Indo-Israel Citrus Production Technology

Presented by

Dr. D.M.Panchbhai

Professor of Horticulture,

College of Agriculture, Nagpur

Citrus Scenario in Israel and India

Sr. No.	Particulars	Israel	India
1	Area under Citrus	70,000 ha	3.24 lakh ha
2	Average productivity	30-35tha^{-1}	9-10 tha^{-1}
3	Citrus varieties/spp. grown	Jafa Mosambi, Grape fruits, Mandarin-Mor, Or, Ora, Murcot, Michel, Rishon	Nagpur Mandarin, Kinnow, Coorge and Khashi mandarin Sweet orange(Nuecellar)

Major component for quality production

- Production of quality planting materials
- Planting on raised bed with high density
- Use of drip irrigation
- Use of pruning
- Site specific nutrient management
- Site specific disease and pest management
- Proper post harvest management

Centre o Excellence for Citrus, Nagpur

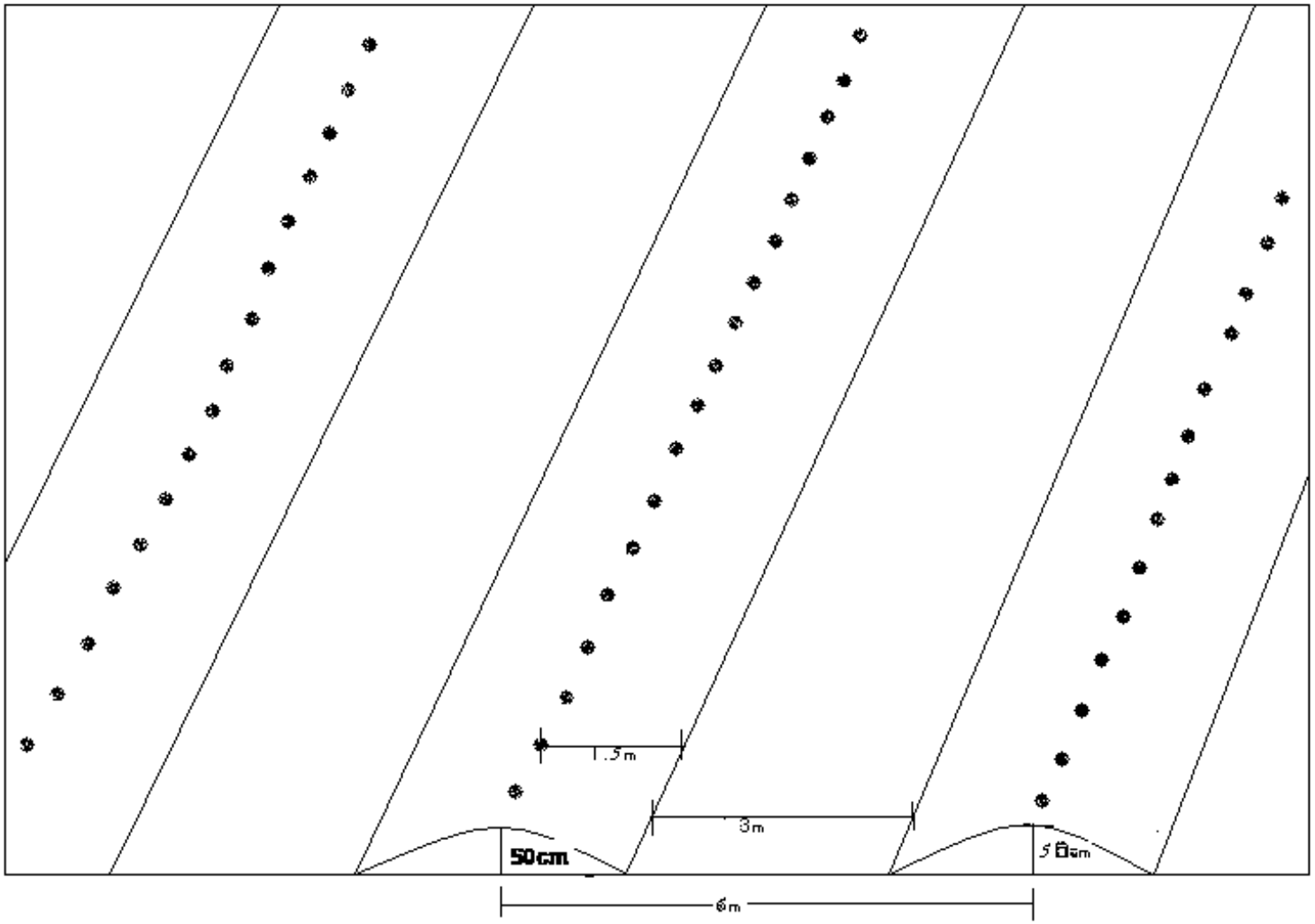
Model Citrus Nursery

▪ Use of Insect Proof Net houses for Citrus Nursery	
▪ Primary Nursery	
▪ Secondary Nursery	

