

Production A: Plug Plasticulture									
Establishment & Maintenance Itemized Costs									
	Date	Description of Work Accomplished/product	Hours Worked	Cost	Unit	Total cost/bed (5.5' x 500')	Total cost/acre (15 beds/acre)		
Pre plant lime	4/14	Lime spread over field at a rate of 1 ton/ acre		5.58		5.58	83.7		
Pre plant fertilizer	9/3	Spread 100 lbs. (2 bags) 4-3-10 per bed		16	/bag	32	480		
Plastic	x	1 mil 4' black plastic laid with a Nolts Mulch Layer		14.84		14.84	222.6		
Drip Tape	x	2 rows 8 mil 6" .67 gal drip 2 or 3" below surface		17.24		17.24	258.6		
Drip header and valves	x	2" blue strip and yellow P6 valve		4.13		4.13	61.95		
Field prep	9/3	Field prep, spread fertilizer, forming of bed, laying of plastic, irrigation hook up	0.5	35	/hr	17.5	262.5		
Plant Cost	x	1000 plants		0.367	/plant	367	5505		
Planting Hours	9/6	3 people, .5 hr/ bed planting with water wheel planter	1.5	12	/hr	18	270		
Hoing pass	10/2	Hoing plastic edges	0.5	12	/hr	6	90		
Mechanical cultivation	10/2	BCS cultivation	0.25	12	/hr	3	45		
Straw cost	x	Reflects the purchase price and handling, 10 bales/ 500' bed		6	bale	60	900		
Mulching cost	12/10	WIC mulcher, hay wagon, 40 HP PTO tractor with two people.	0.5	50	.	25	375		
Drip irrigation hours		13 irrigations over course of season	0.5	12	/ hr	20	300		
Drip fertilization cost		20 irrigations over course of season at 1 gal fish/ acre	20	0.5	/ gallon fish	10	150		
Deer Fencing	4/2	5 hours total	0.2	25		5	75		
Straw Removal	4/13	.5 hour/bed	0.5	12		6	90		
Dead leaf cleanup	4/24	.5 hour/ bed	0.5	12		6	90		
Frost Protection	May	6 hours irrigation set up,8 hours frost protection, \$10.00 in fuel/irrigation	0.5	12		6	90		
Tarnish Plant Bug Spray	6/10	3 hours set up and spray with 150 of product.	0.3	50		15	225		
Picking Time		Estimate of 30 lbs. picked/hour. 476 lbs. picked	15.86666666	12		190.4	2856		
Mowing and Plastic Lifting	7/19	20.00/bed to remove from the field.		20		20	300		
Plastic Disposal		cost 4.00/bed to throw out.		4		4	60		
Totals			41.61666666			852.69	12790.35		
Total Revenue at \$3.75/lb.							0		
Cost Summary	500'Bed								
Non labor inputs (tractor v	147.79								
Plant Cost	367								
Labor inputs (planting, ma	137.5								
Harvest Labor	190.4								
Total	842.69								
Income Summary									
Pounds Harvested	476								
Revenue at 3.75/lb.	1785								
Total Profit	942.31								

