



Planting Guide for Row Crops in Georgia

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This planting guide will help producers establish grasses and legumes commonly grown in Georgia. Information given for particular species should not be taken as a recommendation to grow that species. Not all of the plant species grown in Georgia are recommended by the University of Georgia. Current production guides may be found at www.caes.uga.edu/commodities/fieldcrops/index.html.

Start with high quality seed. Certified seed is available for most recommended crops. Test your soil to determine nutrient needs. Contact your local county Extension office for information on soil sampling. Fertilize and lime according to soil test results. Plant seed at the proper depth in a good seed bed when soil temperatures and moisture are best for that species. Use the correct seed per acre as indicated. Manage for high yields by maintaining soil fertility and controlling weeds, insects and diseases. Harvest at the appropriate time with properly adjusted equipment. Protect seed quality through proper handling and storage.

Crop	Lbs. Seed/ Bu.	Approx. Seeds/ Oz.	Seeding Rate	Planting Date ¹	Days to Maturity ²	Cert. Seed Quality			Remarks
						Min. Germ %	Min. Purity %	Max. Weed Seed	
WARM SEASON									
Corn, field	56	80-140	*See table	LV-Apr. 1 - May10 P-Mar. 15 - Apr. 20 C-Mar. 1 - Apr. 15	100-125	90	99	None	Use higher plant populations for irrigated fields. See the current UGA production guide.
Cotton	46	225-350	For 36"* row width: 3-4 seed/row ft. (dryland) 4-6 seed/row ft. (irrigated)	S-Apr. 1 - May 25	140-160	80	98	.02%	Irrigated fields should be planted after May 1 for best production.
Grain Sorghum	56	750-1250	**See table	LV-May 15 - July 1 P-May 1 -July 1 C -Apr.15 - Jul. 15	100-120	80	98	.10%	Plant when soil temperature is above 65°F. Increase seeding rate for irrigated fields.
Peanuts --Virginia --Runner --Spanish	20-30	25-30 45-50 55-60	For 36" rows: 3-4 seed/row ft. 4-6 seed/row ft. 4-6 seed/row ft.	C-Apr. 15 - May 20	120-150	75	95	None	Always use certified seed.
Soybeans	60	135-250	Row Width 36" 30" 12" 6" Seed/ft. ³ 10-12 9-11 5-6 3-4	LV-May 10 - June 15 P-Apr. 1 - June 30 C-May 1 - July 15	Group V: 145 VII: 160	80	98	10/lb.	Use certified seed for best results. Consult the current UGA production guide.
Sunflowers --Confectionery --Oil	24 32	300-500 600-900	Row Width 36" 30" 24" Seed/ft. ⁴ 11-12 9-10 8-9	LV-Apr. 1 - June 15 P-Apr. 1 - May 1 C-Mar.15 - Jul. 15	90-110	85	97	.1%	Very little market in Ga. Often susceptible to Alternaria leaf blight.
Tobacco --Beds --Field		325,000	.2 oz/100 sq yds 7000 plants/A	S-Dec. 20 - Jan. 10	Varies	80	98	None	Evenly distribute seed in beds and keep moist during germ the first four weeks.

COOL SEASON (Grain only)		Approximate harvest dates							
Barley	48	800-900	75-100 lbs/A	LV-Oct. 10 - Nov. 1 P-Oct. 25 - Nov. 15 C-Nov. 7 - Dec. 1	Mid May to early June	85	98	10/lb	Very sensitive to acid soils. Control loose smut with proper seed treatment. Use certified seed.
Lupine: -White	55	65-100	100 lbs/A	LV-Sept. 15 P-Oct. 15 C-Nov. 1	Late May to mid June	80	98	.3%	Usually used for hay, grazing or green manure. Use an inoculant.
-Blue	60	180-200	80-90 lbs/A						
Oats	32	1000-1425	60-75 lbs/A	LV-Sept. 25 -Oct. 15 P-Oct. 7 - Nov. 1 C-Nov. 7 - Dec. 1	Late May to late June	85	98	10/lb.	Control loose smut with proper seed treatment. Use certified seed.
Winter Rape or Canola	50	6500-8500	4-7 lbs/A	LV-Oct. 1-15 P-Oct. 1 - Nov. 1 C-Oct. 15 - Nov. 15	May-late June	85	99	15/lb.	Harvest as early as possible to reduce shattering. Watch for aphid infestation and apply control methods to avoid damage.
Rye	56	1,135	60-90 lbs/A	LV-Oct. 1 - Oct. 20 P-Oct. 7 - Nov. 15 C-Nov. 7 - Dec. 1	Late May to late June	80	98	10/lb.	Use certified seed.
Triticale	48	700-950	80-90 lbs/A	C-Nov. 7 - Dec. 15	Mid May to early June	85	98	10/lb.	Varieties differ in feeding efficiency. Contact county agent for info.
Wheat	60	625 to 935	60-90 lbs/A 120-150 lbs/A ⁵ . For best results, plant 22-25 seeds per row ft in 7.5 inch drill widths.	LV-Oct. 10 - Nov. 1 P-Oct. 25 - Nov. 15 UC-Nov.7 - Dec. 1 LC-Nov.15 - Dec. 1	Late May to mid June	85	98	10/lb.	See the current production guide for more information. Use deep tillage for best yields. Do not plant seed more than 1 1/2-2" deep. Use certified seed.

