

Agricultural Resource Management Study
Sorghum Production Practices Report for 1998

SORGHUM RESPONDENT BOOKLET

REASONS FOR SEED VARIETY

Section B, item 17 . . .

- 1 Increase yields through improved pest control (*weeds, insects or diseases*)?
- 2 Decrease pesticide input costs?
- 3 Increase planting flexibility?
(*For example, easier to rotate crops, reduce carryover use reduced tillage or no-till systems, etc.*)
- 4 Adopt more environmentally-friendly practices?
- 5 For some other reason(s)?

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 ₂ O ₅	K ₂ 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 SORGHUM

D/L	Class	Code	Product Name	D/L	Class	Code	Product Name
L	H	4443	2,4-D/Class LV4				
L	H	4001	2,4-D/Dacamine 4D	D	I	1047	Diazinon 14G
L	H	4204	2,4-D/Esteron 99 Concentrate	L	I	1041	Diazinon 4E
				D	I	1050	Diazinon 50W
L	H	4291	2,4-D/Formula 40	L	I	1046	Diazinon AG500 (4E)
L	H	4265	2,4-D/Salvo				
L	H	4307	2,4-D/Weed-Rhap A-4D	L	I	1028	Dimethoate 2.67EC
L	H	4306	2,4-D/Weed-Rhap LV-4D	L	I	1029	Dimethoate 4EC
L	H	4003	2,4-D/Weedar 64	D	I	1023	Dipel 2X (WP)
L	H	4004	2,4-D/Weedar 64A	L	I	1024	Dipel 4L
L	H	4294	2,4-D/Weedar Emulsamine E-3	L	H	4039	Direx 4L
L	H	4296	2,4-D/Weedone 638	D	H	4040	Direx 80W
L	H	4298	2,4-D/Weedone LV4				
L	H	4299	2,4-D/Weedone LV6	L	F	7015	Dithane F-45 (4EC)
L	H	4006	AAtrex 4L	L	H	4051	Dual (8E)
D	H	4008	AAtrex Nine-O (WP)	L	H	4466	Dual II
L	H	4041	Atrazine 4L				
D	H	4044	Atrazine 90DF	L	I	1039	Dyfonate 4EC
L	H	4136	Banvel (4L)	L	I	1148	Ethyl Parathion 8E
L	H	4138	Banvel II (2L)	L	I	1201	Ethyl-Methyl Parathion 6-3E
L	H	4327	Banvel SGF (2EC)				
L	H	4019	Basagran (4L)	L	H	4210	Fallow Master
L	H	4470	Bicep II	L	H	4448	Frontier 6.0
L	H	4637	Bicep II Magnum				
L	H	4468	Bicep Lite II	L	I	1054	Furadan 4F
L	H	4638	Bicep Lite II Magnum	L	H	4314	Gramoxone Extra (2.5L)
L	H	4154	Bronco (4EC)	L	H	4064	Gramoxone Super (1.5L)
L	H	4024	Buctril (2EC)				
L	H	4026	Buctril + Atrazine (1+2EC)	L	H	4494	Guardsman Herbicide
L	H	4027	Bullet (4EC)	D	H	4066	Karmex DF
L	I	1011	Carbaryl 4L	L	H	4524	Laddok S-12
D	I	1012	Carbaryl 50W				
D	I	1014	Carbaryl 80S (WP)	L	H	4229	Landmaster BW
				L	H	4326	Landmaster II
L	H	4469	Clarity 4L				
L	I	1008	Comite (6.55EC)	D	I	1065	Lannate (90WSP)
D	I	1009	Counter (15G)	L	I	1063	Lannate L (1.8 lbs.)
				L	I	1064	Lannate LV (2.4 lbs.)
L	H	4330	Cycle (4L)				
L	I	1027	Cygon 400 (4EC)	L	H	4230	Lariat (4F)
L	I	1141	Cythion 57% EC				
				L	H	4069	Lasso (4EC)
D	I	1043	D-z-n Diazinon 14G	D	H	4070	Lasso II (15G)
D	I	1044	D-z-n Diazinon 50W	L	H	4231	Lasso Micro-Tech (4E)
L	I	1045	D-z-n Diazinon AG500 (4E)				
				D	H	4077	Lorox DF (50%)
D	I	1033	Di-Syston 15% G	L	H	4076	Lorox L (4lbs.)
L	I	1034	Di-Syston 8 (EC)				

D/L	Class	Code	Product Name
D	I	1068	Lorsban 15G
L	I	1069	Lorsban 4E
L	I	1236	Malathion 5EC (57%)
L	I	1157	Malathion ULV 9.33 Lb (95%)
D	F	7025	Manzate 200 DF (75%)
L	H	4235	Marksman
L	I	1072	Metasystox-R (2EC)
L	H	4635	Moxy 2E
L	H	4636	Moxy + Atrazine
L	I	1115	Parathion 8E
D	H	4352	Partner WDG
D	H	4569	Peak
D	H	4525	Permit 75DF
L	I	1104	Phosdrin 4EC
L	H	4329	Pledge (4SL)
L	H	4086	Prowl (4EC)
D	H	4088	Ramrod 20 (G)
L	H	4089	Ramrod Flowable (4L)
L	H	4091	Ramrod/Atrazine (4L)
D	H	4331	Ramrod/Atrazine DF
L	H	4328	Rattler
L	H	4093	Roundup (4L)
L	H	4561	Roundup Ultra
L	I	1132	Sevin 4F
D	I	1015	Sevin 5% Bait
D	I	1172	Sevin 50W
D	I	1018	Sevin 80S
L	I	1019	Sevin XLR Plus (4E)
L	H	4554	Shotgun Flowable Herbicide
L	I	1123	Supracide 2E
D	I	1127	Thimet 20-G
D	F	7038	Thiolux (80DF)
L	H	4629	Treflan HFP
L	H	4110	Treflan M.T.F. (4EC)
D	H	4111	Treflan TR-10
L	I	1176	Trithion 8E

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

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

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

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)

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

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