Production B: Bare Root Matted Row							
Establishment & Maintenance							
	Date	Description of Work Accomplished/product	Hours Worked	Cost	Unit	Total cost/bed (5.5' x 500')	Total cost/acre (15 beds/acre)
Pre plant fertilizer	5/18	Spread 100 lbs. (2 bags) 4-3-10 per bed		16	/bag	32	480
Pre plant lime	4/14	Lime spread over field at a rate of 1 ton/ acre		5.58	/bed	5.58	83.7
Plastic	x	1 mil 4' black plastic laid with a Nolts Mulch Layer			/bed	0	0
Drip Tape	x	2 rows 8 mil 6" .67 gal drip 2 or 3" below surface		17.24	/bed	17.24	258.6
Drip header and valves	x	2" blue strip and yellow P6 valve		4.13	/bed	4.13	61.95
Field prep	5/18	Field prep, spread fertilizer, forming of bed, laying of plastic, irrigation hook up	0.5	35	/hr	17.5	262.5
Plant Cost	x	500 plants		0.14	/plant	70	1050
Planting Hours	5/19	2 people, 2 hours each planting by hand with nourse planting tools	3.25	12	/hr	39	585
Hoeing pass	6/14	Hoeing between plants	0.5	12	/hr	6	90
Mechanical cultivation	6/14	BCS cultivation	0.25	12	/hr	3	45
Weeding pass	6/29	Bloom cutting and weeding	9	12	/hr	108	1620
Bloom removal and weeding	7/6	BCS cultivation	0.25	12	/hr	3	45
Runner setting and weeding	8/18	Weed and set runners	9	12	/hr	108	1620
Mechanical cultivation	8/18	BCS cultivation	0.25	12	/hr	3	45
Mechanical cultivation	10/2	BCS cultivation	0.25	12	/hr	3	45
Straw cost	x	Reflects the purchase price and handling, 10 bales/ 500' bed		6	bale	60	900
Mulching cost	12/10	WIC mulcher, hay wagon, 40 HP PTO tractor with two people.	0.5	50	.	25	375
Drip irrigation hours		13 irrigations over course of season	0.5	12	/ hr	20	300
Drip fertilization cost		20 irrigations over course of season at 1 gal fish/ acre	20	0.5	/ gallon fish	10	150
Deer Fencing	4/2	5 hours total	0.2	25		5	75
Straw Removal	4/13	.5 hour/bed	0.5	12		6	90
Dead leaf cleanup	4/24	.5 hour/ bed	0.5	12		6	90
Frost Protection	May	6 hours irrigation set up,8 hours frost protection, \$10.00 in fuel/irrigation	0.5	12		6	90
Tarnish Plant Bug Spray	6/10	3 hours set up and spray with 150 of product.	0.3	50		15	225
Picking Time		Estimate of 30 lbs. picked/hour. 633 lbs. picked	21.1	12		253.2	3798
Mowing and Plastic Lifting	7/19	20.00/bed to remove from the field.		20		20	300
Plastic Disposal		cost 4.00/bed to throw out.		4		4	60
Totals			23.75			849.65	12744.75
Revenue							
Cost Summary	500'Bed						
Non labor inputs (tractor hour	142.95						
Plant Cost	70						
Labor inputs (planting, mainte	383.5						
Harvest Labor	253.2						
Total	849.65						
Income Summary							
Pounds Harvested	633						
Revenue at 3.75/lb.	2373.75						
Total Profit	1524.1						

Production C: Bare Root 2' Plasticulture							
Establishment & Maintenance							
	Date	Description of Work Accomplished/product	Hours Worked	Cost	Unit	Total cost/bed (5.5' x 500')	Total cost/acre (15 beds/acre)
Pre plant fertilizer	5/18	Spread 100 lbs. (2 bags) 4-3-10 per bed		16	/bag	32	480
Pre plant lime	4/14	Lime spread over field at a rate of 1 ton/ acre		5.58		5.58	83.7
Plastic	x	1 mil 4' black plastic laid with a Nolts Mulch Layer		14.84		14.84	222.6
Drip Tape	x	2 rows 8 mil 6" .67 gal drip 2 or 3" below surface		17.24		17.24	258.6
Drip header and valves	x	2" blue strip and yellow P6 valve		4.13		4.13	61.95
Field prep	5/18	Field prep, spread fertilizer, forming of bed, laying of plastic, irrigation hook up	0.5	35	/hr	17.5	262.5
Plant Cost	x	500 plants		0.14	/plant	70	1050
Planting Hours	5/19	2 people, 2 hours each planting by hand with nourse planting tools	4	12	/hr	48	720
Hoeing pass	6/14	Hoeing plastic edges	0.5	12	/hr	6	90
Mechanical cultivation	6/14	BCS cultivation	0.25	12	/hr	3	45
Weeding pass	6/29	Bloom cutting and weeding	5	12	/hr	60	900
Bloom removal and weeding	7/6	BCS cultivation	0.25	12	/hr	3	45
Runner setting and weeding	8/18	Weed and set runners	13	12	/hr	156	2340
Mechanical cultivation	8/18	BCS cultivation	0.25	12	/hr	3	45
Mechanical cultivation	10/2	BCS cultivation	0.25	12	/hr	3	45
Straw cost	x	Reflects the purchase price and handling, 10 bales/ 500' bed		6	bale	60	900
Mulching cost	12/10	WIC mulcher, hay wagon, 40 HP PTO tractor with two people.	0.5	50	.	25	375
Drip irrigation hours		13 irrigations over course of season	0.5	12	/ hr	20	300
Drip fertilization cost		20 irrigations over course of season at 1 gal fish/ acre	20	0.5	/ gallon fish	10	150
Deer Fencing	4/2	5 hours total	0.2	25		5	75
Straw Removal	4/13	.5 hour/bed	0.5	12		6	90
Dead leaf cleanup	4/24	.5 hour/ bed	0.5	12		6	90
Frost Protection	May	6 hours irrigation set up,8 hours frost protection, \$10.00 in fuel/irrigation	0.5	12		6	90
Tarnish Plant Bug Spray	6/10	3 hours set up and spray with 150 of product.	0.3	50		15	225
Picking Time		Estimate of 30 lbs. picked/hour. 708 lb. picked	23.6	12		283.2	4248
Mowing and Plastic Lifting	7/19	20.00/bed to remove from the field.		20		20	300
Plastic Disposal		cost 4.00/bed to throw out.		4		4	60
Totals			70.6			903.49	13552.35
Cost Summary	500'Bed						
Non labor inputs (tractor hours/	153.79						
Plant Cost	70						
Labor inputs (planting, mainten	396.5						
Harvest Labor	283.2						
Total	903.49						
Income Summary							
Pounds Harvested	708						

