

Agricultural Resource Management Study  
Wheat Production Practices Report for 1998

WHEAT RESPONDENT BOOKLET

## REASONS FOR SEED VARIETY

Section B, item 17 . . .

- 1 Increased yield
- 2 Enhanced protein content
- 3 Disease resistance
- 4 Insect resistance
- 5 Drought resistance
- 6 *Not chosen for any of above reasons*

## FERTILIZER / PESTICIDE APPLICATION METHODS

Section C, Column 6

&

Section D, Column 9 . . .

- 1 BROADCAST, GROUND WITHOUT INCORPORATION
- 2 BROADCAST, GROUND WITH INCORPORATION
- 3 BROADCAST, BY AIR
- 4 IN SEED FURROW
- 5 IN IRRIGATION WATER
- 6 CHISEL/INJECTED OR KNIFED IN
- 7 BANDED/SIDEDRESSED IN OR OVER ROW
- 8 FOLIAR OR DIRECTED SPRAY
- 9 SPOT TREATMENTS

## Common Fertilizers and Their Percent Analysis

Name	Percent Active Ingredients				RANGE
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	S	
Anhydrous ammonia . . . . .	82	--	--	--	
Aqua ammonia . . . . .	20	--	--	--	16-30% N
Ammonium nitrate . . . . .	33	--	--	--	33-34% N
Ammonium sulfate . . . . .	21	--	--	--	20-21% N
Nitrogen solutions . . . . .	28	--	--	--	7-58% N
Sodium nitrate . . . . .	16	--	--	--	
Urea . . . . .	46	--	--	--	45-46% N
Urea ammonium nitrate . . .	32	--	--	--	
Super phosphate (22 % & under) . . . . .	--	19	--	--	18-22% P
Super phosphate (over 22 %) . . . . .	--	30	--	--	23-39% P
Triple Super Phosphate . . . . .	--	46	--	--	40-54% P
Ammonium phosphate . . . . .	11	48	--	--	
Di-ammonium phosphate . . . . .	18	46	--	--	
Mono-ammonium phosphate . . . . .	11	52	--	--	
Potassium chloride . . . . .	--	--	60	--	50-62% K
Potassium nitrate . . . . .	13	--	44	--	
Potassium sodium nitrate . . . . .	15	--	14	--	
Mixed Fertilizer . . . . .	2	6	12	--	
	3	9	18	--	
	3	10	30	--	
	5	10	15	--	
	5	10	30	--	
	6	24	24	--	
	8	24	24	--	
	9	18	9	--	
Soil sulfur . . . . .	--	--	--	92	
Sulfur-bentonite . . . . .	--	--	--	90	
Sulfur dioxide . . . . .	--	--	--	50	
Ammonium polySulfide . . . . .	20	--	--	45	
Ammonium sulfate . . . . .	21	--	--	24	
Ammonium thiosulphate solution . . . . .	12	--	--	26	
Diammonium phosphate-sulfur . . . . .	16	40	--	13	
Potassium sulfate . . . . .	--	--	50	18	48-52% K
Potassium-magnesium sulfate . . . . .	--	--	22	22	

