

# **AGRICULTURAL RESOURCE MANAGEMENT SURVEY**

## **CORN PRODUCTION PRACTICES AND COSTS REPORT for 2010**

### **RESPONDENT BOOKLET**

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0535-0218. The time required to complete this information collection is estimated to average 65 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

**Section B, Items 14a & 14b**  
**SEED TYPE – CORN**

1	Genetically-modified <b>herbicide resistant</b> seed variety (e.g. <i>LIBERTYLINK</i> ; <i>ROUNDUP READY CORN</i> )	7	<b>Stacked</b> gene variety with both genetically-modified <b>Bt-ECB and herbicide resistant</b> (e.g. <i>YIELDGARD + ROUNDUP READY</i> , <i>YIELDGARD CORN BORER WITH ROUNDUP READY CORN 2</i> , <i>HERCULEX I + LIBERTYLINK</i> ),
2	Non-genetically-modified <b>herbicide resistant</b> seed variety (e.g. <i>IMI-CORN</i> )	8	<b>Stacked</b> gene variety with both genetically-modified <b>Bt-CRW and herbicide resistant</b> (e.g. <i>YIELDGARD ROOTWORM WITH ROUNDUP READY CORN 2</i> , <i>HERCULEX CW + ROUNDUP READY CORN</i> )
3	Genetically-modified <b>Bt</b> variety for insect resistance to control the European Corn Borer ( <b>Bt-ECB</b> ) (e.g. <i>YIELDGARD</i> , <i>YIELDGARD CORN BORER</i> , <i>HERCULEX I</i> , <i>NATUREGARD</i> , <i>KNOCKOUT</i> )	9	<b>Triple stacked</b> gene variety with genetically-modified Bt-ECB and Bt-CRW plus herbicide resistant traits (e.g. <i>YIELDGARD PLUS WITH ROUNDUP READY CORN 2</i> , <i>HERCULEX XTRA + LIBERTYLINK</i> )
4	Genetically-modified <b>Bt</b> variety for insect resistance to control the corn rootworm ( <b>Bt-CRW</b> ) (e.g. <i>YIELDGARD ROOTWORM</i> , <i>HERCULEX RW</i> )	10	New <b>stacked</b> gene varieties that, in addition to the ECB and the rootworm, can control the corn earworm (e.g. <i>YIELDGARD VT TRIPLE WITH ROUNDUP READY 2</i> , <i>GENUITY VT TRIPLE PRO</i> )
5	<b>Stacked</b> gene (trait) variety with both genetically-modified <b>Bt-ECB and Bt-CRW</b> (e.g. <i>YIELDGARD PLUS</i> , <i>HERCULEX XTRA</i> )	11	New multiple (more than three) trait <b>stacked</b> variety with several Bt traits and two herbicide resistant traits—glyphosate (Roundup) and glufosinate (Liberty) (e.g. <i>GENUITY SMARTSTAX</i> )
6	<b>Stacked</b> gene variety with <b>two</b> genetically-modified herbicide resistant traits (e.g. <i>LIBERTYLINK + ROUNDUP READY</i> )	12	None of the above

**Section B, Item 15**  
**REASONS FOR NOT PLANTING BT CORN**

- 1 Did not expect to have enough corn borers and/or corn rootworms to justify the cost of Bt corn
- 2 Concerned about finding a market for Bt corn
- 3 This field was used as refuge in 2010
- 4 Concerned about the environmental impact of Bt corn
- 5 Not aware of Bt Seed
- 6 Other [Specify: \_\_\_\_\_ ]

**Section B, Item 16**  
**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(s) [Specify: \_\_\_\_\_ ]

**Section B, Item 34a**  
**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, Item 4, Column 2**  
**NITROGEN CODES**

- 1 Anhydrous ammonia
- 2 Nitrogen solution (UAN)
- 3 Urea
- 4 Ammonium nitrate
- 5 Sodium nitrate
- 6 Ammonia sulfate
- 7 Potassium nitrate, magnesium nitrate, and calcium nitrate
- 8 Other nitrogen fertilizer material  
[specify: \_\_\_\_\_ ]

**Section C, Item 4, Column 6**  
**and Section D, Item 1, Column 9**  
**APPLICATION CODES**

- 1 Broadcast, ground without
- 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 in or over row
- 8 Foliar or directed spray
- 9 Spot treatments (**Section D only**)

**Section C, Item 4, Column 2**

**Common Fertilizers and Their Percent Analysis**

[Enumerator Note: If Respondent cannot report the formulation for Section C, Item 4, Column 2, use the formulations below.]

