

CROP IMPROVEMENT

Sl.No	Problem Identified	Specific farming situation for which technology is developed	Crop/ Animals etc	Breed/Variety	Specific Technology	Yield
1	Development of wilt resistant varieties	NEH Region	Brinjal	RCMBM-1 & Sel-5	Resistant to wilt with high yield	40t/ha
2	Development of <i>Phytophthora</i> resistant varieties	High rainfall areas	<i>Colocasia</i>	ML-1, ML-2, ML-9	Moderately resistant to <i>Phytophthora</i> with high yield and low oxalate content	>20t/ha
3	Low gingerol content	Mid hills	Ginger	Meghalaya Local	High gingerol content as compared to other varieties	1.72%
4	High yielding variety	Mid hills	French bean	RCMFB-1	High yield with tender pods	115-120qt/ha
5	Fruit availability for short period(May to July)	Mid hills	Passion fruit	Purple and yellow type	Increased fruit availability from May to Oct. with the introduction of yellow type	70-100q/ha
6	Non availability of quality 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

7	Non availability of quality planting material	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)	> 15 flowers/plant/year (9 plants/m ²)s
8	Long duration varieties are susceptible to late moisture stress hence tolerant varieties is needed	Low and mid hills of Sikkim(upto 2000m amsl) & organic condition	Yellow Sarson	(YSC 68 x SS 3)SS 3 (YSP 842xSS2)SS 2	Three way cross derivatives, tolerant to late moisture stress. Ready for MLT	09.80 10.33
9	High yielding varieties suitable for Sikkim is needed	Low and mid hills of Sikkim(upto 2000m amsl) & organic condition	Brown Sarson	BSC 38 x Pusa Kalyani	Advanced generation strain, ready for MLT	12.56
10	Early maturing toria that can fit well in intensive cropping system is needed	Low and mid hills of Sikkim(upto 2000m amsl) & organic condition	Toria	SKM Toria 1-2-5	Advanced generation strain, ready for MLT	07.58
11	Rai saag with	Low and mid	Rai Saag	SRS-2	A selection from Kalimpong	Leaf yield

	broad leaf and high biomass suitable for organic farming is needed	hills of Sikkim(upto 2000m amsl) & organic condition			local. High yielding rai saag	145g/plants
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