

**AGRICULTURAL RESOURCE
MANAGEMENT SURVEY
SOYBEAN
PRODUCTION PRACTICES and
COSTS REPORT
for 2006

RESPONDENT BOOKLET**

Section B, item 14

SEED TYPE CODE LIST

- 1 Genetically-Modified **herbicide resistant** seed variety (e.g. Roundup Ready)
- 2 Non-genetically-modified **herbicide resistant** seed variety (e.g. STS-soybeans)
- 3 Organic soybean variety (Clear Hilum food-grade)
- 4 Organic soybean variety (Vinton food-grade)
- 5 Organic soybean variety (other food-grade varieties)
- 6 Organic soybean variety (non-food grade varieties)
- 7 None of the above

Section B, item 15

REASONS FOR RESISTANT SEED VARIETY

- 1 Increase yields through improved pest (weed or insect) control?
- 2 Decrease pesticide input 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? [Specify:]

Section B, item 35a

FEDERAL CROP INSURANCE COVERAGE

- 1 **Basic Catastrophic Insurance** (Federal CAT) bought for a flat fee and protects against crop loss greater than 50% of average yield, at 55% of the price.
- 2 **Buy-up Above Basic Federal CAT** for higher levels of yield and price protection (such as 65% of yield and 100% Price, multi peril crop insurance).
- 3 **Revenue Insurance** include Income Protection (IP), Crop Revenue Coverage (CRC), and Revenue Assurance (RA).
- 4 **Organic Plan Insurance** includes:
 - 1) certified organic acreage,
 - 2) transitional acreage being converted to certified organic, and
 - 3) buffer zone acreage.
- 5 **Other Federal Crop Insurance** (Group Risk Plan, Adjusted Gross Revenue, Group Risk Income Protection, etc.).

Section C, Column 6 & Section D, Column 9

FERTILIZER/PESTICIDE APPLICATION METHODS

- 1 Broadcast, Ground without incorporation
- 2 Broadcast, Ground with incorporation
- 3 Broadcast, by aircraft
- 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, use the formulations below.]

Name	Form	Percent Active Ingredients			
		N	P ₂ O ₅	K ₂ O	S
Ammonia	D/L	80	---	---	---
Ammoniated superphosphate	D	12-17	22-35	---	---
Ammonium metaphosphate	D	12	51	---	---
Ammonium nitrate	D	32-34	---	---	---
Ammonium phosphate	D	11-18	46-48	---	---
Ammonium phosphate nitrate	D	27-30	10-15	---	---
Ammonium phosphate sulfate (APS)	D	13-16	20	---	15
Ammonium polyphosphate (APP)	L	10-11	34-37	---	---
Ammonium polysulfide (Ammonium Sulfate)	L	20-21	---	---	24
Ammonium sulfate nitrate	D	20-30	---	---	5
Ammonium thiosulfate solution	L	12	---	---	26
Anhydrous ammonia	L/G	82	---	---	---
Aqua ammonia (Ammonium Hydroxide)	L	16-25	---	---	---
Bone meal	D	0-2	10-20	---	---
Calcium ammonium nitrate	D	15-16	---	---	---
Diammonium phosphate sulfur	D	15-16	39-41	---	---
Diammonium phosphate (DAP)	D	16-21	46-53	---	---
Elemental sulfur	D	---	---	---	52-100
Greensand	D	---	1	6	---
Magnesium sulfate	D	---	---	---	13
Mixed fertilizer	D	2	6	12	---
		3	9	18	---
		3	10	30	---
		5	10	15	---
		5	10	30	---
		5	15	30	---
		8	24	24	---
		9	18	9	---
		10	34	---	---
Monoammonium phosphate (MAP)	D	11-13	48-62	---	---
Natralene	D/L	40	---	---	---
Nitrogen solutions	L	7-58	---	---	---
Nitric phosphate	D	12-17	22-35	---	---
Phosphate rock	D	---	2-35	---	---
Phosphoric acid	L	---	2-76	---	---
Potassium carbonate	D	---	---	34-48	---
Potassium chloride (Muriate of potash)	D	---	---	60-62	---
Potassium magnesium sulfate	D	---	---	22	23
Potassium metaphosphate	D	---	55-57	37-38	---
Potassium nitrate	D	13	---	44	---
Potassium orthophosphate	D	---	30-60	30-50	---
Potassium polyphosphate	L	---	40-60	22-48	---
Potassium sodium nitrate	D	15	---	14-15	---
Potassium solutions	L	---	---	13-15	---
Potassium sulfate	D	---	---	50-53	16
Sodium nitrate (Nitrate of Soda)	D	15-16	---	---	---
Sulfuric acid	L	---	---	---	20-26
Super phosphate (22% & under)	D	---	16-22	---	11
Super phosphate (over 22%)	D	---	23-39	---	11
Triple super phosphate	D	---	40-54	---	11
Urea	D	45-46	---	---	---
Urea, sulfure coated	D	36-38	---	---	13-16
Urea ammonium phosphate	D	25-58	28-35	---	---
Urea ammonium nitrate (UAN)	L	28-32	---	---	---
Urea phosphate	D	17	44	---	---