Name	Form	Percent Primary Nutrients			
		N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> 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
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, sulfur 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	---	---

**Section D, Item 1, Column 2  
CHEMICALS and PESTICIDES for Corn, All**

**Class Definitions:** F = Fungicide; H = Herbicide; I = Insecticide; M = Misc. Other; MD = Defoliant/Dessicant; MG = Growth Regulator

**Common Material Form Terms, and Corresponding D/L Classification:**

**Dry:** D = Dust, DF = Dry flowable, DG = Water-Dispersible Granules, G or GR = Granular, M or ME = Microencapsulated, P = Pellets, SP = Soluble powder, W or WP = Wetttable powder, WDG or WG = Water-Dispersible Granules, WSP = Water-soluble packet

**Liquid:** AS = Aqueous Suspension, E or EC = Emulsifiable Concentrate, ES = Emulsifiable solution, F or L = Flowable, L = Liquid, LV = Low volatility, S = Solution, SC = Soluble Concentrate, SL = Slurry

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4758	2,4-D Amine	L	H	4823	Balance Pro
L	H	4351	2,4-D/Agasco 400 EC	D	H	4652	Balance WDG
L	H	4377	2,4-D/Amine 4	L	H	4617	Banvel + 2,4-D
L	H	4664	2,4-D/Amine 6	L	H	4136	Banvel 4L
L	H	4203	2,4-D/Esterone 6E	L	H	4327	Banvel SGF 2 EC
L	H	4291	2,4-D/Formula 40	L	H	4676	Banvel-K + Atrazine
L	H	4480	2,4-D/LV 6	L	H	4808	Barrage
L	H	4562	2,4-D/Riverside LV4	L	H	4019	Basagran
L	H	4265	2,4-D/Salvo	D	H	4611	Basis Gold WDG
L	H	4296	2,4-D/Weedone 638	D	H	4521	Basis WDG
L	H	4298	2,4-D/Weedone LV4	L	I	1246	Baythroid 2 (EC)
L	H	4299	2,4-D/Weedone LV6	L	H	4637	Bicep II Magnum
				L	H	4638	Bicep Lite II Magnum
				L	H	4963	Brash
D	H	4008	AAtrex Nine-O WP	L	H	4884	Buccaneer Herbicide
D	H	4339	Accent 75 DG	L	H	4026	Buctril + Atrazine (1+2 EC)
D	H	4648	Accent Gold	L	H	4024	Buctril 2 EC
D	H	4683	Aim	L	H	4025	Buctril 4 EC
L	H	4879	Aim EC	L	H	4027	Bullet 4 EC
L	H	4880	Aim EW/Avalanch				
L	I	1004	Asana XL .66 EC				
L	H	4041	Atrazine 4 L	L	H	4847	Callisto 4L
L	H	4042	Atrazine 5L	L	H	4896	Camix
D	H	4044	Atrazine 90 DF	L	I	1140	Capture 2 EC
D	I	4651	Axiom DF	D	H	4690	Celebrity
D	I	1468	Aztec 2.1 %Granular	D	H	4799	Celebrity Plus
D	H	1971	Aztec 467 %Granular	L	H	4887	Cinch ATZ

**Class Definitions:** F = Fungicide; H = Herbicide; I = Insecticide; M = Misc. Other; MD = Defoliant/Dessicant; MG = Growth Regulator

**Common Material Form Terms, and Corresponding D/L Classification:**

**Dry:** D = Dust, DF = Dry flowable, DG = Water-Dispersible Granules, G or GR = Granular, M or ME = Microencapsulated, P = Pellets, SP = Soluble powder, W or WP = Wettable powder, WDG or WG = Water-Dispersible Granules, WSP = Water-soluble packet

**Liquid:** AS = Aqueous Suspension, E or EC = Emulsifiable Concentrate, ES = Emulsifiable solution, F or L = Flowable, L = Liquid, LV = Low volatility, S = Solution, SC = Soluble Concentrate, SL = Slurry

