DAT	Location	Operation1	Operation2	Operation3	Description1	Description2	Description3	Input	Unit	Units/acre
-30	Nursery GH	Sowing	Multiplate-sowing		Cocopeat	3 of 5 parts		Substrate	kg	200.00
-30	Nursery GH	Sowing	Multiplate-sowing		Vermiculite	2 of 5 parts		Substrate	kg	200.00
-30	Nursery GH	Sowing	Multiplate-sowing		98-cavity 3.8-cm plug (26×53 cm)			Multiplate	#	190.00
-30	Nursery GH	Sowing	Multiplate-sowing		Mix substrate and fill multiplates			Labor	Man-d	1.00
-30	Nursery GH	Sowing	Multiplate-sowing		Slightly cover seeds			Seed	#	19000.00
-30	Nursery GH	Sowing	Multiplate-sowing					Labor	Man-d	2.00
-30-0	Nursery GH	Irrigation			twice daily	DAILY REQUIREMENT: 1000 ltr	TOTAL REQUIREMENT	Water	m3	30.00
-30-0	Nursery GH	Irrigation			Controlling	DAILY REQUIREMENT: 0.5 Man-day	TOTAL REQUIREMENT	Labor	Man-d	15.00
-23-0	Nursery GH	Fertigation	Nutrient stock solution	from germination	Nutrient stock solution concentration: 7% (7 kg/100 ltr)	Nutrient stock solution injection rate: 1%	TOTAL REQUIREMENT	06-12-36 Haileaf Foliar	kg	17.00
-23-0	Nursery GH	Fertigation	Nutrient stock solution	from germination	Nutrient stock solution concentration: 7% (7 kg/100 ltr)	Nutrient stock solution injection rate: 1%	TOTAL REQUIREMENT	Calcium nitrate	kg	17.00
-23-0	Nursery GH	Fertigation	Nutrient stock solution	from germination	Prepare stock solutions	DAILY REQUIREMENT: 0.5 Man-day	TOTAL REQUIREMENT	Labor	Man-d	15.00
-23-0	Nursery GH	Fertigation	Nutrient solution	from germination	Nutrient solution concentration: 0.07%	DAILY REQUIREMENT: 20 ltr (2×10 ltr)	TOTAL REQUIREMENT	Water	ltr	480.00
-7	Greenhouse	Equipment installation	Growbag	Installation	Puncture sheets at bottom; place in Mapal troughs (81 #/row	Cut 10-cm holes at 30-cm distance at top	3 holes/bag, every third bag: 4 holes	Growbag	#	4698.00
-7	Greenhouse	Equipment installation	Growbag	Installation				Labor	Man-d	5.00
-7	Greenhouse	Equipment installation	Dripper	Installation	1 dripper and drip peg per hole (plant)			Labor	Man-d	1.00
-7	Greenhouse	Equipment installation	Growbag	Irrigation	Reconstitute bags; 25 l/bag	13 h @ 2 ltr/h dripper flow rate		Water	m3	118.00
-7	Greenhouse	Equipment installation	Growbag	Irrigation	Check individual drippers	Check uniformity of reconstitution		Labor	Man-d	1.00
-6	Greenhouse	Equipment installation	Growbag	Fertigation	(see below)	13 h @ 2 ltr/h dripper flow rate		Water	m3	118.00
-6	Greenhouse	Equipment installation	Growbag	Fertigation				Labor	Man-d	1.00
-6	Greenhouse	Equipment installation	Bobbin		1 #/plant on high wire	Unwind 4 m twine, fix twine to drip peg		Bobbin	#	15660.00
-6	Greenhouse	Equipment installation	Bobbin					Labor	Man-d	3.00
0	Greenhouse	Transplanting			1 plant per hole (3-4 plants per growbag)			Labor	Man-d	4.00
daily	Greenhouse	Irrigation			Radiation sum setpoint: 0.2-0.4 kWh = 10-15 impulses/day	Volume setpoint: 1-14 min = 0.3-4.5 ltr/plant×day @ 2 ltr/h dripper flow rate	MAX. DAILY REQUIREMENT	Water	m3	71.00
daily	Greenhouse	Irrigation			Control irrigation		DAILY REQUIREMENT	Labor	Man-d	0.50
daily	Greenhouse	Fertigation	Nutrient stock solution		Nutrient stock solution concentration: 5% (5 kg/100 ltr)	Nutrient stock solution injection rate: 2%	MAX. DAILY REQUIREMENT	06-12-36 Haileaf Foliar	kg	71.00
daily	Greenhouse	Fertigation	Nutrient stock solution		Nutrient stock solution concentration: 5% (5 kg/100 ltr)	Nutrient stock solution injection rate: 2%	MAX. DAILY REQUIREMENT	Calcium nitrate	kg	71.00
daily	Greenhouse	Fertigation	Nutrient stock solution		Prepare stock solutions		DAILY REQUIREMENT	Labor	Man-d	0.50
daily	Greenhouse	Fertigation	Nutrient solution		Nutrient solution concentration: 0.1%	Sum of 2 stock solutions	MAX. DAILY REQUIREMENT	Water	ltr	2820.00