CHEMICALS and PESTICIDES for Soybeans, All

F = Fungicide; **H** = Herbicide; **I** = Insecticide; **M** = Misc. Other; **MD** = Defoliant/Dessicant; **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** = Microencapsulated,
P = Pellets, **S** = Solution, **SC** = Soluble Concentrate, **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	H	4146	Blazer 2L
L	H	4377	2,4-D Amine 4	L	H	4795	Boundary
L	H	4759	2,4-D Amine 4CA	L	H	4357	Boundary 3.6EC
L	H	4664	2,4-D Amine 6	L	F	7579	Bravo 720
L	H	4271	2,4-D Lo-V Ester	L	F	7008	Bravo Weather Stik
L	H	4562	2,4-D LV4	L	H	4884	Buccaneer
L	H	4283	2,4-D L.V. 4 Ester	L	F	7534	Bumper 41.8 EC
L	H	4480	2,4-D LV 6	L	H	4160	Butyrac 200
				L	H	4159	Butyrac 175
L	H	4879	Aim EC				
L	H	4880	Aim EW	D	H	4161	Canopy
D	I	1975	Ambush 25WP	D	H	4399	Canopy EX
D	F	7520	Amistar	D	H	4684	Canopy SP
L	I	1133	Ammo 2.5EC	D	H	4610	Canopy XL
D	H	4876	Amplify	L	H	4469	Clarity 4L
D	H	4681	Authority 75DF	D	H	4167	Classic 25DF
L	H	4954	Arrow 2EC	L	H	4875	ClearOut 41 Plus
L	I	1004	Asana XL	L	H	4169	Cobra
L	H	4371	Assure II	L	H	4578	Command 3 ME
L	H	4041	Atrazine 4L	L	H	4872	Cornerstone
D	H	4603	Authority	L	H	4176	Cotoran 4L
D	H	4651	Axiom DF	L	H	4894	Credit
L	H	4786	Backdraft				
L	H	4808	Barrage	L	H	4185	Depend
L	H	4531	Barrage HF	L	I	1775	Denim
L	H	4019	Basagran	L	I	1028	Dimethoate 2.67EC
L	I	1246	Baythroid 2	L	I	1267	Dimethoate 400
L	H	4470	Bicep II	L	I	1029	Dimethoate 4 EC