## CHEMICALS and PESTICIDES for WHEAT

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4351	2,4-D/Agsco 400 (EC)				
L	H	4377	2,4-D/Amine 4	L	H	4039	Direx 4L
L	H	4444	2,4-D/Class 40A				
L	H	4443	2,4-D/Class LV4	L	H	4045	Diuron 4L
				D	H	4046	Diuron 80W
L	H	4001	2,4-D/Dacamine 4D				
L	H	4204	2,4-D/Esteron 99 Concentrate	D	H	4205	Express (DF)
L	H	4291	2,4-D/Formula 40	L	H	4210	Fallow Master
L	H	4221	2,4-D/Hi-Dep				
L	H	4480	2,4-D/LV-6	L	H	4057	Far-Go (4EC)
L	H	4265	2,4-D/Salvo	D	H	4211	Far-Go Granular (10%)
D	H	4391	2,4-D/Savage				
L	H	4306	2,4-D/Weed-Rhap LV-4D	D	H	4214	Finesse (DF)
L	H	4003	2,4-D/Weedar 64	L	F	7254	Folicur
				L	I	1054	Furadan 4F
L	H	4296	2,4-D/Weedone 638				
L	H	4298	2,4-D/Weedone LV4	D	H	4125	Glean FC (75DF)
L	H	4299	2,4-D/Weedone LV6	L	H	4314	Gramoxone Extra (2.5L)
D	H	4123	Ally (60DF)				
D	H	4390	Amber	D	H	4139	Harmony Extra (DF)
L	H	4133	Assert (2.5EC)	L	H	4065	Hoelon 3EC
L	H	4041	Atrazine 4L				
L	H	4135	Avenge (2L)	D	H	4066	Karmex DF
L	H	4136	Banvel (4L)	L	H	4229	Landmaster BW
L	H	4138	Banvel II (2L)	L	H	4326	Landmaster II
L	H	4327	Banvel SGF (2EC)				
				L	I	1064	Lannate LV (2.4 lbs.)
D	F	7046	Bayleton 50%-WP	D	H	4073	Lexone DF
D	F	7003	Benlate (50WP)	L	I	1069	Lorsban 4E
D	H	4143	Bladex 90DF				
L	H	4153	Bronate (4EC)	L	H	4293	MCP 4 Ester
D	H	4155	Buckle (G)	L	H	4292	MCP Amine 4
L	H	4024	Buctril (2EC)				
				L	I	1236	Malathion 5EC (57%)
D	H	4609	Canvas				
				L	I	1158	Methyl Parathion 4EC
L	H	4465	<i>CHEYENNE (both products required)</i> Cheyenne FM (container #2)	L	I	1086	Methyl Parathion 6EC
D	H	4471	X-TRA (Cheyenne container#1)	L	I	1088	Methyl Parathion 7.5EC
L	I	1482	Chlorpyrifos 4E AG				
L	H	4180	Curtail (EC)	D	H	4569	Peak
L	H	4365	Curtail M (EC)				
L	H	4181	Cyclone (2EC)	L	I	1164	Penncap-M (2 lbs.)
L	I	1027	Cygon 400 (4EC)	D	F	7026	Penncozeb (80WP)
L	H	4445	Dakota TP	L	H	4581	Puma 1EC
L	I	1034	Di-Syston 8 (EC)				
				L	H	4092	Ranger (EC)
L	I	1028	Dimethoate 2.67EC	L	H	4262	Rhonox (EC)
L	I	1267	Dimethoate 400				
L	I	1029	Dimethoate 4EC	L	H	4093	Roundup (4L)
				L	H	4561	Roundup Ultra

D/L	Class	Code	Product Name
L	H	4095	Sencor 4
D	H	4096	Sencor DF (75%)
L	I	1019	Sevin XLR Plus (4E)
L	H	4630	Silverado Herbicide
L	H	4628	Starane EC
L	H	4320	Stinger (3EC)
L	H	4273	Surefire Herbicide (3EC)
L	H	4486	Sword
D	I	1127	Thimet 20-G
L	H	4280	Tiller
L	F	7076	Tilt (3.6EC)
L	F	7210	Tilt Plus
L	H	4281	Tordon 22K (2EC)
L	H	4109	Treflan 5 (EC)
L	H	4108	Treflan EC (4Lbs.)
L	H	4629	Treflan HFP
L	H	4110	Treflan MTF (4EC)
D	H	4111	Treflan TR-10 (10G)
L	H	4286	Tri-4 (EC)
L	I	1435	Warrior