Revenue at 3.75/lb.	2655						
Total Profit	1751.51						

Production D: BareRoot 16" runners removed							
Establishment & Maintenance							
	Date	Description of Work Accomplished/product	Hours Worked	Cost	Unit	Total cost/bed (5.5' x 500')	Total cost/acre (15 beds/acre)
Pre plant fertilizer	5/18	Spread 100 lbs. (2 bags) 4-3-10 per bed		16	/bag	32	480
Pre plant lime	4/14	Lime spread over field at a rate of 1 ton/ acre		5.58		5.58	83.7
Plastic	x	1 mil 4' black plastic laid with a Nolts Mulch Layer		14.84		14.84	222.6
Drip Tape	x	2 rows 8 mil 6" .67 gal drip 2 or 3" below surface		17.24		17.24	258.6
Drip header and valves	x	2" blue strip and yellow P6 valve		4.13		4.13	61.95
Field prep	5/18	Field prep, spread fertilizer, forming of bed, laying of plastic, irrigation hook up	0.5	35	/hr	17.5	262.5
Plant Cost	x	750 plants		0.14	/plant	105	1575
Planting Hours	5/19	2 people, 2 hours each planting by hand with nourse planting tools	5	12	/hr	60	900
Hoeing pass	6/14	Hoeing plastic edges	0.5	12	/hr	6	90
Mechanical cultivation	6/14	BCS cultivation	0.25	12	/hr	3	45
Weeding pass	6/29	Bloom cutting and weeding	6	12	/hr	72	1080
Bloom removal and weeding	7/6	BCS cultivation	0.25	12	/hr	3	45
Runner setting and weeding	8/18	Weed and cut runners	9.5	12	/hr	114	1710
Mechanical cultivation	8/18	BCS cultivation	0.25	12	/hr	3	45
Mechanical cultivation	10/2	BCS cultivation	0.25	12	/hr	3	45
Straw cost	x	Reflects the purchase price and handling, 10 bales/ 500' bed		6	bale	60	900
Drip irrigation hours		13 irrigations over course of season	0.5	12	/ hr	20	300
Drip fertilization cost		20 irrigations over course of season at 1 gal fish/ acre	20	0.5	/ gallon fish	10	150
Deer Fencing	4/2	5 hours total	0.2	25		5	75
Straw Removal	4/13	.5 hour/bed	0.5	12		6	90
Dead leaf cleanup	4/24	.5 hour/ bed	0.5	12		6	90
Frost Protection	May	6 hours irrigation set up,8 hours frost protection, \$10.00 in fuel/irrigation	0.5	12		6	90
Tarnish Plant Bug Spray	6/10	3 hours set up and spray with 150 of product.	0.3	50		15	225
Picking Time		Estimate of 30 lbs. picked/hour 451 lbs. picked	15.03333333	12		180.4	2706
Mowing and Plastic Lifting	7/19	20.00/bed to remove from the field.		20		20	300
Plastic Disposal		cost 4.00/bed to throw out.		4		4	60
Totals			60.03333333			792.69	11890.35
Total Revenue							
Cost Summary	500'Bed						
Non labor inputs (tractor hours/fertilizer)	147.79						
Plant Cost	105						
Labor inputs (planting, maintenance, mu	359.5						
Harvest Labor	180.4						
Total	792.69						
Income Summary							
Pounds Harvested	451						
Revenue at 3.75/lb.	1691.25						
Total Profit	898.56						

