5										
400	0.9	0.5											
300	0.8	0.5											
200	0.5	0.3											
150													
100													
80													
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS FOR VALUES WHERE (E) IS LESS THAN 0.1 OR GREATER THAN 440.0 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, NOT (V)

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 48

SURFACE - K = 0.7

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.4	2.6	1.6	0.8									
8000	3.4	2.6	1.6	0.8									
6000	3.2	2.5	1.5	0.7									
4000	2.8	2.2	1.3	0.6									
3000	2.5	1.9	1.2	0.5									
2000	2.0	1.5	0.8										
1000	1.5	1.1	0.6										
800	1.3	1.0	0.5										
600	1.0	0.6											
400	0.8	0.5											
300	0.6	0.4											
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 48

SURFACE - K = 0.6

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	2.9	2.2	1.4	0.6									
8000	2.9	2.2	1.4	0.6									
6000	2.7	2.1	1.3	0.6									
4000	2.3	1.8	1.1	0.5									
3000	2.0	1.5	0.8										
2000	1.6	1.3	0.7										
1000	1.2	0.9	0.5										
800	1.0	0.6											
600	0.8	0.5											
400	0.6	0.4											
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 48

SURFACE - K = 0.5

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	2.6	1.8	1.1	0.5									
8000	2.4	1.8	1.1	0.5									
6000	2.1	1.6	1.0	0.4									
4000	1.5	1.4	0.8										
3000	1.7	1.3	0.7										
2000	1.5	1.1	0.6										
1000	0.9	0.5											
800	0.8	0.5											
600	0.6	0.4											
400													
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS FOR VALUES WHERE *E* IS LESS THAN 0.1 OR GREATER THAN 440.0 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, NOT *V*

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 56

SURFACE - K = 1.0

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	5.6	4.4	2.9	1.5	0.6								
8000	5.6	4.4	2.9	1.5	0.6								
6000	5.6	4.4	2.9	1.5	0.6								
4000	5.1	4.0	2.6	1.4	0.5								
3000	4.8	3.8	2.4	1.3	0.5								
2000	4.4	3.5	2.2	1.1	0.4								
1000	3.4	2.6	1.6	0.8									
800	3.0	2.4	1.4	0.7									
600	2.3	1.8	1.1	0.5									
400	1.8	1.4	0.7										
300	1.5	1.1	0.6										
200	1.0	0.8											
150	0.8	0.5											
100	0.5	0.3											
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 56

SURFACE - K = 0.9

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	5.0	4.0	2.5	1.4	0.5								
8000	5.0	4.0	2.5	1.4	0.5								
6000	5.0	4.0	2.5	1.4	0.5								
4000	4.7	3.7	2.3	1.2	0.5								
3000	4.5	3.5	2.2	1.2	0.4								
2000	4.1	3.2	2.0	1.0	0.4								
1000	3.1	2.4	1.5	0.7									
800	2.6	2.0	1.2	0.6									
600	2.0	1.5	0.8										
400	1.6	1.3	0.7										
300	1.3	1.0	0.5										
200	0.9	0.5											
150	0.7	0.4											
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 56

SURFACE - K = 0.8

(L) (V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	4.5	3.5	2.2	1.2	0.4								
8000	4.5	3.5	2.2	1.2	0.4								
6000	4.5	3.5	2.2	1.2	0.4								
4000	4.3	3.2	2.0	1.1	0.4								
3000	3.9	3.0	1.9	0.9									
2000	3.4	2.6	1.6	0.8									
1000	2.4	1.8	1.1	0.5									
800	2.0	1.5	0.8										
600	1.7	1.3	0.7										
400	1.3	1.0	0.5										
300	1.0	0.6											
200	0.7	0.4											
150													
100													
80													
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS FOR VALUES WHERE "I" IS LESS THAN 0.1 OR GREATER THAN 440.0 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, NOT (V)

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981
C = 10
I = 56

SURFACE - K = 0.7
(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.9	3.1	1.9	0.9									
8000	3.9	3.1	1.9	0.9									
6000	3.9	3.0	1.9	0.9									
4000	3.5	2.7	1.7	0.8									
3000	3.2	2.5	1.5	0.7									
2000	2.7	2.1	1.3	0.6									
1000	1.8	1.4	0.8										
800	1.7	1.3	0.7										
600	1.4	1.0	0.6										
400	1.0	0.8											
300	0.8	0.5											
200	0.5	0.3											
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981
C = 10
I = 56