# TARGET PEST CODE LIST

## SECTION D, Item 1 Column 12

### INSECTS

- 010 APHIDS**
- 020 BEETLES, WEEVILS or WIREWORMS**  
727 Corn Rootworm (adults)  
728 Corn Rootworm (larvae)  
020 Other Beetles, Weevils or Wireworms
- 030 CUTWORMS OR ARMYWORMS**
- 040 MOTH / CATERPILLAR**  
754 Pink Bollworm  
045 Other Bollworm  
757 Tobacco Budworm  
040 Other Moths or Caterpillars  
*(For example: loopers, leafminer, leaf perforator, leafworm, corn borer, webworm, leafrollers, soybean podworm, fall armyworm, corn ear worm, etc.)*
- 050 TRUE BUG**  
*(For example: fleahoppers, lygus bugs, stink bugs, chinch bugs, tarnished plant bugs, etc.)*
- 060 WHITEFLY, MEALYBUGS or LEAF**
- 080 GRASSHOPPERS or CRICKETS**
- 090 MITES**
- 095 FLIES or MAGGOTS**
- 085 THRIPS**
- 100 NEMATODES**

### DISEASES

- 105 BACTERIAL DISEASES**
- 110 FUNGAL DISEASES, (FUNGUS)**
- 120 VIRAL DISEASES, (VIRUS)**

### WEEDS

- 171 GRASSES, ANNUAL**  
607 Foxtail  
171 Other Annual Grasses
- 172 GRASSES, PERENNIAL**  
617 Shattercane  
608 Johnsongrass  
616 Quack Grass  
172 Other Perennial Grasses
- 175 BROADLEAVES, ALL**  
173 Perennial broadleaf  
174 Annual broadleaf
- 177 SEDGES**

### OTHER PESTS

- 180 OTHER PESTS**  
*(For example, defoliant, desiccant or growth regulator, vine killer, etc.)*

# PEST MANAGEMENT INFORMATION SOURCES

Section E, item 17 . . .

- 1 Extension Advisor, Publications or Demonstrations  
(County, Cooperative or University)
- 2 Farm Supply or Chemical Dealer
- 3 Commercial Scouting Service
- 4 Crop Consultant or Pest Control Advisor
- 5 Other Growers or Producers
- 6 Producer Associations, Newsletters or Trade  
Magazines
- 7 Electronic Information Services (*World Wide Web,*  
*DTN, etc.*)
- 8 Other
- 9 None

# MACHINERY and IMPLEMENT CODES

## PLOWS and DISKS

- 01 Chisel Plow (Big Ox)
- 02 Coulter Plow  
(Coulter Chisel, Soil Saver, Soil Conserver)
- 03 Deep Ripper  
(Knife, Bed Knife, Slide)
- 04 Disk Plow  
  
Moldboard
- 05 -Regular
- 06 -Two-way
- 07 Stubble-mulch  
(Noble, Sweeps, Hoeme Plow, Muckeroy Plow)
- 08 Subsoiler  
(Chisel, Ripper, V-ripper)
- 09 Disk-chisel  
(Mulch Tiller)  
  
Offset Disk
- 10 -Heavy Disk
- 11 -Light Disk
- 12 One-way Disk  
(Disk Tiller)
- 13 Single Disk  
  
Tandem Disk
- 14 -Plowing
- 15 -Regular
- 16 Paraplow

## CULTIVATORS

- 21 Field Cultivator  
(Regular Digger, Triple K, Danish Tined, Swedish Tined, Incorporated, S-tine, Cultivator, Vibra-shank Harrow, Lilliston Tiller)
- 22 Furrow-out
- 23 Rotary Hoe  
(Crust Buster)  
  
Row
- 24 -Disk Sweep, Shovel
- 25 -Rolling, Rotary  
  
Field Cultivator
- 26 -Heavy Duty  
(Duckfoot Cultivator)
- 27 Marker

## PACKERS

- 51 Culti-packer  
(Pulverizer, Crow-foot, Serrated, Ring, Spiral)  
  
Roller-packer
- 52 -Attachment
- 53 -Smooth & Flat

## HARROWS (DRAGS)

- 30 Heavy Harrow
- 31 Field Conditioner  
(Scratcher, Seed Bed Conditioner, Soil Conditioner, Ground Hog)
- 32 Finishing  
(Harrogator, Spiral, Roller, Knives, Shanks, Pegs, Smoother)
- 33 Flex-tine Tooth  
(Coil Tine)
- 34 Multi-weeder  
(Cultivator & Harrow)
- 35 Rail, Pipe, Log, Plank
- 36 Rod Weeder
- 37 Roller (Culti-mulcher, Pulvi-mulcher, Crumbler, Packer-mulcher, Packer & Shanks)
- 38 Spike Tooth
- 39 Spring Tooth
- 40 Powered Spike Tooth Harrow

