

**AGRICULTURAL RESOURCE
MANAGEMENT SURVEY
DURUM WHEAT
PRODUCTION PRACTICES and
COSTS REPORT
for 2004**

RESPONDENT BOOKLET

REASONS FOR NON GM SEED VARIETY

Section B, item 14a

- 1 Increase yields through improved pest (weed) control?
- 2 Decrease herbicide costs?
- 3 Decrease machinery costs?
- 4 Improve ability to use or ease of using reduced tillage or no-till system?
- 5 Improve ability to use or ease of rotating crops?
- 6 Save management time or labor or improve ease of management?
- 7 Adopt more environmentally friendly practices?
- 8 For some other reason?

LIKELIHOOD OF PLANTING GM HERBICIDE RESISTANT SEED

Section B, item 15

- 1 Very likely to plant
- 2 Somewhat likely to plant
- 3 Uncertain
- 4 Somewhat unlikely to plant
- 5 Very unlikely to plant

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 (SECTION D ONLY)

Section C, Item 4

Common Fertilizers and Their Percent Analysis

[Enumerator Note: *If Respondent cannot report the formulation for Section C, item 4, enter the formulations below.*]

Name	FORM	Percent Active Ingredients			RANGE	RANGE
		N	P ₂ O ₅	K ₂ O		
Ammonia	D/L	80	—	—	15-16%N	
Ammonium metaphosphate	D	12	51	—		
Ammonium nitrate	D	32	—	—	32-34%N	
Ammonium phosphate	D	11	48	—		
Ammonium phosphate nitrate	D	27	14	—	14-15%P	
Ammonium phosphate sulfate (APS)	D	16	20	—	13-16%N	20-39%P
Ammonium polyphosphate (APP)	L	10	34	—	10-11%N	34-37%P
Ammonium polysulfide (Ammonium Sulfate)	L	20	—	—	20-21%N	
Ammonium sulfate nitrate	D	21	—	—	20-26%N	
Ammonium thiosulphate solution	L	12	—	—		
Anhydrous ammonia	G	82	—	—		
Aqua ammonia (Ammonium Hydroxide)	L	20	—	—	16-30%N	
Calcium ammonium nitrate	D	15	—	—	15-16%N	
Diammonium phosphate sulfur	D	16	40	—	15-16%N	39-41%P
Diammonium phosphate (DAP)	D	18	46	—	16-21%N	46-53%P
Monoammonium phosphate (MAP)	D	11	52	—	11-13%N	48-62%P
Natralene	D/L	40	—	—	15-16%N	
Nitrogen blends	D/L	50-70	—	—	47-81%N	
Nitrogen solutions	L	28	—	—	7-58%N	
NPKS Blends	D/L	3	9	18		
		5	10	15		
		5	10	30		
		5	15	30		
		9	23	30		
Phosphate potash blends		—	18	36		
		—	26	26		
Phosphoric acid	L	—	54	—	2-75%P	
Potassium chloride (Muriate of potash)	D	—	—	60	60-62%K	
Potassium magnesium sulfate	D	—	—	22		
Potassium metaphosphate	D	—	55	37	55-57%P	37-38%K
Potassium nitrate	D	13	—	44		
Potassium orthophosphate	D	—	45	40	30-60%P	30-50%K
Potassium polyphosphate	L	—	50	35	40-60%P	22-48%K
Potassium sodium nitrate	D	15	—	14	14-15%K	
Potassium solutions	L	—	—	14	13-15%K	
Potassium sulfate	D	—	—	50	50-53%K	
Sodium nitrate (Nitrate of Soda)	D	16	—	—	15-16%N	
Phosphate (22% & under)	D	—	19	—	16-22%P	
Super phosphate (over 22% & under 40%)	D	—	30	—	23-39%P	
Triple super phosphate	D	—	46	—	40-54%P	
Urea	D	46	—	—	45-46%N	
Urea ammonium nitrate (UAN)	L	32	—	—	28-32%N	
Triple super phosphate	D	—	46	—	40-54%P	
Urea	D	46	—	—	45-46%N	