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
D	I	1145	Dimilin 25W	L	H	4999	Glyphomax XRT
L	I	1715	Dimilin 2L	L	H	4890	Glyphosate 4
D	H	4807	Domain	L	H	4838	Glyphosate Original
L	F	7592	Domark 230 ME	L	H	4314	Gramoxone Extra
L	H	4659	Dual Magnum	L	H	4402	Gramoxone Inteon
D	H	4753	Dual IIG Magnum				
L	H	4660	Dual II Magnum	D	H	4139	Harmony Extra XP
L	H	4661	Dual II Magnum SI	D	H	4137	Harmony GT XP
				L	F	7522	Headline
L	F	7226	Echo 720	L	F	7603	Headline SBR
D	F	7332	Echo 90DF	L	H	4222	Honcho
L	F	7329	Echo Zn				
L	H	4203	Esteron 6E	L	I	1863	Intrepid
D	H	4205	Express	L	H	4969	Intro
L	H	4756	Extreme				
				L	I	1252	Karate
D	H	4643	FirstRate	L	I	1707	Karate Z
L	F	7254	Folicur 3.6 F				
L	H	4532	Flexstar	L	I	1064	Lannate LV
L	H	4448	Frontier 6.0	L	I	1065	Lannate SP
D	H	4644	Frontrow (Tank mix USE-4645 & 4643)	L	F	7483	Laredo EC
L	H	4442	Fusion	L	F	7190	Laredo EW
L	H	4492	Fusilade DX	L	I	1066	Larvin 3.2
				D	I	1384	Larvin DF
D	H	4962	Gangster (Co-Pack USE-4915 & 4964)	L	H	4069	Lasso 4 EC
D	H	4915	Gangster FR (aka FirstRate)	D	I	1671	Lepinox WDG
D	H	4964	Gangster V (aka Valor)	L	H	4640	Liberty
D	H	4839	Gauntlet	L	H	4074	Linex 4L
L	H	4990	Gly-4 Plus	D	H	4077	Lorox 50 DF
L	H	4882	Gly Star Plus	L	I	1069	Lorsban 4E
L	H	4580	Glyfos X-TRA	L	H	4522	Low Vol 4 Ester Weed Killer
L	H	4840	Glyphomax				
L	H	4405	Glyphomax Plus				
L	H	4404	Gramoxone Max				

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	F	7396	Mertect 340-F	L	F	7291	Quadris
L	I	1086	Methyl Parathion 6EC	L	F	7085	Quadris Opti
L	H	4491	Mirage	L	F	7575	Quilt
L	I	1363	Mustang				
L	I	1895	Mustang Max	L	H	4604	Raptor
				L	H	4256	Reflex
L	F	7199	Orius 3.6 F	L	H	4527	Resource
D	F	7200	Orius 45DF	L	H	4500	Rezult
D	F	7201	Orius 45 WP	L	H	4398	Rezult B
D	I	1509	Orthene 90WSP	L	H	4784	Rezult G
D	I	1258	Orthene 90S	L	F	7286	Ridomil Gold EC
L	H	4862	Outlook	D	F	7307	Ridomil Gold GR
				D	F	7323	Ridomil Gold WSP
				L	H	4700	Roundup Custom
L	H	4813	Pendimax 3.3	L	H	4376	Roundup D-Pak
L	I	1164	Pennacap-M	L	H	4564	Roundup Export
L	I	1902	Permethrin 3.2 AG	L	H	4093	Roundup Original
L	H	4329	Pledge	L	H	4939	Roundup Original Max
L	H	4081	Poast	L	H	4315	Roundup Original II
L	H	4703	Poast 3.5	L	H	4707	Roundup Pro
L	H	4334	Poast Plus	L	H	4561	Roundup Ultra
D	I	1106	Pounce 25WP	D	H	4762	Roundup Ultra Dry
L	I	1107	Pounce 3.2 EC	L	H	4763	Roundup Ultra Max
L	I	1972	Proaxis	L	H	4881	Roundup Weather Max
L	I	1057	Prolex				
L	F	7528	PropiMax EC				
L	H	4086	Prowl				
L	H	4360	Prowl 3.3 EC				
L	H	4254	Pursuit				
D	H	4505	Pursuit DG				
L	H	4255	Pursuit Plus EC				
D	H	4646	Python WDG				