## BEDDERS-SHAPERS

- 41 Bedder (Shaper)  
Bedshaper, Crowder)
- 42 Bed Shaper  
  
Disk
- 43 -Hipper
- 44 -Row
- 45 Lister (Middle-buster)
- 46 Rotovator-bedder
- 47 Seedbed Roller  
(Flat Roller)
- 48 Sub-soil Bedder  
(Ripper-hipper)
- 49 Discovator

## MISCELLANEOUS TILLAGE

- 61 Land-all, Do-all  
Mix-n-till, Till-all  
(Disk, Shovels, Reel & Spikes)
- 62 Mulch Treader, Picker,  
Treader, Skew
- 63 Roto-tiller
- 64 Roterra  
(Roto-spike, Lely)
- 65 Sand-fighter
- 66 Soil Finisher  
(Finishing Tool, Mulch Finisher, Tri-tiller, Task Master)

## FERTILIZER APPLICATORS

- 71 Aerial (Airplane)
- 72 Attachment to  
Implement
- 73 Manure Spreader
- 74 Self-propelled
- 75 Truck Spreader  
  
Tractor Mounted
- 76 -Anhydrous
- 77 -Dry  
(Includes Lime & Gypsum)
- 78 -Liquid  
  
Trailer Mounted
- 79 -Anhydrous
- 80 -Dry  
(Includes Lime & Gypsum)
- 81 -Liquid

## CHEMICAL APPLICATORS

- 91 Aerial (Airplane)
- 92 Attachment to  
Implement
- 93 Largest Self-propelled  
(Or Large Truck)
- 94 Motorcycle/atv  
Sprayer
- 95 Small Self-propelled  
(Spray-coupe, Hi-cycle)
- 96 Small Truck  
(Skid Mounted)
- 97 Tractor Mounted
- 98 Trailer Mounted

## DRILLS and SEEDERS

- 101 Aerial Seeding
- 102 Broadcast Seeder  
  
Drill
- 103 -Air Delivery
- 104 -Lister Disk
- 105 -No-till,  
Minimum till
- 106 -Plain
- 107 -Press, Disk or Hoe

## PLANTERS

- 111 Bedder-shaper Planter
- 112 Lister-bedder
- 113 No-till, Minimum Till,  
(Ripper Planter)
- 114 Conventional,  
Regular (Tye, Flex)
- 115 Air Delivery/vacuum
- 116 Ridge till
- 271 Potato Planter



# MACHINERY and IMPLEMENT CODES

## HARVESTING EQUIPMENT

- Small Grains Combine
- 121 - (Self-propelled)
- Hillside
- 122 - Self-propelled, 2wd
- 123 - Self-propelled, 4wd
- 124 - Track
- 125 - PTO/motor Mounted
- Windrower-swather
- 126 - (Grain/hay)pto
- 127 - (Grain/hay)  
Self-propelled
- Row Crops Combine
- 128 - (Self-propelled)  
Hillside
- 129 - Self-propelled, 2wd  
Or 2wd with  
Rear Wheel Assist
- 130 - Self Propelled, 4wd
- 131 - Track
- 132 - PTO/motor Mounted
- 133 Corn Picker
- 134 Hand Harvesting