CHEMICALS and PESTICIDES for WHEAT, All

F = Fungicide; H = Herbicide; I = Insecticide; M = Misc. Other; MD = Defoliant/Desiccant; MG = Growth Regulator
AS; Aqueous Suspension, D; Dust, DF; Dry flowable, DG; Water-Dispersible Granules, E or EC; Emulsifiable Concentrate, ES; Emulsifiable
solution, F or L; Flowable, G or GR; Granular, L; Liquid, LV; Low volatility, M or ME; Microencapsalted, P; Pellets, S: Solution, SL; Slurry, SP;
Soluble powder, W or WP; Wettable powder, WDG or WG; Water-Dispersible Granules, WSP; Water-soluble packet

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4758	2,4-D Amine	L	F	7254	Folicur
L	H	4351	2,4-D/Agasco 400 (EC)	L	I	1374	Fury 1.5 EC
L	H	4377	2,4-D/Amine 4	D	H	4125	Glean FC (75DF)
L	H	4664	2,4-D/Amine 6	L	H	4882	Gly Star Plus
L	H	4444	2,4-D/Class 40A	L	H	4580	Glyphos X-TRA
L	H	4443	2,4-D/Class LV4	D	H	4139	Harmony Extra (DF)
L	H	4204	2,4-D/Esteron 99 Concentrate	D	H	4137	Harmony GT
L	H	4221	2,4-D/Hi-Dep	L	H	4065	Hoelon 3EC
L	H	4480	2,4-D/LV 6	L	H	4229	Landmaster BW
L	H	4265	2,4-D/Salvo	L	I	1069	Lorsban 4E
L	H	4453	2,4-D/See 2,4-D (Ester)	L	H	4818	LV 4 2,4-D Ester
L	H	4004	2,4-D/Weedar 64A	L	H	4826	LV 400 2,4-D Weed Killer
L	H	4299	2,4-D/Weedone LV6	D	H	4791	Maverick
L	H	4298	2,4-D/Weedone LV4	L	H	4293	MCP 4 Ester
D	H	4657	Achieve 40DG	L	H	4292	MCP Amine 4
D	H	4859	Ally Extra	L	H	4878	MCPA Amine
D	H	4123	Ally XP (60DF)	L	I	1363	Mustang
D	H	4390	Amber	L	H	4138	Oracle Dicamba Agricultural Herbicide
L	H	4133	Assert (2.5EC)				
L	H	4327	Banvel SGF (2EC)	D	H	4569	Peak
L	H	4136	Banvel (4L)	L	H	4581	Puma 1EC
L	H	4617	Banvel + 2,4-D	D	H	4750	Rave
L	H	4808	Barrage	L	H	4262	Rhonox (EC)
L	H	4655	Bromox/MCPA 2 - 2	L	H	4700	Roundup Custom
L	H	4864	Bronate	L	H	4093	Roundup Original
L	H	4856	Bronate Advanced	L	H	4315	Roundup Original RT
L	H	4153	Bronate (4EC)	L	H	4561	Roundup Ultra
D	H	4155	Buckle (G)	L	H	4763	Roundup Ultra Max
L	H	4024	Buctril (2EC)	L	H	4857	RT Master
L	H	4465	Cheyenne FM (container #2)	L	H	4865	Salvo
L	H	4469	Clarity 4L	D	H	4096	Sencor DF (75%)
L	H	4875	Clear-Out 41 Plus / Gly Star Plus	L	H	4628	Starane EC
L	H	4365	Curtail M (EC)	L	H	4863	Starane + Sword
L	H	4180	Curtail (EC)	L	H	4819	Starane+Salvo
L	I	1029	Dimethoate 4EC	L	H	4486	Sword
L	H	4820	Discover	L	F	7076	Tilt
D	H	4855	Everest	L	H	4281	Tordon 22K (2EC)
D	H	4205	Express (DF)	D	H	4111	Treflan TR-10
L	H	4210	Fallow Master	L	I	1553	Warrior T
D	H	4211	Far-Go Granular (10%)	L	I	1435	Warrior (1EC)
D	H	4214	Finesse (DF)	L	H	4003	Weedar 64
				D	H	4471	X-TRA (Cheyenne container #1)