SURFACE - K = 0.6
(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	3.4	2.6	1.6	0.8									
8000	3.4	2.6	1.6	0.8									
6000	3.2	2.5	1.5	0.7									
4000	2.8	2.2	1.3	0.6									
3000	2.5	1.9	1.2	0.5									
2000	2.0	1.5	0.8										
1000	1.5	1.1	0.6										
800	1.3	1.0	0.5										
600	1.0	0.6											
400	0.8	0.5											
300	0.6	0.4											
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981
C = 10
I = 56

SURFACE - K = 0.5
(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	2.8	2.2	1.3	0.6									
8000	2.8	2.2	1.3	0.6									
6000	2.8	2.0	1.2	0.6									
4000	2.2	1.7	1.0	0.5									
3000	1.9	1.5	0.8										
2000	1.7	1.3	0.7										
1000	1.2	0.9	0.5										
800	1.0	0.6											
600	0.8	0.5											
400	0.6	0.3											
300													
200													
150													
100													
80													
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS PER VALUES WHERE 'E' IS LESS THAN 0.1 OR GREATER THAN 440.0 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, ACT 'V'

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 86

SURFACE - K = 1.0

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	8.8	6.9	4.6	2.6	1.2	0.2							
8000	8.8	6.9	4.6	2.6	1.2	0.2							
6000	8.8	6.9	4.6	2.6	1.2	0.2							
4000	8.6	6.9	4.6	2.6	1.2	0.2							
3000	8.9	6.8	4.5	2.6	1.2	0.2							
2000	7.7	6.2	4.1	2.3	0.9								
1000	5.8	4.6	3.0	1.6	0.6								
800	5.3	4.1	2.6	1.4	0.5								
600	4.4	3.4	2.2	1.1	0.4								
400	3.5	2.7	1.7	0.8									
300	2.8	2.1	1.3	0.6									
200	1.9	1.4	0.8										
150	1.5	1.1	0.6										
100	1.0	0.6											
80	0.9	0.5											
60	0.6	0.4											
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 86

SURFACE - K = 0.9

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	7.7	6.2	4.1	2.3	0.9								
8000	7.7	6.2	4.1	2.3	0.9								
6000	7.7	6.2	4.1	2.3	0.9								
4000	7.5	6.0	4.0	2.2	0.9								
3000	7.2	5.8	3.9	2.1	0.8								
2000	6.5	5.2	3.4	1.9	0.7								
1000	4.8	3.8	2.4	1.3	0.5								
800	4.5	3.5	2.2	1.2	0.4								
600	3.8	3.0	1.9	0.9									
400	3.0	2.3	1.4	0.7									
300	2.3	1.8	1.1	0.5									
200	1.7	1.3	0.7										
150	1.3	1.0	0.5										
100	0.9	0.5											
80	0.7	0.4											
60	0.5	0.3											
50													
40													
30													
20													
10													

(E)* SOIL LOSS FROM WIND EROSION IN TONS PER ACRE PER YEAR JANUARY,1981

C = 10
I = 86

SURFACE - K = 0.8

(V)** - FLAT SMALL GRAIN RESIDUE IN POUNDS PER ACRE

(L) UNSHELTERED DISTANCE IN FEET	0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
10000	6.9	5.5	3.6	2.0	0.8								
8000	6.9	5.5	3.6	2.0	0.8								
6000	6.9	5.5	3.6	2.0	0.8								
4000	6.2	4.9	3.2	1.7	0.7								
3000	5.7	4.5	2.9	1.6	0.6								
2000	5.4	4.2	2.7	1.5	0.6								
1000	4.0	3.2	2.0	1.0	0.4								
800	3.8	2.9	1.8	0.9									
600	3.2	2.5	1.5	0.7									
400	2.4	1.9	1.1	0.5									
300	1.9	1.5	0.8										
200	1.4	1.1	0.6										
150	1.0	0.8											
100	0.8	0.5											
80	0.6	0.4											
60													
50													
40													
30													
20													
10													

* NOTE: SOIL LOSS FOR VALUES WHERE "E" IS LESS THAN 0.1 OR GREATER THAN 440.0 ARE NOT SHOWN; OTHER VALUES NOT SHOWN ARE INVALID

** NOTE: VALUES SHOWN ARE FLAT SMALL GRAIN EQUIVALENT, ACT "V"