- PTO - Power Take-off
- WD - Wheel Drive

## TRUCKS

- 301 - Single Axle
- 302 - Tandem Axle
- 303 - Semi

## MOWERS and BALERS

- 141 Amish Harvester
- Bale Wagon
- 142 - Pto
- 143 - Self-propelled
- 144 Bale Loader
- Baler
- 145 - Motor Mounted
- 146 - PTO (Large)
- 147 - PTO (Small)
- 148 - Self-propelled
- 149 Mower-chopper-  
Rotary
- 150 - Conditioner/PTO
- 151 - Self-propelled
- 152 - Drum-disk
- 153 - Flail
- 154 - Sickle
- Rake
- 155 - Dump
- 156 - Side Delivery
- 157 - Wheel
- 158 Stack Mower
- 159 Stacker, Automatic
- 160 Front End Loader

## LAND FORMING EQUIPMENT

- 171 Backhoe
- 172 Disk Border Maker
- 173 Ditch Closer
- 174 Ditcher
- 175 Levee Plow Disk
- 176 Quarter Drain Machine
- 177 Rear Mounted Blade
- 178 Corrugator  
(Furrow Diker,  
Dammer Diker, Diker)
- 179 Float
- 180 Land Plane Leveler  
(Water Leveler)
- 181 Laser Planer,  
Laser Leveler

For implements codes 171-177, enter *Total Hours Operated* in the column labeled *Total Acres Covered*. *Total Acres Covered* is not meaningful for these implements.

## OTHER IMPLEMENTS

- 191 Burn Buggy
- 192 Chaff/straw Saver
- 193 Electric-discharge  
Weed Killer
- 194 Grain Wagon or Cart
- 208 Gravity Wagon
- 195 Hay Wagon
- 196 Off-field Thresher
- 197 Rock Picker
- 198 Rock Windrower or  
Rake
- 199 Rodent (Gopher) Killer
- 200 Roller Groover
- 201 Rubber-wheeled  
Weed Puller
- 202 Flail Shredder
- 203 Rotary Shredder
- 204 Silage Harvester
- 205 Stalk Shredder,  
Stalk Cutter
- 206 Swath Roller

## SECTION G, IRRIGATION TYPE CODES

PRESSURE SYSTEMS	GRAVITY SYSTEMS
1 HAND-MOVE	10 SIPHON TUBE from unlined ditches
2 SOLID OR PERMANENT SET	11 SIPHON TUBE from lined ditches
3 SIDE ROLL OR WHEEL LINE	12 PORTAL SYSTEM from unlined ditches
4 CENTER PIVOT OR LINEAR MOVE with sprinklers on main line	13 PORTAL SYSTEM from lined ditches
5 CENTER PIVOT OR LINEAR MOVE with sprinklers below main line, but more than 2 feet above ground	14 ANY POLY PIPE SYSTEM
6 CENTER PIVOT OR LINEAR MOVE with sprinklers less than 2 feet above ground	15 GATED PIPE (not poly pipe)
7 BIG GUN	16 IMPROVED GATED PIPE (surge flow or cablegation not poly pipe)
8 LOW FLOW IRRIGATION (drip, trickle or micro sprinkler)	17 SUBIRRIGATION
9 OTHER - SPECIFY	18 FLOOD
	19 OTHER - SPECIFY

# LANDLORD COST

## Seed Costs

- a. Purchased seed
- b. Seed cleaning and treating

## Fertilizer Costs [Exclude Lime and Gypsum]

- d. Fertilizer custom applications
- e. Fertilizer materials

## Chemicals/Pesticides Costs

- f. Chemicals/pesticides custom applications
- g. Chemicals/pesticides materials

## Technical Services

- h. Soil tests or plant tissue tests
- i. Scouting service
- j. Biological pest controls and their application
- k. Other custom technical services  
[Specify \_\_\_\_\_]

Section I, Item 1 . . .

## Custom Field Operations and Services

- l. Custom land preparation, shaping, and/or
- m. Custom cultivating
- n. Custom planting and/or reseeding
- o. Custom harvesting of the crop
- p. Custom hauling of the wheat grain or seed  
from  
the field to storage or point of first market
- q. Custom drying
- r. Custom raking
- s. Other custom services  
[Specify \_\_\_\_\_]

## Irrigation and Water Management Costs

- t. Fuel, lubrication and electricity for irrigation
- u. Repairs for irrigation equipment
- v. Purchased irrigation water

