

# Orange



**Contact for more details:**  
82 7373 3030/82 7373 3535

**Name of the plant:** Orange

**Botanical / Scientific Name:** Citrus Reticulata

**Family:** Rutaceae

**Spacing:** 12 x 12, 15 x 15, 18 x 18, 20 x 20 feet (plant to plant and row to row distance)

**Variety:** Nagpur mandarin, Kinnow

**Properties of Orange:** Micronutrient loving plants, it covers 50% area under citrus species, good source of vitamin C, contains plant compounds that have anti-inflammatory antioxidant properties, is known to have several health benefits and its among the most popular fruit around the world. Good source of potassium and fiber that is useful for heart health.

**Soil:** Highly sensitive to calcareous soil so avoid Soil more than 5-7% of  $\text{CaCO}_3$  and more than 0.1% EC, presence of calcium carbonate at feeding zone may adversely affect on growth of plants. well drained light loam, medium to black soil suitable for cultivation having Ph 6.5-7.5.

**Climate:** Subtropical climate is suitable for cultivation, Low temperature and High rainfall harmful to plants, hot wind during summer may adversely affect flower and fruit drops problem. Annual rainfall ranging 75-250 cm is favorable for crop growth.

**Production:** Production starts after 4-5 years of plantation and average production is 20 kg/plant. 50 fruits at 5th year per tree and from the 8th year average production near about 700-800 fruits per tree after stabilization.

**Insect & Pest:** Leaf miner, Leaf eating caterpillar, Red spider mite, Stem borer, Aphids, fruit sucking moth, lemon butterfly, citrus psylla.

**Disease:** Gummosis, Citrus decline, Root rot



# Orange

## *Nagpur mandarin*



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**Variety:** Nagpur mandarin

**Plantation date:** 15/04/2023

**Spacing:** 15x10 feet

**Plantation Area:** 12 R

**No. of plants:** 90

**Character of Variety:** This variety occupies prime position in the Indian market and is one of the finest mandarins grown in the world. It is also known as Ponkan. Tree is large, vigorous, and spineless with compact foliage. Fruit size is medium, cadmium color, smooth surface, and glossy, rind thin, soft, and slightly adhered with 10-12 segments. High yielding variety, flesh color orange tender melting juicy having flavor mild, pleasant and aromatic.

**Production:** Production starts after 5 year, 50 fruits at 5th year per tree and stabilizes in the 8th year. Average production near about 700-800 fruits after stabilization.



# Orange

## *Kinnow*



**Contact for more details:**  
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**Variety:** Kinnow

**Botanical / Scientific Name:** King (Citrus nobilis) x Willow leaf (Citrus delliciosa)

**Plantation date:** 29/07/2023

**Spacing:** 15x10 feet

**Plantation Area:** 10 R

**No. of plants:** 78

**Character of Variety:** High yielding variety, having pleasant flavor and good color, medium fruit size, oblate in shape and high juice percentage, low seed content, cold resistant variety. Fruit color is deep yellowish orange, smooth and glossy surface, very shallow pitted, with flattened base, thin rind, tough and leathery peel, segment 9-10 easily separable, 12-24 seeds. It is a late variety.

**Production:** Production starts after 4-5 years of plantation, it should be harvested at full maturity during January and February. On an average 400-450 fruits can be harvested with average yield of 70-80 kg/tree.



# Orange crop economics



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Nagpuri orange one acre area (0.40 R) cost of cultivation and production								
Sr. No	Work	Details	First year expenses	Second year expenses	third year expenses	Forth year expenses	Fifth year expenses	For Next all Years
1	Testing	Soil and water testing	700	0	0	0	0	0
2	land preparation	Ploughing and Rotavator (Including Crop )	4,000	2,000	2,000	2,000	2,000	2,000
3	Digging pit cost	217 plants x 20 Rs.	4,340	0	0	0	0	0
4	Manure	Manure (5000 per trolley)	10,000	10,000	15,000	20,000	20,000	20,000
5	Chemical fertilizer	500 kg	2,000	3,000	4,500	5,000	5,500	6,000
6	The cost of the plant	217 x 35 Rs.	7,595	0	0	0	0	0
7	Labour cost	Male and female	1,500	1,500	2,000	3,000	3,000	3,000
8	Bamboo cost		1,000	0	0	0	0	0
9	Drip irrigation cost		20,000	0	0	0	0	0
10	Spraying cost	Pest and disease control	1,000	1,000	2,500	3,000	3,500	4,000
11	Other cost		1,000	2,000	2,500	3,000	4,000	4,000
12	<b>Total cost</b>	<b>Rs</b>	<b>53,135</b>	<b>19,500</b>	<b>28,500</b>	<b>36,500</b>	<b>38,000</b>	<b>39,000</b>
13		<b>3 years management cost up to first income</b>	<b>101,135</b>					
14	Production	weight of the fruit (Ton)	0	0	0	4.5 Ton (20kg/plant)	6.5 Ton	Min 10 Ton
15	Rate	Min. Rs.	0	0	0	30	30	30
16	<b>Total Production</b>	<b>Rs .</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,35,000</b>	<b>1,95,000</b>	<b>3,00,000</b>
17	<b>Net Profit</b>	<b>Minimum net profit after an average of three years (Total Production - Total Cost)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>98,500</b>	<b>1,57,000</b>	<b>261,000</b>
18	Intercrop minimum production	Kharif soybean acre production (6 quintle x 4000 rs)	24,000	24,000	24,000	0	0	0
19		Rabbi gram acre production (4 quintals x 5000)	20,000	20,000	20,000	0	0	0
20		Intercropping production	44,000	44,000	44,000	0	0	0
21	Intercropping production cost	Kharif Soybeans	14,700	14,700	14,700	0	0	0
22		Rabbi Gram	9,000	9,000	9,000	0	0	0
23		Intercropping costs	23,700	23,700	23,700	0	0	0
24	Intercropping production - Production cost		44,000-23,700	44,000-23,700	44,000-23,700	0	0	0
	<b>Intercropping net profit</b>		<b>20,300</b>	<b>20,300</b>	<b>20,300</b>	<b>0</b>	<b>0</b>	<b>0</b>
25	<b>Net profit after three years</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>98,500</b>	<b>1,57,000</b>	<b>261,000</b>
26	Note :The above planting is at a 20 x 10 feet spacing, but changes in spacing, as well as changes in management practices, land, soil-climate, market, etc., may result in higher cost and lower production							