Production E: Bare Root 3' Runners Set							
Establishment & Maintenance							
	Date	Description of Work Accomplished/product	Hours Worked	Cost	Unit	Total cost/bed (5.5' x 500')	Total cost/acre (15 beds/acre)
Pre plant fertilizer	5/18	Spread 100 lbs. (2 bags) 4-3-10 per bed		16	/bag	32	480
Pre plant lime	4/14	Lime spread over field at a rate of 1 ton/ acre		5.58		5.58	83.7
Plastic	x	1 mil 4' black plastic laid with a Nolts Mulch Layer		14.84		14.84	222.6
Drip Tape	x	2 rows 8 mil 6" .67 gal drip 2 or 3" below surface		17.24		17.24	258.6
Drip header and valves	x	2" blue strip and yellow P6 valve		4.13		4.13	61.95
Field prep	5/18	Field prep, spread fertilizer, forming of bed, laying of plastic, irrigation hook up	0.5	35	/hr	17.5	262.5
Plant Cost	x	333 plants		0.14	/plant	46.62	699.3
Planting Hours	5/19	2 people, 2 hours each planting by hand with nurse planting tools	3.25	12	/hr	39	585
Hoeing pass	6/14	Hoeing plastic edges	0.5	12	/hr	6	90
Mechanical cultivation	6/14	BCS cultivation	0.25	12	/hr	3	45
Weeding pass	6/29	Bloom cutting and weeding	5	12	/hr	60	900
Bloom removal and weeding	7/6	BCS cultivation	0.25	12	/hr	3	45
Runner setting and weeding	8/18	Weed and set runners	11.5	12	/hr	138	2070
Mechanical cultivation	8/18	BCS cultivation	0.25	12	/hr	3	45
Mechanical cultivation	10/2	BCS cultivation	0.25	12	/hr	3	45
Straw cost	x	Reflects the purchase price and handling, 10 bales/ 500' bed		6	bale	60	900
Mulching cost	12/10	WIC mulcher, hay wagon, 40 HP PTO tractor with two people.	0.5	50	.	25	375
Drip irrigation hours		13 irrigations over course of season	0.5	12	/ hr	20	300
Drip fertilization cost		20 irrigations over course of season at 1 gal fish/ acre	20	0.5	/ gallon fish	10	150
Deer Fencing	4/2	5 hours total	0.2	25		5	75
Straw Removal	4/13	.5 hour/bed	0.5	12		6	90
Dead leaf cleanup	4/24	.5 hour/ bed	0.5	12		6	90
Frost Protection	May	6 hours irrigation set up,8 hours frost protection, \$10.00 in fuel/irrigation	0.5	12		6	90
Tarnish Plant Bug Spray	6/10	3 hours set up and spray with 150 of product.	0.3	50		15	225
Picking Time		Estimate of 30 lbs. picked/hour. 687 lb. picked.	22.9	12		274.8	4122
Mowing and Plastic Lifting	7/19	20.00/bed to remove from the field.		20		20	300
Plastic Disposal		cost 4.00/bed to throw out.		4		4	60
Totals			22.75			844.71	12670.65
Total Revenue							
Cost Summary	500'Bed						
Non labor inputs (tractor hours/	147.79						
Plant Cost	46.62						
Labor inputs (planting, mainten	359.5						
Harvest Labor	274.8						
Total	828.71						
Income Summary							
Pounds Harvested	687						
Revenue at 3.75/lb.	2576.25						