D/L	Class	Code	Product Name
L	H	4265	Salvo
L	H	4266	Scepter
D	H	4318	Scepter 70DG
L	I	1170	Scout X-Tra
L	H	4447	Select 2 EC
L	H	4095	Sencor 4L
D	H	4096	Sencor 75DF
L	H	4960	Sequence
L	I	1132	Sevin 4F
D	I	1018	Sevin 80S
L	I	1019	Sevin XLR Plus
L	H	4100	Sonalan (3EC)
L	H	4269	Squadron
L	I	1806	Steward
L	H	4272	Storm
L	F	7513	Stratego
D	H	4501	Synchrony STS
L	H	4403	Targa
L	MS	9011	Telone II
D	I	1124	Temik 15G
L	F	7202	Thiophanate Methyl 4.5F AG
L	F	7076	Tilt
D	F	7151	Topsin 85 WDG
D	F	7040	Topsin M 70WP
L	H	4848	Touchdown
L	H	4662	Touchdown 5
L	H	4362	Touchdown 6
L	I	1526	Tracer
L	H	4983	Treflan 4L
L	H	4109	Treflan 5
D	H	4508	Treflan 5G
L	H	4108	Treflan E.C.

D/L	Class	Code	Product Name
L	H	4629	Treflan HFP
D	H	4111	Treflan TR-10
L	H	4286	Tri-4
L	H	4450	Trifluralin 4
L	H	4112	Trilin
D	H	4285	Trilin 10G
L	F	7321	Trilogy
L	H	4815	Trust 4EC
L	H	4843	Ultra Blazer
D	H	4871	Valor
L	I	1553	Warrior
L	H	4296	Weedone 638
L	H	4298	Weedone LV-4 Solventless
L	H	4299	Weedone LV6

Conversion Factors for Liquid and Dry Products

Liquid Products

1 Gallon = 4 Quarts

1 Quart = 2 Pints

1 Pint = 16 Fluid Ounces

2 Cups = 1 Pint

Dry Products

1 Pound = 16 Dry Ounces

1 Ounce = 28.3 Grams

1 Pound = 453 Grams

PEST MANAGEMENT INFORMATION SOURCES

Section E, item 24.

- | | |
|----|--|
| 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 (<i>DTN, Internet, World Wide Web, etc.</i>) |
| 8 | Employee Pest Advisor |
| 9 | Other – (Specify: _____) |
| 10 | None – Operator used no outside information source |

Section F, item 1

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

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
- 68 Stalk Puller/Chopper

BEDDERS-SHAPERS

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

Disk

- 43 Hipper
- 44 Row
- 45 Float
- 46 Lister (Middle-buster)
- 47 Rorovator-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**
- 76 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

PACKERS

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

Roller-packer

- 52 Attachment
- 53 Smooth & Flat

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

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

CHEMICAL APPLICATIONS

- 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 or 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 Ditcher
- 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

ENUMERATOR NOTE:

*For Land Forming Equipment codes
171 – 183, enter Total Hours Operated
in column 9.*

MOWERS and BALERS

- 141 Amish Harvester

Baler

- 145 Motor Mounted
- 146 PTO (Large)
- 147 PTO (Small)
- 148 Self-propelled
- 159 Stacker, Automatic

Mowers

- 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
- 162 Hay Tedder

HAULING EQUIPMENT

Bale wagon/mover

- 142 Bale wagon (PTO)
- 143 Bale Wagon (Self-propelled)
- 144 Bale Loader
- 158 Stack Mover
- 160 Front End Loader
- 161 Round Bale Mover
- 195 Hay wagon

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

ENUMERATOR NOTE:

*For Hauling Equipment codes above,
enter Total Hours Operated in
column 9.*

OTHER IMPLEMENTS

- 191 Burn Buggy
- 192 Chaff/straw Saver
- 193 Electric-discharge Weed Killer
- 196 Off-field Thresher
- 197 Rock Picker
- 198 Rock Windower 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

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 12.

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