¹ LV-Limestone Valley, P-Piedmont, C-Coastal Plain, UC-Upper Coastal Plain, LC-Lower Coastal Plain, S-Statewide
² Due to the growth habit of cool season crops, approximate harvest dates are given rather than days to maturity
³ Assumes 80% emergence
⁴ Assumes 90% emergence
⁵ For intensive management

This chart is to be used as a guide and does not replace the need to obtain additional information for good management practices. Consult current performance bulletins for variety yield data. Always use certified seed to ensure good germination, trueness to variety and freedom from noxious weeds.

Helpful Tables and Formulas

Corn Planting Rates According to Row Widths					
Final Pop Plants/A	Row spacing (in.)				Seeds/A planted
	30	36	38	40	
	— inches between seed —				
16000	11.0	9.2	8.7	8.3	18800
18000	9.9	8.2	7.8	7.4	21200
20000	8.9	7.4	6.9	6.6	23500
22000	8.1	6.7	6.3	6.0	25900
24000	7.5	6.1	5.8	5.5	28200
26000	6.8	5.6	5.4	5.1	30600
28000	6.4	5.3	5.0	4.8	33000
30000	6.0	4.9	4.6	4.4	35300

* Corn planting rates assuming 85% emergence

Grain Sorghum Planting Rates According To Row Widths							
Final Pop Plants/A	Row spacing (in.)						Seed/A planted
	7	10	20	24	40	36	
	— inches between seed —						
34000	22.4	15.7	7.8	6.5	5.2	4.4	40000
42500	17.9	12.5	6.3	5.2	4.2	3.5	50000
51000	14.9	10.5	5.2	4.4	3.5	2.9	60000
59500	12.8	9.0	4.5	3.7	3.0	2.5	70000
68000	11.2	7.8	3.9	3.3	2.6	2.2	80000
76500	10.0	7.0	3.5	2.9	2.3	1.9	90000
85000	9.0	6.3	3.1	2.6	2.1	1.8	100000
106350	7.2	5.0	2.5	2.1	1.7	1.4	125000

** Grain sorghum planting rate assuming 85% emergence

The following three formulas can help you determine seeding rates:

$$\begin{aligned} \text{seed per row foot} &= \text{number seed desired per acre} \times \text{row width (ft)} \div 43560 \\ \text{seed per acre} &= (43560 \div \text{row width (ft)}) \times \text{seed per row foot} \\ \text{pounds of seed needed} &= (\text{seed per acre} \div \text{seeds per pound}) \times \text{acres to be planted} \end{aligned}$$

Estimating Plant Populations

This table can be used for all crops in determining plant population or seed drop per acre. Simply follow these easy steps.

1. Determine average row width, in inches (left column).
2. Either determine average spacing between seeds (or plants) in inches (top line) OR determine average number of seeds (or plants)/50 ft. row length (bottom line).
3. Read seed drop or plants per acre from table below (intersection of line and column).
4. Add 000, as all counts are in thousands.

Population Per Acre											
Row Width (Inches)	Spacing Between Seeds or Plants (inches)										
	1	2	3	4	5	6	7	9	11	12	15
	(in thousands)										
7	896	448	299	224	179	150	128	100	81	69	60
10	627	314	209	157	125	105	90	70	57	48	42
15	418	209	139	105	84	70	60	46	38	32	28
20	314	157	105	79	63	53	45	35	29	24	21
28	224	112	75	56	45	38	32	25	20	17	15
30	209	105	70	53	42	35	30	23	19	16	14
36	174	87	58	44	35	29	25	19	16	14	12
38	165	83	55	42	33	28	24	18	15	13	11
40	157	78	52	39	31	26	22	17	14	12	10
Average Number of Plants or Seeds per 50 ft.											
	600	300	200	150	120	100	86	67	55	46	40

Count the number of plants in a length of row equal to 1/1000 of an acre. Make several counts in several areas of the field and figure the average of these samples. Multiply the average number by 1000.

Row width	7"	15"	24"	30"	32"	36"	38"	40"
Row length equal to 1/1000 AC	74'8"	34'10"	21'10"	17'5"	16'4"	14'6"	13'9"	13'1"

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Circular 813

Reviewed November 2014

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