

Horticulture

Sl.No	Problem Identified	Specific farming situation for which technology is developed	Crop/ Animals etc	Breed/Variety	Specific Technology	Yield
1	Propagation of Assam lemon	Sub tropical condition	Lemon	Assam lemon	1) Treatment-10% IBA 2. Mist propagation May-June second fortnight 3. Shade net house can be used from June 2 nd fortnight to end of August	Survival of cuttings-88-92% compared to 45-50% in open condition
2	Low yield of turmeric	Sub tropical condition	Turmeric (<i>Curcuma longa</i>)	Megha turmeric-1	Standard agro techniques followed in the terraced land with spacing of 50 x 20 cm ²	Demonstration plot yield-65-70t/ha/yr compared to yield potential of 30t/ha/yr reported during release of the variety.
3	Banana production	Sub tropical condition	Banana (<i>Musa paradisiaca</i>)	Jahajee	i) Amongst 32 genotypes, Jahajee was found most suitable for foothills. ii) Use of transparent and blue colored polythene cover on bunches reduced maturity by 21 days. iii) DDVP (0.08%) suitable to control banana skipper. iv) Stem weevil peak population in August. Control measures could be applied during August	Yield increased by 17.6 – 23.4%
4	Passion fruit orchard decline-drying and dying	Sub-temperate region (above 1500 msl)	Passion fruit (<i>Passiflora edulis</i>)	Purple & local	i) Collar region rotting – scrapping the infected portion with knife & applying Bordeaux paste ii)Field phyto sanitation, removal	18.5 t/ha

					and burning of dead & leaves iii) For the control of scale insects/leaf hopper/mealy bug/stem girdler, clean cultivation followed by spray with Monocrotophos @ 1ml/wt of water or phorate @ 50 g/vine. iv) Popularization of Kavery variety with yield potential of 20 t/ha.	
5	Round the year cultivation for subsistence of the rural folk	Foothills of Nagaland	Various vegetables and fruit crops	Local races could be cultivated	Homestead garden/kitchen garden	Rs.6, 000 per year additional income could be earned
6	Less profit during peak season/unavailability of pineapple in off-season	Rainfed	Pineapple	Queen	Production technology for year round production of pineapple (introduction of chemicals (Staccering of pineapple by chemicals)	Flowers 30 days before
7	a) Less production b) Irrational use of nutrients	Rainfed	Banana, Cabbage	Dwarf Cavendish, BC-76	Optimum spacing (1.5m x 1.5m) Integrated nutrient management in cabbage	131.5t/ha, 51.2t/ha
8	Low shelf life of vegetables and fruits	-----	Vegetables and fruits	Zero Energy Cool Chambers	Zero Energy Cool Chambers	None
9	Loss of land for production in MPTS	Rainfed	Pineapple Turmeric Black Pepper	HYV, Local	Growing pineapple, turmeric, black pepper 3-tier system	Upto 12.59t/ha Upto 2.77t/ha 107.9g/plant (dry)
10	Poor quality planting material	None	Citrus	Khasi Mandarin	i. Production of disease free quality planting material through tissue culture ii. Rapid multiplication under polyhouse iii. Soft wood grafting of Khasi Mandarin	None
11	Poor quality planting	None	Peach	TA-170, Shan-a-Punjab,	Propagation through tongue grafting	>90% success

	material			Flordasun		during Nov. to Dec.
12	Non-availability of high yielding peach varieties for mid hills	Mid hills (300-1000m)	Peach	TA-170, Shan-e-Punjab, Flordasun	Low chilling varieties	20-24kg/tree
13	Poor quality of planting material	None	Guava	Allahabad Safeda, H-7	Patch budding	> 80% success in Feb. to March
14	Improvement of fruit quality	None	Guava	Allahabad Safeda, H-7	Improved cultivars having high TSS	30-34kg/tree
15	Identification of suitable strawberry varieties for mid hills	Mid hills(300-1000m)	Strawberry	Camarosa, Ofra, Chandler and Sweet Charlie	Day neutral varieties	180-250g/plant
16	Non-availability of suitable variety	Hilly areas	Gladiolus	Pusa Jyotsana, Candyman, American Beauty, White Prosperity	Quality spikes with large florets with more numbers (>15 florets/spike)	1.2 lakhs spikes/ha
17	Non-availability of planting materials	Hilly areas	Gladiolus	Pusa Jyotsana, Candyman, American Beauty, White Prosperity	Multiplication of gladiolus corms by using plant growth regulators	>3 lakhs corms/ha
18	Non-availability of suitable variety for poly house conditions	Hilly areas	Gerbera	Sangaria, Piton, Pink Elegance	High quality flowers (Large flowers, long and sturdy flower stalk with good vase life)	>36 flowers/plant/year (9 plants/m ²)
19	Non-availability of suitable variety	Hilly areas	Gerbera	Alesmera, Black Heart, Divas Memory, RCGH-117, RCGH-113	High quality flowers (Large flowers, long and sturdy flower stalk with good vase life)	>30 flowers/plant/yr (9 plants/m ²)