cotton-dry

number of acres
1000

planting
variable cost

	% of revenue agreement	labor cost as % of revenue	grand total labor costs based on % revenue	labor cost per hour w/picking
employee	0.00%	$ -	$ -	$ 14.00
employee	0.00%	$ -		$ 14.00
employee	0.00%	$ -		$ 14.00
				$ 14.00

yield price

number of acres	crop selling price per lb.	crop selling price per bale	number of bales per acre
1000	$ 0.6500	$ **305.50**	**1.60**
	0.5686		

hold all cost and selling cost constant, vary increase due to pollination yield and quality and number of colonies per acre

increase yield and quality

number of acres

1000

cotton-irrigated

planting variable cost

% of revenue agreement	labor cost as % of revenue	grand total labor costs based on % revenue	labor cost per hour w/picking

employee	0.00%	$ -	$ -	$ 14.00
employee	0.00%	$ -		$ 14.00
employee	0.00%	$ -		$ 14.00
				$ 14.00

yield price

number of acres	crop selling price per lb.	crop selling price per bale	number of bales per acre
1000	$ 0.5686	$ 267.24	2.98

0.5686

7% cost increase

input into cells with this color	does not include fixed overhead expenses - machinery, land, tax, etc.

# labor hours w/picking	total labor cost w/picking	total labor cost w/o picking
694	$ 9,716.00	$ 14.00
694	$ 9,716.00	$ 14.00
0	$ -	$ 14.00
0	$ -	$ 14.00

base crop lbs. yield per acre	increase in crop yield due to pollination per acre	increase in crop price due to higher quality crops per acre due to pollination
750	11%	0
685	7	

total reveune	total gross variable profit

input into cells with this color	does not include fixed overhead expenses - machinery, land, tax, etc.

# labor hours w/picking	total labor cost w/picking	total labor cost w/o picking

694	$ 9,716.00	$ 14.00
694	$ 9,716.00	$ 14.00
0	$ -	$ 14.00
0	$ -	$ 14.00

base crop lbs. yield per acre	increase in crop yield due to pollination per acre	increase in crop price due to higher quality crops per acre due to pollination
1400	3%	0

	picking cost	$0.1/lb

# labor hours w/o picking	total labor cost w/o picking	grand total labor costs w picking
$ 278	$ 3,886.40	**$ 19,432.00**
$ 278	$ 3,886.40	
$ -	$ -	grand total labor costs w/o picking
$ -	$ -	**$ 7,772.80**
	difference	$ 11,659.20

total yield per acre lbs	total revenue
832.5	**$ 541,125.00**

	picking cost	$0.1/lb
# labor hours w/o picking	total labor cost w/o picking	grand total labor costs w picking

$ 278	$ 3,886.40	**$ 19,432.00**
$ 278	$ 3,886.40	
$ -	$ -	grand total labor costs w/o picking
$ -	$ -	**$ 7,772.80**
	difference	$ 11,659.20

total yield per acre lbs	total revenue
1442	**$ 819,921.20**

fuel/labor	drop off $1.65/ac fuel ie reduce acre by 1000 ac	labor $8400/1000ac

	cost of picking per acre	ginning price per acre	cost of fertilizer per acre
with picking farmer picks	$ 75.00	$ 75.00	$ 142.45
		75	142.45

	cost of picking per acre		
w/o picking someone else picks	$ 100.00	$ 75.00	$ 142.45
		$ -	$ -

total gross variable profit= Total revenue - Total cost with farmer picking	gross variable profit margin with picking	pollination colony cost impact on gross variable profit margin with picking
$ 89,468.00	16.5%	4.1%

total gross variable profit= Total revenue - Total cost w/o farmer picking - contract out	gross variable profit margin w/o picking	pollination colony cost impact on gross variable profit margin w/o picking
$ 2,777.20	0.5%	4.1%

fuel/labor	drop off $1.65/ac fuel ie reduce acre by 1000 ac	labor $8400/1000ac	
	cost of picking per acre	ginning price per acre	cost of fertilizer per acre

with picking farmer picks	$ 75.00	$ 75.00	$ 142.45
		75	142.45

cost of picking per acre

w/o picking someone else picks	$ 90.00	$ 75.00	$ 142.45
		$ -	$ -

total gross variable profit= Total revenue - Total cost with picking	gross variable profit margin with picking	pollination colony cost impact on gross variable profit margin with picking
$ 368,264.20	44.9%	2.7%

total gross variable profit= Total revenue - Total cost w/o picking	gross variable profit margin w/o picking	pollination colony cost impact on gross variable profit margin w/o picking
$ 291,573.40	35.6%	2.7%

cost of chemicals per acre	cost of seed per acre		number of acres	total fertilizer , chemical, and seed cost
$ 105.00	$ 82.00		1000	**$ 404,450.00**
105	82			
$ 105.00	$ 82.00		1000	**$ 504,450.00**
$ -	$ -	difference		$ (100,000.00)

$ yield increase due to bees - cost of hives with picking	direct cost as % of revenue with picking
$ 31,625.00	**83%**

$ yield increase due to bees - cost of hives w/o picking	direct cost as % of revenue w/o picking
$ 31,625.00	**99%**

cost of chemicals per acre	cost of seed per acre	number of acres	total fertilizer , chemical, and seed cost

$ 105.00	$ 82.00		1000	**$ 404,450.00**
105	82			

$ 105.00	$ 82.00		1000	**$ 494,450.00**
$ -	$ -	difference		$ (90,000.00)

$ yield increase due to bees - cost of hives with picking	direct cost as % of revenue with picking
$ 1,881.20	**55%**

$ yield increase due to bees - cost of hives w/o picking	direct cost as % of revenue w/o picking
$ 1,881.20	**64%**

number of colonies

gas number of gallons	cost of gas per gallon	total gas cost	number of farmers renting bees
3500	$ 1.65	**$5,775.00**	1
2500	$ 1.65	**$4,125.00**	1
	difference	$ 1,650.00	

number of colonies

gas number of gallons	cost of gas per gallon	total gas cost		number of farmers renting bees

3500	$ 1.65	**$5,775.00**	1
2500	$ 1.65	**$4,125.00**	1
	difference	$ 1,650.00	

cost of colonies	number of colonies per acre	total number of colonies	total colony cost	total colony cost per farmer
$ 55.00	$ 0.40	**400.00**	**$22,000.00**	**$22,000.00**

0.4

$ 55.00	$ 0.40	**400.00**	**$22,000.00**	**$22,000.00**
			difference	$ - difference

difference	$	(86,690.80)
difference/acre	$	(86.69)

cost of colonie	number of colonies per acre	total number of colonies	total colony cost	total colony cost per farmer

$ 55.00	$ 0.40	400.00	$22,000.00	$22,000.00

0.4

$ 55.00	$ 0.40	400.00	$22,000.00	$22,000.00
			difference	$ - difference

difference	$ -
difference/acre	$ -

total costs hourly	total colony cost as % of total cost	
$451,657.00	**5%**	with farmer picking
$538,347.80	**4%**	w/o picking-contract out picking

$ (86,690.80)

total costs : % revenue	total colony cost as % of total cost	
$432,225.00	**5%**	with farmer picking
$530,575.00	**4%**	w/o picking-contract out picking

total costs hourly	total colony cost as % of total cost	total costs : % revenue	total colony cost as % of total cost

$451,657.00	**5%**	with farmer picking	**$432,225.00**	**5%**	with farmer picking
$528,347.80	**4%**	w/o picking-contract out picking	**$520,575.00**	**4%**	w/o picking-contract out picking

$ (76,690.80)