Budgraft ready for sale

Planting on raised bed with high density

- Spacing % 6 x 3 m



Layout of Plan

Raised Bed for Citrus Planting

Spacing: 6 X 3 m
Bed Size: 3m width at bottom and 50 cm height

Spacing: 6X3m

Citrus Planting ¼6 x 6 m½ in India

Citrus Planting ¼6 x 3 m½ in Israel

Use of Drip irrigation system with double lateral

Mechanical Pruning


India


Israel

Use of pruning


Israel

Fruiting in pruned orchard

After Pruning

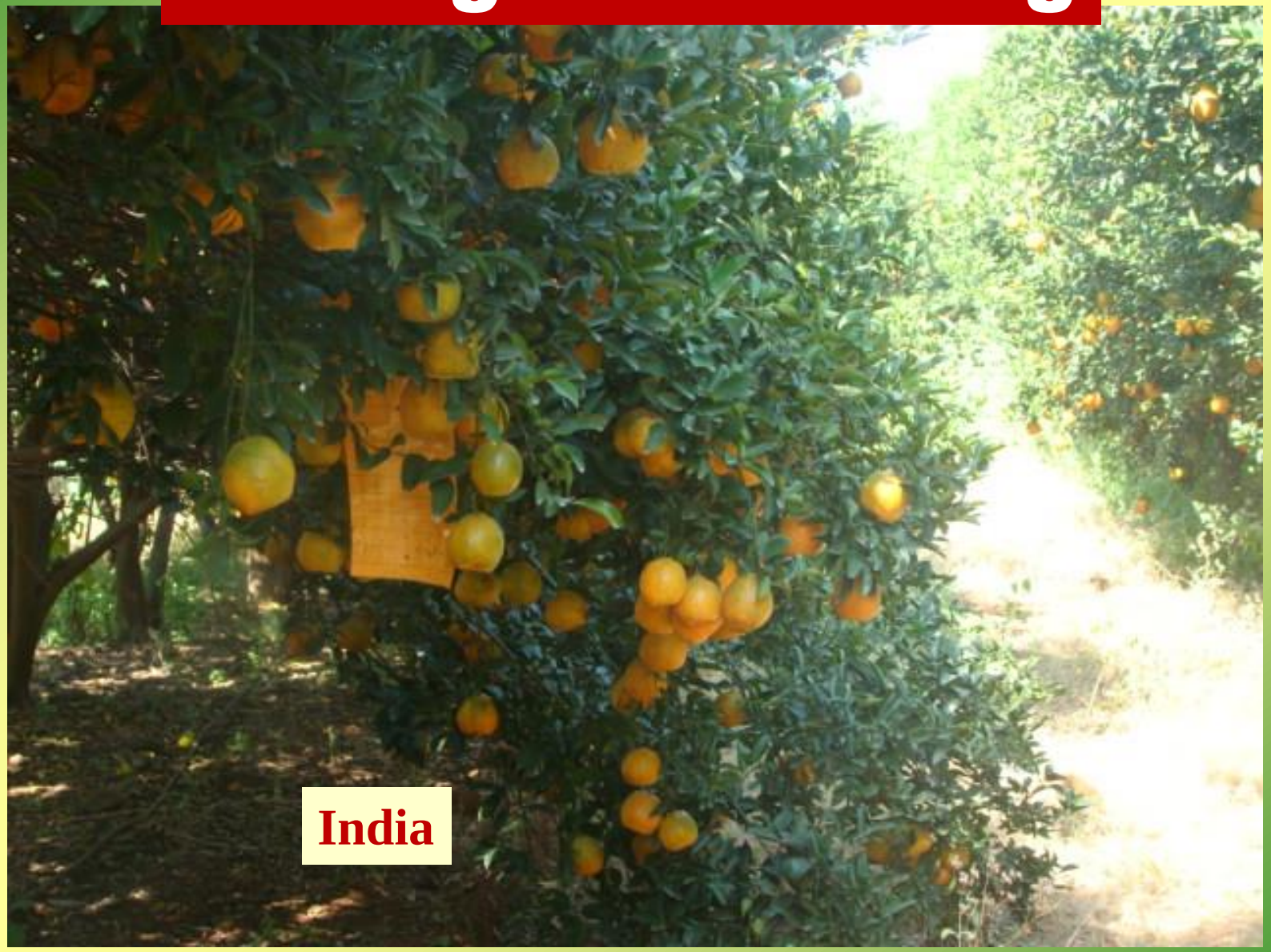
After Pruning

Fruiting after Pruning

India

Fruiting after Pruning

Fruiting after Pruning



Staking is required without pruning

Staking is not required after pruning

India

Site specific nutrient management

- Soil testing for every year
- Leaf and tissue analysis for every year
- Site specific nutrient management system
- Application of nutrient through drip
- Use of liquid fertilizers

Fertilizer application for New / young plants Spacing 6X3m

Age	Urea in gram per ha at every four day(g)	Interval of fertigation	Time of fertigation	Total quantity of Urea required(Kg)
1	1932	4 day	Jan-May, Sept-Dec	130