daily	Greenhouse	Fertigation	Nutrient solution		Control nutrient solution EC: 1.8-2.0	Control nutrient solution pH: 5.6-6.3	DAILY REQUIREMENT	Labor	Man-d	0.50
daily	Greenhouse	Fertigation	Nutrient solution		Control leachate volume: 20-30% of irrigation volume	Control leachate EC: 0.7-2.5 mS	DAILY REQUIREMENT	Labor	Man-d	0.50
bi-weekly	Greenhouse	Layering	Bobbin		Release 60 cm twine & move 30 cm clockwise on high wire	Prevent fruit clusters to touch ground	WEEKLY REQUIREMENT	Labor	Man-d	6.00
bi-weekly	Greenhouse	Clipping leaves & clusters			Clip leaves and bad clusters up to bottommost fruit cluster	Circa 6 leaves & 2 clusters per plant	WEEKLY REQUIREMENT	Labor	Man-d	3.00
weekly	Greenhouse	Cluster thinning			Prune abnormal flowers & excessive, deformed fruits	Leave ca. 14 well formed fruits/cluster	WEEKLY REQUIREMENT	Labor	Man-d	2.00
twice weekly	Greenhouse	Tying up			Tye up new stems (30 cm) clockwise around twine		WEEKLY REQUIREMENT	Labor	Man-d	12.00
twice weekly	Greenhouse	Pruning			Prune 7-10 cm long side-shoots		WEEKLY REQUIREMENT	Labor	Man-d	12.00
daily	Greenhouse	Harvest			Ca. 1 cluster/plant×week = 280 g/plant×week	Marketable yield: 30%; 200 kg/GH×day	DAILY REQUIREMENT	Labor	Man-d	1.00
-23	Nursery GH	Cultivation	Plant protection	Insecticide	Concentration: 0.15%, H.I.: 14 days	after germination		Polytrin C-44 (Profenophos & Cypermethrin)	ltr	0.30
-23	Nursery GH	Cultivation	Plant protection			after germination		Water	ltr	200.00
-23	Nursery GH	Cultivation	Plant protection			after germination		Labor	Man-d	0.50
-17	Nursery GH	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 7 days		NEED-BASED	Abic M-45 (Mancozeb)	kg	0.40
-17	Nursery GH	Cultivation	Plant protection	Insecticide	Concentration: 0.15%, H.I.: 14 days		NEED-BASED	Polytrin C-44 (Profenophos & Cypermethrin)	ltr	0.30
-17	Nursery GH	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
-17	Nursery GH	Cultivation	Plant protection				NEED-BASED	Labor	Man-d	0.50
-10	Nursery GH	Cultivation	Plant protection	Insecticide	Concentration: 0.15%, H.I.: 14 days		NEED-BASED	Polytrin C-44 (Profenophos & Cypermethrin)	ltr	0.30
-10	Nursery GH	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
-10	Nursery GH	Cultivation	Plant protection				NEED-BASED	Labor	Man-d	0.50
-3	Nursery GH	Cultivation	Fertilization	Foliar application	Concentration: 0.10%			Fetrilon-Combi-2	kg	0.20
-3	Nursery GH	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 7 days		NEED-BASED	Abic M-45 (Mancozeb)	kg	0.40
-3	Nursery GH	Cultivation	Plant protection	Insecticide	Concentration: 0.15%, H.I.: 14 days		NEED-BASED	Polytrin C-44 (Profenophos & Cypermethrin)	ltr	0.30
-3	Nursery GH	Cultivation	Plant protection					Water	ltr	200.00
-3	Nursery GH	Cultivation	Plant protection					Labor	Man-d	0.50
14-80	Field	Fertigation	Nutrient stock solution		BI-DAILY RATE: 9328 g	TOTAL: 50-00-00 N-P-K	from 7 days after germination	Calcium nitrate	kg	250.00
14-80	Field	Fertigation	Nutrient stock solution		BI-DAILY RATE: 4776 g	TOTAL: 00-00-80 N-P-K	from 7 days after germination	SOP (K2SO4)	kg	120.00
14-80	Field	Fertigation	Nutrient stock solution		BI-DAILY RATE: 20 g		from 7 days after germination	Fetrilon-Combi-2	kg	1.07
14-80	Field	Fertigation	Nutrient stock solution		DAILY MINIMUM RATE: 100 ltr	Venturi valve: 250 ltr/hr	from 7 days after germination	Water	ltr	6700.00
14-80	Field	Fertigation			DAILY REQUIREMENT: see attached			Water	m3	290.00
14-80	Field	Fertigation			DAILY REQUIREMENT: 0.25 Man-day			Labor	Man-d	17.00
7	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days	against cutworm; after germination	PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
7	Field	Cultivation	Plant protection				PREVENTIVE	Water	ltr	200.00
7	Field	Cultivation	Plant protection			spray after sunrise	PREVENTIVE	Labor	Man-d	0.50
