

MASTER KEY FOR TECHNOLOGICAL PACKAGE OF PRACTICES

APPENDIX 3b Cont'd

NOTATIONS: X = not recommended    0 = optional    ✓ = recommended    ✓✓ = highly recommended

APPROPRIATE METHODOLOGY FOR VARYING SIZES OF PEANUT ENTERPRISE

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Items and Remarks

Details of operational alternatives

Increasing importance of layouts for mechanical efficiency.

What To Do	How To Do	Small Farm	Medium Farm	Large Farm
		Family Labour Intensive	Increased Mechanisation Hired Labour	Fully Mechanised Capital Intensive Minimum Labour
<p>A. <u>Seed Production</u> For self-reliance</p> <p><u>N.B.</u> : Proposed growers are to acquire seed in February</p>	1. Separate nursery production	X	X	✓✓
	2. Selection of plants from most vigour as section of commercial area of planting	✓	✓✓	✓✓
	3. Selection of large whole and full nuts (1) By hand (b) By grader	✓✓ X	✓✓ 0	X ✓✓
	4. Separate and special drying of choice nuts.	✓✓	✓✓	✓✓
	5. Pesticidal treatment of whole nuts	X	0	✓
	6. Storage of choice nuts in cool and dry secure place separate from commercial storage.	0	✓	✓✓
	7. <u>Shelling</u> (a) By hand (b) By machine	✓✓ X	0 ✓	X ✓✓

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Final selection use only medium and large kernels.	8. Rejection of all small shrivelled mouldy or discolored kernels. (a) By hand (b) By machine with an electric eye	// X	// O	O //
Improved performance of seeder	9. Sizing separate medium from large kernels	X	O	//
	10. Orthocide treatment of kernels	X	O	//
B. <u>Land Preparation</u> Be early and thorough a good fine tilth and clean smooth surface. Take advantage of solar energy for soil aggregation.	1. <u>Clean Up</u> (a) Cutlass and Burning (b) Bush Cutter 2. <u>Tillage</u> (a) Forking, Hoeing, Raking (b) Ploughing, Harrowing, Levelling (c) Walking Tractor (d) Large Tractor	// X  //  O X	// O  X  // O	X //  X  X //
	3. <u>Fertility Maintenance</u> Broadcast spreader	X	X	O
Solar Sterilization	4. Preplant pesticidal treatment of soil	X	X	X
C. <u>Crop Establishment</u> Plant in moist soil. Vary depth of seed with soil type and moisture condition. Fertilizer must be about 2 inches below seed to avoid burning. Simultaneous placement	1. <u>Opening of Furrows</u> Hand placement of fertilizer and varying (a) By hoe (b) By wheel Furrow (c) By Walking Tractor	// // X	X O //	X X X

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<p>of fertilizer and seed. High plant populations 90 - 130,000, machine speed 2-4 m.p.h. Vertical seed plate preferred to horizontal</p>	<p>2. <u>Seeders</u> (a) Hand operated (b) Tractor operated fitted with spider wheels.</p>	<p>X X</p>	<p>// X</p>	<p>X //</p>
<p>D. <u>Plant Protection</u> Farm sanitation: prevent weed seeding in surroundings.</p>	<p>1. <u>Weed Control</u> Pre-emergence herbicide applications (a) Knapsack with fan jets (b) Boomsprayer</p>	<p>X X</p>	<p>// X</p>	<p>// //</p>
<p>Note simultaneous moulding and weeding to be carried out prior to irri- gation. No culti- vation after closing of rows</p> <p>Always weed free conditions</p>	<p>2. <u>Interrow Cultivation</u> (a) Hoe (b) Wheel hoe and furrow (c) Walking tractor with cultivator</p> <p>(d) Tractor fitted with spider wheels, cultivator sweep.</p>	<p>// // X</p> <p>X</p>	<p>X // //</p> <p>X</p>	<p>X X X</p> <p>//</p>
<p>Preventative measures start 2 weeks after ger- mination; suspend spraying 1 month before scheduled harvest</p>	<p>1. <u>Insect and Disease Control</u> Cocktail application Insecticide/Fungicide / Sticker (a) Knapsack with cone jets</p>	<p>//</p>	<p>//</p>	<p>0</p>

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	(b) Motorblower (c) Poon sprayer fitted with (drop nozzles) Tractor with spider wheels	X X	✓✓ X	✓✓
	2. Rat Bait			
E. <u>Harvesting</u> Judging maturity 70-80% pods are large (under dry conditions) Interior of shells are speckled.	1. <u>Lifting trials</u> - increased frequency.	✓✓	✓✓	✓✓
	2. <u>Uprooting</u> (a) By hand (b) Forking (c) Machine digger	✓✓ ✓✓ X	○ ○ ✓	X X ✓✓
Green Harvesting reduces thief and aflatoxin damage. Omit wind rowing.	3. Wind rowing and stacking	X	X	X
	4. Simultaneous hand collection and (a) hand picking (b) machine threshing (c) portable machine threshing	✓✓ X X	✓✓ ✓✓ X	X ✓✓ ✓✓
	5. Gleaning	✓✓	✓	X
F. <u>Post Harvest Care</u> Exposure for 4 days bright sunshine. Avoid wetting.	1. <u>Sun drying</u> (a) Removable tarpaulin (b) Permanent barbecue (c) Artificial dryers (solar preferred)	✓✓ ✓✓ X	○ ✓✓ X	○ ✓✓ ✓✓
	2. <u>Cleaning and Sorting</u> (a) By hand and wooden rake (b) By machine	X	X	

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G. Marketing	3. <u>Storage</u> (a) Well ventilated, secure area. Allow 1 cu. ft. per 15 lbs of nuts (0.03m <sup>3</sup> per 6.75 kg)			
	1. Onion bags	✓✓	✓✓	✓✓
	2. Store separately from chemicals and other materials	✓✓	✓✓	✓✓
	1. Quick disposal to avoid theft and spoilage	✓✓	✓✓	✓✓