2	3865	4 day	Jan-May, Sept-Dec	260
3	5798	4 day	Jan-May, Sept-Dec	392
4	7730	4 day	Jan-May, Sept-Dec	522

Fertilizer application for New / young plants Spacing 6X3m

Age	SSP per ha at every 45 days (Kg)	Interval of fertigation	Time of fertigation	Total quantity of SSP required (Kg)
1	31.25	45 day	Jan-May, Sept-Dec	187.6
2	62.50	45day	Jan-May, Sept-Dec	375.2
3	93.75	45day	Jan-May, Sept-Dec	562.8
4	125.00	45 day	Jan-May, Sept-Dec	750.4

Fertilizer application for New / young plants Spacing 6X3m

Age	MOP per ha at every 45 days (Kg)	Interval of fertigation	Time of fertigation	Total quantity of MOP required(Kg)
1	16.66	45 day	Jan-May, Sept-Dec	100
2	33.33	45day	Jan-May, Sept-Dec	200
3	49.98	45day	Jan-May, Sept-Dec	300
4	66.64	45 day	Jan-May, Sept-Dec	400

Fertilizer application for bearing tree tree

Sr. No	Quarter	Stage	Duration	Urea (kg/ha)	SSP (kg/ha)	MOP (kg/ha)
1	1st quarter	Blossom	40	135.9	234.4	104.2
2	2nd quarter	Fruit set	20	135.9	234.4	104.2
3	3rd quarter	Fruit growth stage -1	50	190.2	156.3	145.8
4	4th quarter	Fruit growth stage -2	20	81.5	156.3	62.5
		Total	130	543.5	781.3	416.7
		No. of bag		10.9	15.6	8.3