Total Profit	1747.54						

Results Summary

Cost Summary by 500' trial bed		A: Plug Production	B: BareRoot Matted Row	C: BareRoot 2' run	D: BareRoot 16" rui	E: BareRoot 3' runners set	
Non labor inputs (tractor hours/fertilizer/drip/plastic/straw)	147.79	142.95	153.79	147.79	147.79		
Plant Cost	367	70	70	105	46.62		
Labor inputs (planting, maintenance, mulching)	137.5	383.5	396.5	359.5	359.5		
Harvest Labor	190.4	253.2	283.2	180.4	274.8		
Total Costs	842.69	849.65	903.49	792.69	828.71		
Income Summary by 500' trial bed							
Pounds Harvested	476	633	708	451	687		
Revenue at 3.75/lb.	1785	2373.75	2655	1691.25	2576.25		
Total Profit	1132.71	1524.1	1751.51	898.56	1747.54		

Results Summary

Cost Summary by 500' trial bed	A:Plug Production	B:BareRootMatted Row	C:BareRoot 2' run	D:BareRoot 16" rui	E:BareRoot 3' runners set	
Non labor inputs (tractor hours/fertilizer/drip/plastic/straw)	2216.85	2144.25	2306.85	2216.85	2216.85	
Plant Cost	5505	1050	1050	1575	699.3	
Labor inputs (planting, maintenance, mulching)	2062.5	5752.5	5947.5	5392.5	5392.5	
Harvest Labor	2856	3798	4248	2706	4122	
Total Costs	12640.35	12744.75	13552.35	11890.35	12430.65	
Income Summary by 500' trial bed						
Pounds Harvested	7140	9495	10620	6765	10305	
Revenue at 3.75/lb.	26775	35606.25	39825	25368.75	38643.75	
Total Profit	16990.65	22861.5	26272.65	13478.4	26213.1	
Non Harvest Totals vs. Production						
Non labor inputs (tractor hours/fertilizer/drip/plastic/straw)	2216.85	2144.25	2306.85	2216.85	2216.85	
Plant Cost	5505	1050	1050	1575	699.3	
Labor inputs (planting, maintenance, mulching)	2062.5	5752.5	5947.5	5392.5	5392.5	
Total non harvest costs	9784.35	8946.75	9304.35	9184.35	8308.65	
Revenue at 3.75/lb.	26775	35606.25	39825	25368.75	38643.75	
Pounds Harvested	7140	9495	10620	6765	10305	Pounds Harvested
Harvest Labor @ 30 lbs./ hr	2856	3798	4248	2706	4122	
Harvest Labor @ 20 lbs./ hr	4284	5697	6372	4059	6183	
Harvest Labor @ 10 lbs./hr	8568	11394	12744	8118	12366	
Profit with respect to harvest time						
Harvest Labor @ 30 lbs./ hr	14134.65	22861.5	26272.65	13478.4	26213.1	
Harvest Labor @ 20 lbs./ hr	12706.65	20962.5	24148.65	12125.4	24152.1	
Harvest Labor @ 10 lbs./hr	8422.65	15265.5	17776.65	8066.4	17969.1	
Profit						

Table 1

Bed	6/19	6/21	6/24	6/27	7/1	7/3	7/4	7/5	7/6	7/8	Totals	
A good	11.8	34.75	82	98		54.6	76.4	48.4		68.21	474.16	Plug Production
A culls	1.15	1.5	10	9		21.5	24	11.25			78.4	
B good		7.4	74	167.86		6	160.2		162	56.3	633.76	Matted Row runners set
B culls		0.5	1.5	6		2.3	80				90.3	
C good	5.15	32.4	149	172.87	96.5	79			145.5	28.15	708.57	Runners Set 2' spacing
C culls	0.5	0.73	3	9	19.9	12.7	39				84.83	
D good	7.84	35.9	140.5	89.6	91.2				86.1		451.14	Runners Removed
D culls	0.25	0.58	3	6	50						59.83	
E good	4.75	25.25	117.5	181.26	121.88			17.6	194	25.2	687.44	Runners set 3' spacing
E good	0.2	0.5	3	11.5	15			2			32.2	