

DAS	Location	Operation1	Operation2	Operation3	Description1	Description2	Description3	Input	Unit	Units/acre
-20	Field	Field preparation	Irrigation	Flood	ONLY for newly acclimated land		NEED-BASED	Labor	Man-d	0.50
-10	Field	Field preparation	Deep-chiseling		ONLY for newly acclimated land	EITHER deep-chiseling or ploughing	NEED-BASED	Tractor with chisel	Tractor-op.	1.00
-10	Field	Field preparation	Ploughing		ONLY for newly acclimated land	EITHER deep-chiseling or ploughing	NEED-BASED	Tractor with plough	Tractor-op.	1.00
-3	Field	Field preparation	Organic manuring	Manure application			ONLY ONCE PER YEAR	Vermicompost	mt	1.20
-3	Field	Field preparation	Fertilization	Basal fertilizer	18-46-00 N-P-K			DAP	kg	100.00
-3	Field	Field preparation	Fertilization	Basal fertilizer	00-00-50 N-P-K			SOP (potassium sulphate)	kg	100.00
-3	Field	Field preparation	Fertilization	Basal fertilizer				Zn-Sulphate	kg	20.00
-3	Field	Field preparation	Fertilization		Mix and apply evenly to surface			Labor	Man-d	1.00
-3	Field	Field preparation	Harrowing					Tractor with harrow	Tractor-op.	1.00
-3	Field	Field preparation	Planking					Tractor with planker	Tractor-op.	1.00
-3	Field	Bed preparation	Bed making	90-cm bed & 45-cm furrow				Tractor with bedmaker	Tractor-op.	1.00
-2	Field	Bed preparation	Trellis construction		2 sticks/bed, 2.5-m distance within rows	1 horizontal stick across furrows at 2.5-m distance		2.5-m bamboo stick	#	3600.00
-2	Field	Bed preparation	Trellis construction					GI wire	kg	170.00
-2	Field	Bed preparation	Trellis construction		1 2.5-m-long string per plant fixed to GI-wire	2 strings around trellisses at bottom and 1-m height		Jute string	mtr	36000.00
-2	Field	Bed preparation	Trellis construction					Labor	Man-d	20.00
-2	Field	Bed preparation	Irrigation	Furrow				Labor	Man-d	0.50
0	Field	Sowing						Seed	kg	1.00
0	Field	Sowing	90-cm bed & 45-cm furrow	1 row/bed	45-cm interplant distance	on one edge of beds	6,700 plants/A	Labor	Man-d	1.00
0	Field	Cultivation	Irrigation	Furrow				Labor	Man-d	0.50
7	Field	Cultivation	Irrigation	Furrow				Labor	Man-d	0.50
7	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.08%	against Red Pumpkin Beetle, after germination		Karate (Lambda Cyhalothrin 5% EC)	ltr	0.16
7	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Downy Mildew		Abic M-45 (Mancozeb)	kg	0.40
7	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
7	Field	Cultivation	Plant protection					Water	ltr	200.00
7	Field	Cultivation	Plant protection					Labor	Man-d	0.50
14	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
14	Field	Cultivation	Weeding				NEED-BASED	Labor	Man-d	6.00
14	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Downy Mildew		Abic M-45 (Mancozeb)	kg	0.40
14	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
14	Field	Cultivation	Plant protection					Water	ltr	200.00
14	Field	Cultivation	Plant protection					Labor	Man-d	0.50
21	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
28	Field	Cultivation	Fertilization	Side dressing	09-00-00 N-P-K			Urea	kg	20.00
28	Field	Cultivation	Fertilization	Basal fertilizer	00-00-10 N-P-K			SOP (potassium sulphate)	kg	20.00
28	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
28	Field	Cultivation	Weeding				NEED-BASED	Labor	Man-d	6.00
28	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.20%		NEED-BASED	Rogor 30% EC (Dimethoate)	ltr	0.40
28	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
28	Field	Cultivation	Plant protection				NEED-BASED	Labor	Man-d	0.50
38	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
38	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Downy Mildew		Abic M-45 (Mancozeb)	kg	0.40
38	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
38	Field	Cultivation	Plant protection					Water	ltr	200.00
38	Field	Cultivation	Plant protection					Labor	Man-d	0.50
45	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
45	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
45	Field	Cultivation	Weeding				NEED-BASED	Labor	Man-d	6.00
45	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.20%		NEED-BASED	Rogor 30% EC (Dimethoate)	ltr	0.40
45	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
45	Field	Cultivation	Plant protection				NEED-BASED	Labor	Man-d	0.50
50	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
