

AGRICULTURAL RESOURCE MANAGEMENT SURVEY

**SORGHUM PRODUCTION PRACTICES
AND COSTS REPORT**

for 2011

RESPONDENT BOOKLET

FEDERAL CROP INSURANCE COVERAGE

Section B, Item 23a

- 1 **Federal CAT** (*Basic Catastrophic Insurance*) 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.*).

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 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

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 Primary Nutrients			
		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
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	---	---

Section D, Item 1
CHEMICALS and PESTICIDES for Sorghum

Class Definitions:

F = Fungicide; **H** = Herbicide; **I** = Insecticide; **M** = Misc. Other; **MD** = Defoliant/Dessicant; **MG** = Growth Regulator;
MS = Soil Fumigant

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** = Microencapsalted,
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	4758	2,4-D Amine	L	I	1686	BMP 123 (48 LC)
L	H	4377	2,4-D Amine 4 (3.80 lbs/g)	L	H	4963	Brash
L	H	4664	2,4-D Amine 6	L	H	4884	Buccaneer
L	H	4271	2,4-D Lo-V Ester	L	H	4024	Buctril (2EC)
L	H	4562	2,4-D LV4 (3.80 lbs/g)	L	H	4026	Buctril + Atrazine (1+2EC)
L	H	4480	2,4-D LV6 (5.60 lbs/g)	L	H	4027	Bullet
L	H	4006	AAtrex 4L	L	I	1140	Capture 2EC
D	H	4008	AAtrex Nine-O (WP)	L	I	1011	Carbaryl 4L
D	H	4683	Aim (40% WDG)	L	H	3078	Charger Max
L	H	4879	Aim EC	L	H	3154	Charger Max ATZ
L	H	4880	Aim EW	L	I	1482	Chlorpyrifos 4E AG
L	H	4443	Alachlor 4 EC	L	H	4917	Cinch
D	H	4123	Ally XP (60DF)	L	H	4887	Cinch ATZ
L	I	1004	Asana XL	L	H	4953	Cinch ATZ Lite
L	H	4041	Atrazine 4L	L	I	1810	Citrus Soluble Oil
L	H	4042	Atrazine 5L	L	H	4469	Clarity
D	H	4043	Atrazine 80 (WP)	L	H	4444	Class 40A
D	H	4044	Atrazine 90DF	L	H	4921	Cleanout
				L	I	2274	Cobalt
L	H	4136	Banvel (4L)	D	I	1009	Counter 15G
L	H	4617	Banvel + 2,4-D	D	I	1241	Counter 20CR
L	H	4327	Banvel SGF (2EC)	L	H	4654	Cyclone Concentrate
L	H	4531	Barrage HF				
L	I	1246	Baythroid 2 (EC)	L	H	4976	Degree
L	I	2051	Baythroid XL	L	H	4803	Degree Xtra
L	H	4637	Bicep II Magnum	L	I	1029	Dimethoate 4EC
L	H	4638	Bicep Lite II Magnum	L	H	4660	Dual II Magnum

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D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4661	Dual II Magnum SI	L	H	4229	Landmaster BW
L	H	4659	Dual Magnum	L	H	4326	Landmaster II
				L	H	4230	Lariat (4F)
L	H	4203	Esteron 6E	L	H	4069	Lasso
L	H	4913	Expert	D	H	4070	Lasso II (15G)
				L	H	4665	LeadOff
L	H	4210	Fallow Master	L	H	4989	Lexar
L	H	4291	Formula 40	D	I	1068	Lorsban 15G
L	H	4448	Frontier 6.0	L	I	1069	Lorsban 4E
L	I	1374	Fury 1.5 EC	L	H	4885	Lumax
L	I	1555	Gemstar LC	L	H	4235	Marksman
L	H	4882	Gly Star Plus	L	H	4865	Medal II
L	H	4580	Glyfos X-TRA	L	H	4231	Micro-Tech
L	H	4914	Glymix MT	L	H	4491	Mirage (4EC)
L	H	4840	Glyphomax	L	I	1895	Mustang Max
L	H	4838	Glyphosate Original				
L	H	4886	G-Max Lite	L	H	4138	Oracle Dicamba
L	H	4494	Guardsman	L	H	4862	Outlook
L	H	4852	Guardsman Max				
				D	H	4910	Paramount Herbicide
L	H	4221	Hi-Dep (a.k.a. Orchard Master)	D	H	4352	Partner WDG
				D	H	4569	Peak (WDG)
L	I	1780	Insecticidal Soap 49.52CF	D	H	4525	Permit
				L	I	1972	Proaxis
L	I	1252	Karate (1EC)	L	H	3212	Propel ATZ
L	I	1707	Karate Z	L	H	4942	Prowl H2O

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D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
D	H	4088	Ramrod 20 (G)	L	H	3086	Starane Ultra
L	H	4089	Ramrod Flowable (4L)	L	H	4802	Sterling
L	H	4814	Range Star	L	H	3232	Sterling Blue
L	H	4328	Rattler				
L	H	4700	Roundup Custom	L	H	4281	Tordon 22K (2EC)
L	H	4376	Roundup D-Pak	L	H	4662	Touchdown 5
L	H	4093	Roundup Original	L	H	4848	Touchdown Herbicide
L	H	4315	Roundup Original II	L	H	4108	Treflan E.C.
L	H	4939	Roundup Original Max	L	H	4450	Trifluralin 4EC
L	H	4407	Roundup Power Max				
L	H	4789	Roundup Pro	L	I	2180	Warrior II with Zeon
L	H	3164	Roundup Pro Max	L	I	1435	Warrior with Zeon
L	H	4561	Roundup Ultra	L	H	4204	Weed Killer 4D
L	H	4763	Roundup Ultra Max	L	H	4307	Weed Rhap A-4D
L	H	4881	Roundup Weather Max	L	H	4306	Weed Rhap LV-4D
L	H	4857	RT Master	L	H	4003	Weedar 64
				L	H	4295	Weedmaster
L	H	4675	Saber	L	H	4296	Weedone 638
L	H	4265	Salvo	L	H	4298	Weedone LV4 Solventless
D	H	4391	Savage	L	H	4299	Weedone LV6
L	H	3214	Sharpen				
L	H	4628	Starane EC	D	H	4858	Yukon
L	H	3089	Starane NXT				

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 (*DTN, Internet, World Wide Web, etc.*)
- 8 Employee Pest Advisor
- 9 Other – [Specify: _____]
- 10 None – Operator used no **outside** information source

MACHINERY and IMPLEMENT CODES

Section F, Item 3, Columns 3 & 4

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 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

IRRIGATION TYPE CODES

Section G, Item 2

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

