Texas Agricultural Extension Service
The Texas A&M University System

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Field Estimation of Cotton Yields

- ✓ Determine the number of bolls in 10 feet of row. ***Do not count bolls that are less than a quarter size in diameter.***
- ✓ Divide this number by 10 to determine the average number of bolls per foot.
- ✓ Multiply the average number of bolls per foot by the number of linear feet in an acre based upon row spacing. This determines the average number of bolls per acre.
- ✓ Multiply the number of bolls per acre by 0.0033. This determines the number of lint pounds per acre. *(0.0033 is the average lint weight in pounds of an average boll)*
- ✓ Divide the number of lint pounds per acre by 500. This determines the number of bales per acre.
- ✓ Repeat this procedure at several locations and average the results.

For example, a grower counts an average of 100 bolls in 10 feet of row (40" spacing). What is the estimated lint yield/A?

100/10 = 10 bolls/foot

10 X 13,081 = 130,810 bolls/A

130,810 X 0.0033 = 431.7lbs lint/A

431.7/500 = 0.86 bales/A

Row Spacing (inches)	Linear Feet/A
40	13,081
38	13,741
36	14,520
32	16,315
30	17,424

Because boll size will vary according to variety and growing conditions, this formula should only be used as a rough estimate. As with any sampling procedure, the more samples that are taken, the more reliable the estimate.

By using this method, the following table can be developed which provides cotton yield estimates based upon row spacing and boll numbers per linear row foot:

Row Spacing (inches)	Avg. No. of Bolls/linear ft. of Row					
	0.5	1.0	1.5	2.0	2.5	3.0
	bales					
40	5.8	11.6	17.4	23.2	29.0	34.8
38	5.5	11.0	16.5	22.0	27.5	33.0
36	5.2	10.4	15.6	20.8	26.0	31.2
32	4.7	9.3	14.0	18.6	23.3	27.9
30	4.4	8.7	13.1	17.4	21.8	26.1

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