Conversion Codes for Liquid & Dry Products

Liquid Products

1 Gallon = 4 Quarts
1 Quart = 2 Pints
1 Pint = 16 Fluid Ounces

Dry Products

1 Pound = 16 Dry Ounces
1 Ounce = 28.3 Grams
1 Pound = 453 Grams

PEST MANAGEMENT INFORMATION SOURCES

Section E, item 33

- 1 County, Cooperative, or University Extension Advisor, Publications or Demonstrations
- 2 Farm Supply or Chemical Dealer
- 3 Commercial Scouting Service
- 4 Independent Crop Consultant or Pest Control Advisor/Custom Applicator
- 5 Other Growers or Producers
- 6 Producer Associations, Newsletters or Trade Magazines
- 7 Electronic Information Services (*DTN, Internet, World Wide Web, etc.*)
- 8 Employee Pest Advisor
- 9 Other - (Specify _____)
- 10 None - Operator used no **outside** information source

Section F, item 3

MACHINERY and IMPLEMENT CODES**PLOWS and DISKS**

- 01 Chisel Plow (Big Ox)
- 02 Coulter Plow
(Coulter Chisel, Soil Saver, Soil Conservor)
- 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

PACKERS

- 51 Culti-packer
(Pulverizer, Crow-foot, Serrated, Ring, Spiral)

Roller-packer

- 52 -Attachment
- 53 -Smooth & Flat

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)
- 67 Root Crown Puller

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
- 28 Fallow Master

BEDDERS-SHAPERS

- 41 Bedder (Shaper)
Bedshaper, Crowder)
- 42 Bed Shaper

Disk

- 43 -Hipper
- 44 -Row
- 45 Float
- 46 Lister (Middle-buster)
- 47 Rotovator-bedder
- 48 Seedbed Roller
(Flat Roller)
- 49 Sub-soil Bedder
(Ripper-hipper)
- 50 Discovator

FERTILIZER APPLICATORS

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

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

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

CHEMICAL APPLICATORS

- 91 Aerial (Airplane)
- 92 Attachment to Implement
- 93 Largest Self-propelled
(Or Large Truck)
- 94 Motorcycle/atv Sprayer
- 95 Small Self-propelled
(Spra-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

HARVESTING EQUIPMENT

Small Grains/Row Crops Combine

- 121 -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
- 133 Corn Picker
- 134 Hand Harvesting

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

LAND FORMING EQUIPMENT

- 171 Backhoe
- 172 Disk Border Maker
- 173 Ditch Closer
- 174 Ditched
- 175 Levee Plow Disk
- 176 Quarter Drain Machine
- 177 Rear Mounted Blade
- 178 Corrugator
(Furrow Dicer,
Dammar Dicer, Dicer)
- 180 Land Plane Leveler
(Water Leveler)
- 181 Laser Planer, Laser Leveler
- 182 Gate Setter
- 183 Bull Dozer

For implements codes 171-183,
enter *Total Hours Operated* in the
column labeled *Total Acres
Covered*. *Total Acres Covered* is
not meaningful for these
implements.

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

OTHER IMPLEMENTS

- 191 Burn Buggy
- 192 Chaff/straw Saver
- 193 Electric-discharge Weed Killer
- 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
- 207 Tractor or Truck - No
Attachments
- 223 Flame Thrower

HAULING EQUIPMENT**Trailers**

- 194 General Purpose Wagon or
Cart
- 195 Hay Wagon
- 208 Gravity Wagon
- 209 Grain Cart with Auger
- 221 Forage Wagon
- 222 Dump Wagon
- 220 Other Trailers

Trucks

- 301 -Single Axle
- 302 -Tandem Axle
- 303 -Tri-Axle
- 304 -Semi
- 305 Other Trucks

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	OPEN DISCHARGE FROM WELL OR PUMP
		19	OTHER - SPECIFY

RUN-OFF CODES

Section G, item 9

1	Retained at the end of the field?
2	Re-used to irrigate on the farm?
3	Collected in evaporation ponds on the farm?
4	Drained from the farm?
5	There is no runoff.