14	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 14 days		NEED-BASED	Abic M-45 75% EC (Mancozeb)	kg	0.40
14	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days		PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
14	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
14	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
21	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 14 days		NEED-BASED	Abic M-45 75% EC (Mancozeb)	kg	0.40
21	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days		PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
21	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
21	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
28	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 14 days		NEED-BASED	Abic M-45 75% EC (Mancozeb)	kg	0.40
28	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days		PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
28	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
28	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
35	Field	Cultivation	Weeding				NEED-BASED	Labor	Man-d	10.00
35	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 14 days		NEED-BASED	Abic M-45 75% EC (Mancozeb)	kg	0.40
35	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days		PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
35	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
35	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
42	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 14 days		NEED-BASED	Abic M-45 75% EC (Mancozeb)	kg	0.40

DAT	Location	Operation1	Operation2	Operation3	Description1	Description2	Description3	Input	Unit	Units/acre
42	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days		PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
42	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
42	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
48	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.30%, H.I.: 1 day		NEED-BASED	Thiovit 80% WP (Sulphur)	kg	0.60
48	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.02%, H.I.: 14 days		PREVENTIVE	Actara 25% WG (Thiamethoxam)	kg	0.08
48	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
48	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
55	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.20%, H.I.: 7 days	at first flowering	PREVENTIVE	Rovral 50% WP (Iprodione)	kg	0.40
55	Field	Cultivation	Plant protection	Insecticide	Concentration: 0.20%, H.I.: 3 days	at first flowering	NEED-BASED	Basathrin 25% EC (Cypermethrin)	ltr	0.40
55	Field	Cultivation	Plant protection			at first flowering	PREVENTIVE	Water	ltr	200.00
55	Field	Cultivation	Plant protection			at first flowering	PREVENTIVE	Labor	Man-d	0.50
62	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
62	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.30%, H.I.: 1 day		NEED-BASED	Thiovit 80% WP (Sulphur)	kg	0.60
62	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
62	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
64	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
66	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
68	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
70	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
70	Field	Cultivation	Plant protection	Fungicide	Concentration: 0.30%, H.I.: 1 day		NEED-BASED	Thiovit 80% WP (Sulphur)	kg	0.60
70	Field	Cultivation	Plant protection				NEED-BASED	Water	ltr	200.00
70	Field	Cultivation	Plant protection			spray late afternoon	NEED-BASED	Labor	Man-d	0.50
72	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
74	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
76	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
78	Field	Harvest					NEED-BASED	Labor	Man-d	5.00
80	Field	Harvest					NEED-BASED	Labor	Man-d	5.00