50	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Downy Mildew		Abic M-45 (Mancozeb)	kg	0.40
50	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
50	Field	Cultivation	Plant protection					Water	ltr	200.00
50	Field	Cultivation	Plant protection					Labor	Man-d	0.50
55	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
55	Field	Cultivation	Fertilization	Side dressing	09-00-00 N-P-K			Urea	kg	20.00
55	Field	Cultivation	Fertilization	Basal fertilizer	00-00-10 N-P-K			SOP (potassium sulphate)	kg	20.00
55	Field	Cultivation	Fertilization					Labor	Man-d	1.00
55	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
60	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
60	Field	Cultivation	Weeding				NEED-BASED	Labor	Man-d	6.00
60	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.20%		NEED-BASED	Rogor 30% EC (Dimethoate)	ltr	0.40
60	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
60	Field	Cultivation	Plant protection				NEED-BASED	Labor	Man-d	0.50
65	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
65	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
65	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.50%	against Downy Mildew; apply in the evening		Kocide (Copper hydroxide)	kg	1.00
65	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
65	Field	Cultivation	Plant protection					Water	ltr	200.00
65	Field	Cultivation	Plant protection					Labor	Man-d	0.50
70	Field	Harvest					NEED-BASED	Labor	Man-d	3.00

75	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
75	Field	Cultivation	Fertilization	Side dressing	09-00-00 N-P-K			Urea	kg	20.00
75	Field	Cultivation	Fertilization	Basal fertilizer	00-00-10 N-P-K			SOP (potassium sulphate)	kg	20.00
75	Field	Cultivation	Fertilization		Mix and apply evenly to surface			Labor	Man-d	1.00
75	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
75	Field	Cultivation	Weeding				NEED-BASED	Labor	Man-d	6.00
75	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.20%		NEED-BASED	Rogor 30% EC (Dimethoate)	ltr	0.40
75	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
75	Field	Cultivation	Plant protection				NEED-BASED	Labor	Man-d	0.50
80	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
80	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.50%	against Downy Mildew; apply in the evening		Kocide (Copper hydroxide)	kg	1.00
80	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
80	Field	Cultivation	Plant protection					Water	ltr	200.00
80	Field	Cultivation	Plant protection					Labor	Man-d	0.50
85	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
85	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
90	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
90	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.50%	against Downy Mildew; apply in the evening		Kocide (Copper hydroxide)	kg	1.00
90	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
90	Field	Cultivation	Plant protection					Water	ltr	200.00
90	Field	Cultivation	Plant protection					Labor	Man-d	0.50
95	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
95	Field	Cultivation	Fertilization	Side dressing	09-00-00 N-P-K			Urea	kg	20.00
95	Field	Cultivation	Fertilization	Basal fertilizer	00-00-10 N-P-K			SOP (potassium sulphate)	kg	20.00
95	Field	Cultivation	Fertilization		Mix and apply evenly to surface			Labor	Man-d	1.00
95	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
100	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
100	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.50%	against Downy Mildew; apply in the evening		Kocide (Copper hydroxide)	kg	1.00
100	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%	against Powdery Mildew; apply in the evening		Thiovit 80% WP (Sulphur)	kg	0.40
100	Field	Cultivation	Plant protection					Water	ltr	200.00
100	Field	Cultivation	Plant protection					Labor	Man-d	0.50
105	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
105	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
110	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
115	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
115	Field	Cultivation	Irrigation	Furrow			NEED-BASED	Labor	Man-d	0.50
120	Field	Harvest					NEED-BASED	Labor	Man-d	3.00
120	Field	Harvest	Residue removal					Labor	Man-d	4.00