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4469	Clarity 4 L	L	I	1720	Empower
L	H	4875	ClearOut 41 Plus	D	I	1927	Empower 2
L	I	1401	Comite II	D	H	4749	Epic
L	H	4173	Confidence 4EC	D	H	4973	Equipcorn Herbicide
D	H	4850	Connect 20 WSP	L	H	4994	Esteron 99
L	H	4872	Cornerstone	L	H	4900	ET
D	I	1009	Counter 15 G				
D	I	1241	Counter 20 CR				
L	H	4894	Credit	L	I	1997	Fanfare 2EC
L	H	4982	Credit Duo Extra	L	H	4642	Field Master
				D	I	1440	Force 3 G
				D	I	1678	Fortress 2.5 G
L	H	4001	Dacamine 4D	D	I	1397	Fortress 5 G
D	H	4849	Define	L	H	4597	Fultime Herbicide
D	H	4992	DEFINE DF	D	I	1053	Furadan 15 G
L	H	4803	Degree Xtra	L	I	1054	Furadan 4 F
L	I	1041	Diazinon 4 E				
D	I	1050	Diazinon 50 W				
L	I	1028	Dimethoate 2.67 EC	L	H	4958	Gly Star Original
L	I	1029	Dimethoate 4 EC	L	H	4882	Gly Star Plus
D	H	4040	Direx 80 DF	L	H	4990	Gly-4 Plus
D	H	4677	Distinct	L	H	4580	Glyphos X-TRA
L	H	4660	Dual II Magnum	L	H	4999	Glyphomax XRT
L	H	4661	Dual II Magnum SI	L	H	4840	Glyphomax/Glyphomax Plus
D	H	4753	Dual IIG Magnum	L	H	4838	Glyphosate Original
L	H	4629	Dual Magnum	L	H	4886	G-Max LHE
L	H	4198	Durango	L	H	4314	Gramoxone Extra 2.5 L
				L	H	4654	Gramoxone Max/Cyclone Con
				L	H	4064	Gramoxone Super 1.5 L
				L	H	4494	Guardzman Herbicide
				L	H	4852	Guardzman Max

**Class Definitions:** F = Fungicide; H = Herbicide; I = Insecticide; M = Misc. Other; MD = Defoliant/Dessicant; MG = Growth Regulator

**Common Material Form Terms, and Corresponding D/L Classification:**

**Dry:** D = Dust, DF = Dry flowable, DG = Water-Dispersible Granules, G or GR = Granular, M or ME = Microencapsulated, P = Pellets, SP = Soluble powder, W or WP = Wettable powder, WDG or WG = Water-Dispersible Granules, WSP = Water-soluble packet

**Liquid:** AS = Aqueous Suspension, E or EC = Emulsifiable Concentrate, ES = Emulsifiable solution, F or L = Flowable, L = Liquid, LV = Low volatility, S = Solution, SC = Soluble Concentrate, SL = Slurry

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
D	H	4139	Harmony Extra DF	L	H	4885	Lumax
L	H	4602	Harness	L	H	4826	LV 400 2,4-D Weed Killer
D	H	4650	Harness 20 G				
L	H	4529	Harness Xtra				
L	H	4649	Harness Xtra 5.6 L	L	H	4906	Mad Dog Glyphosate
L	H	4955	Helosate Plus	L	H	4235	Marksman
L	H	4222	Honcho	L	H	4865	Medal II
D	H	4517	Hornet	L	H	4231	Micro-Tech
D	H	4861	Hornet WDG	L	H	4491	Mirage 4 EC
				L	I	1363	Mustang
				L	I	1895	Mustang Max
L	H	4961	Intensity				
				D	H	4692	NorthStar
L	H	4888	Keystone	D	I	1546	Nufos 15 G
L	H	4889	Keystone LA				
				D	H	4860	Option
L	H	4230	Lariat 4 F	L	H	4138	Oracle Dicamba Agricultural Herbicide
L	H	4069	Lasso 4 EC	L	H	4940	Outlaw (aka Bushwhacker)
L	H	4665	LeadOff	L	H	4862	Outlook
L	H	4989	Lexar				
L	H	4640	Liberty				
L	H	4678	Liberty ATZ	D	H	4910	Paramount Herbicide
D	H	4607	Lightning DG	L	H	4813	Pendimax 3.3
L	H	4074	Linex 4 L	L	I	1902	Permethrin 3.2 AG
D	I	1068	Lorsban 15 G	D	H	4525	Permit 75 DF
L	I	1069	Lorsban 4 E	L	I	1884	Perm-Up
L	I	1434	Lorsban 4 E-HF	D	I	1105	Pounce 1.5 G
D	I	1070	Lorsban 50W	D	I	1106	Pounce 25 WP
L	H	4522	Low Vol 4 Ester Weed Killer	L	I	1107	Pounce 3.2 EC