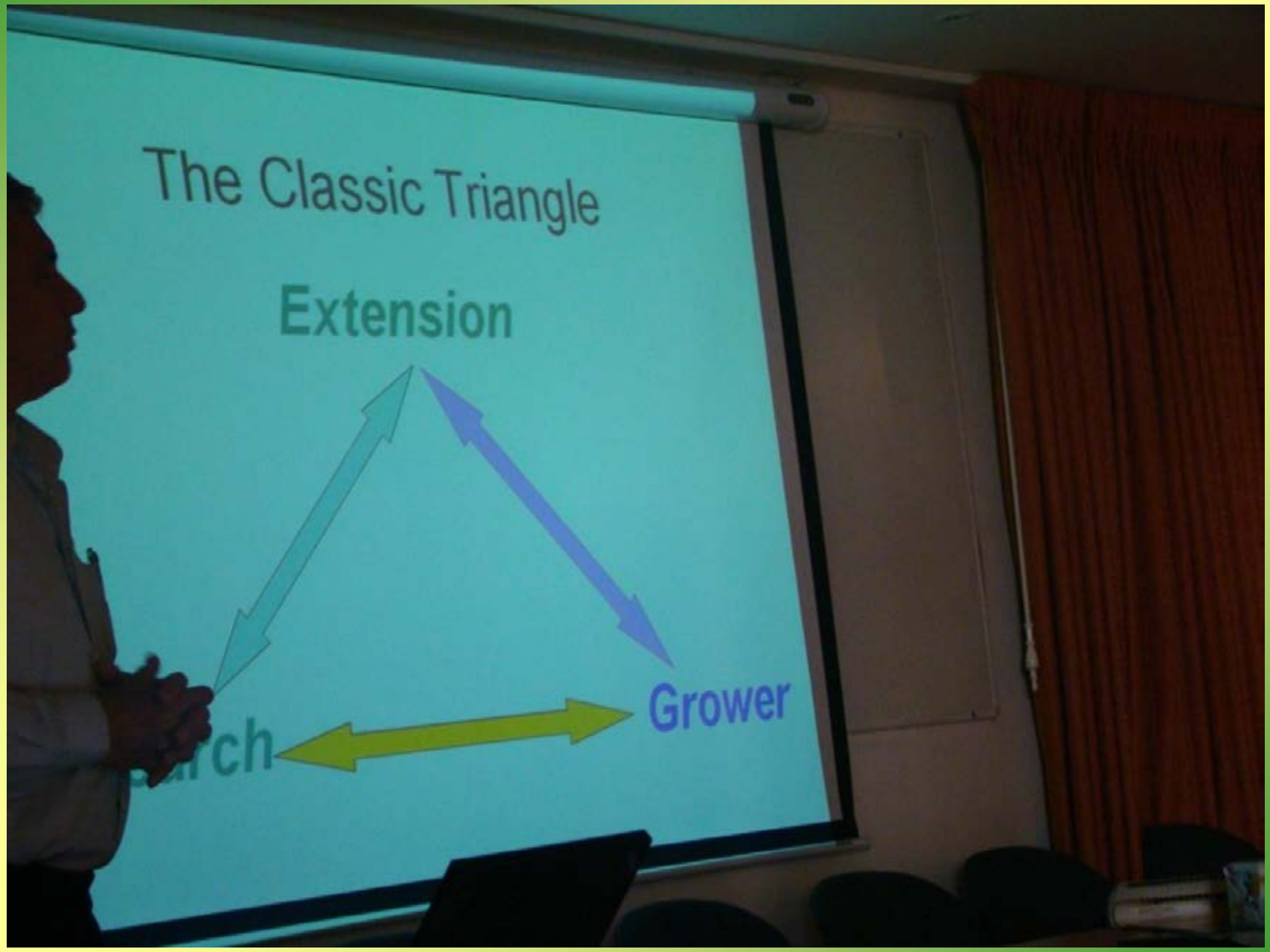
Note: Urea may give through drip and SSP and MOP through soil application manually as per quarter.

Site specific disease and pest management

- Very good linkages between farmers, extension service and research
- Regular surveillance for different pest and disease monitor through citrus extension worker
- Management of pest and disease as per recommendation of citrus extension workers.

Proper post harvest management

Proper post harvest management


The Classic Triangle
Extension
Grower

Thank you