**Class Definitions:** F = Fungicide; H = Herbicide; I = Insecticide; M = Misc. Other; MD = Defoliant/Dessicant; MG = Growth Regulator

**Common Material Form Terms, and Corresponding D/L Classification:**

**Dry:** D = Dust, DF = Dry flowable, DG = Water-Dispersible Granules, G or GR = Granular, M or ME = Microencapsulated, P = Pellets, SP = Soluble powder, W or WP = Wettable powder, WDG or WG = Water-Dispersible Granules, WSP = Water-soluble packet

**Liquid:** AS = Aqueous Suspension, E or EC = Emulsifiable Concentrate, ES = Emulsifiable solution, F or L = Flowable, L = Liquid, LV = Low volatility, S = Solution, SC = Soluble Concentrate, SL = Slurry

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4084	Princep 4 L	D	H	4641	Spirit
D	H	4249	Princep Caliber 90	L	H	4949	Stalwart C
L	I	1972	Proaxis	D	H	4845	Steadfast
L	H	4360	Prowl 3.3 EC	D	H	4924	Steadfast ATZ
D	H	4646	Python WDG	L	H	4802	Sterling
				L	H	4516	Surpass 100
				D	H	4577	Surpass 20 G
L	H	4814	Range Star	L	H	4515	Surpass EC
L	I	1552	Regent 4 SC				
D	I	1532	Regent 80 WG				
L	H	4527	Resource	D	I	1127	Thimet 20 G
L	H	4997	Rifle Plus	L	H	4530	TopNotch
L	H	4700	Roundup Custom	L	H	4848	Touchdown IQ
L	H	4093	Roundup Original	L	H	4129	Touchdown Total
L	H	4939	Roundup Original Max	L	H	4815	Trust 4EC
L	H	4315	Roundup Original RT				
L	H	4707	Roundup Pro (T & O)				
L	H	4561	Roundup Ultra	D	H	4871	Valor
L	H	4881	Roundup Weather Max	L	H	4893	Volley ATZ Lite
L	H	4857	RT Master				
				L	I	1553	Warrior T
L	H	4263	Saddle	L	I	1435	Warrior with Zeon
L	H	4846	Salvan (Cornbelt)	L	H	4204	Weed Killer 4D
L	H	4845	Salvo	L	H	4003	Weedar 64
L	H	4554	Shotgun Flowable Herbicide				
L	H	4048	Simazine 4 L				
D	H	4049	Simazine 80 W	D	H	4858	Yukon Herbicide
D	H	4342	Simazine 90 DF				



**Conversion Factors for Liquid and Dry Products**

<b>Liquid Products</b>	<b>Dry Products</b>
1 Gallon = 4 Quarts	1 Pound = 16 Dry Ounces
1 Quart = 2 Pints	1 Ounce = 28.3 Grams
1 Pint = 16 Fluid Ounces	1 Pound = 453 Grams
2 Cups = 1 Pint	

**Section E, Item 28**

**PEST MANAGEMENT INFORMATION SOURCES**

- 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, Columns 3 & 4  
**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

**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  
(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 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 10.*

**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
- 234 Brush Rake Sweeper

**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
- 224 Forklift

**Trailers**

- 194 General Purpose Wagon or Cart
- 195 Hay Wagon
- 208 Gravity Wagon
- 209 Grain Cart with Auger
- 221 Forage Wagon
- 222 Dump Wagon
- 229 Bin Trailer
- 228 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 10.*

**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, Item 2**  
**IRRIGATION TYPE CODES**

<b>PRESSURE SYSTEMS</b>	<b>GRAVITY SYSTEMS</b>
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

**Section G, Item 10**  
**RUN-OFF CODES**

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 run-off