Sr. No.	Crop	Name of the Variety/Hybrid	Variety/ Hybrid	Sponsoring organization	Recommended for the states	Special Features
CEREALS						
1.	Rice	CR Dhan 416 (IET 30201)	Variety	ICAR-National Rice Research Institute, Cuttack, Odisha	West Bengal, Maharashtra, Gujarat	Suitable for **coastal saline areas**,yield 48.97 q/ha, maturity 125-130 days, moderately resistant to brown spot, neck blast, sheath rot, rice tungro disease, glume discoloration, resistant to brown plant hopper, grasshopper and stem borer
2.	Rice	CR DHAN 810 (IET 30409)	Variety	ICAR-National Rice Research Institute, Cuttack, Odisha	Odisha, West Bengal, Assam	Suitable for **rainfed shallow low land**, yield 42.38 q/ha, maturity 150 days, submergence tolerance for 14 days at early stage, moderately resistant to brown spot disease, moderately resistant to leaf folder and stem borer (dead heart)
3.	Rice	CR Dhan 108 (IET29 052)	Variety	ICAR-National Rice Research Institute, Cuttack, Odisha	Odisha, Bihar	Suitable for early **direct seeded rainfed condition**, yield 34.46 q/ha, maturity 110-114 days, moderately resistance to leaf blast, neck blast, sheath blight, plant hopper, moderately tolerant to drought
4.	Rice	CSR 101 (IET-30827)	Variety	ICAR-Central Soil Salinity Research Institute,	Uttar Pradesh, Haryana, Tamil Nadu,	Suitable for irrigated **alkaline/saline stress areas,** yield of 35.15 q/ha (alkaline stress); 39.33 q/ha (saline stress) and 55.88 q/ha (normal condition), maturity 125-

				Karnal, Haryana	Karnataka	130 days, MAS derived NIL of Pusa 44 (possessing two genes for bacterial blight resistance xa13 and Xa21 and *saltol* QTL for salt tolerance), resistant to salinity tolerance and bacterial blight
5.	Rice	Swarna PurviDhan 5 IET 29036 (RCPR 68-IR83929-B-B-291-2-1-1-2)	Open Pollinated Variety	ICAR-Research Complex for Eastern Region, Patna, Bihar	Bihar, West Bengal, Jharkhand	Suitable for **direct seeded aerobic condition in drought** **prone rainfed** as well as water limiting areas during *Kharif*, yield (normal condition - 43.69 q/ha, under moderate drought condition - 29.02 q/ha), maturity early (110-115 days), contains high amount of Zinc (25.5 ppm) and Iron (13.1 ppm), resistant to neck blast and stem rot and moderate resistant to leaf blast, brown spot, and sheath rot, tolerant to major pests like stem borer (dead heart &white ears head), gall midge, leaf folder, gall midge, rice thrip
6.	Rice	DRR Dhan 73 (IET 30242)	Open pollinated Variety	ICAR – Indian Institute of Rice Research, Rajendranagar, Hyderabad	Karnataka, Odisha and Telangana	Suitable for irrigated and **rainfed shallow low land areas with low soil P for** **both *Kharif* and *Rabi*,** yield 60 q/ ha (under normal conditions; 60 kg/ha of P i.e. recommended dose), 40 q/ ha (under low P; 40 kg/ha of P) and 40.0 q/ ha (under low Phosphorus; 0 kg/ha of P), maturity 120-125 days, moderately resistant toleafblast

7.	Rice	DRR Dhan 74 (IET 30252)	Open pollinated Variety	ICAR-Indian Institute of Rice Research, Rajendranagar, Hyderabad	Karnataka, Maharashtra, Telangana, Jharkhand, and regions with P deficit soil of India	Suitable for irrigated and **rainfed shallow low land areas with low soil P for both *Kharif* and *Rabi***, yield 70 q/ ha (under normal conditions; 60 kg/ha of P i.e. recommended dose), 44 q/ ha (under low P; 40 kg/ha of P) and 45.6 q/ ha (under low Phosphorus; 0 kg/ha of P), maturity 130-135 days, moderately tolerant to leaf blast, neck blast, sheath rot, plant hoppers
8.	Rice	DRR Dhan 78 (IET 30240)	Open pollinated Variety	ICAR – Indian Institute of Rice Research, Rajendranagar, Hyderabad	Karnataka and Telangana	Suitable for irrigated and rainfed shallow low land areas with **low soil P for both***Kharif* and *Rabi*, yield 58 q/ ha (under normal conditions; 60 kg/ha of P i.e. recommended dose), 46 q/ ha (under low P; 40 kg/ha of P) and 40.0 q/ ha (under low Phosphorus; 0 kg/ha of P), maturity 120-125 days, moderately resistant to leaf blast and plant hoppers
9.	Rice	KKL (R) 4 (IET 30697) (KR 19011)	Open pollinated Variety	ICAR-AICRP on Rice, Pandit Jawaharlal Nehru College of Agriculture and Research Institute Karaikal, Puducherry (U.T.)	Tamil Nadu, Andhra Pradesh, Telangana and Puducherry	Suitable for **submergence stress conditions**, yield 38q/ha under stress situations and 56 q/ha under normal conditions, maturity mid-early (120-125 days), MASderivedNIL entryofADT39*4/SwarnaSub1introgressedwithQTL*Sub1*for submergence tolerance, moderately resistant to leaf blast

10.	Wheat	Pusa Gehun Sharbati (HI 1665)	Open pollinated Variety	ICAR-Indian Agricultural Research Institute Regional Station, Indore, Madhya Pradesh	Maharashtra, Karnataka and Plains of Tamil Nadu	Suitable for timely sown, **restricted irrigated condition**, yield 33.0 q/ha, maturity 110 days, tolerant to heat and drought (heat sensitivity index 0.98 and **drought sensitivity index 0.91), excellent grain quality, bio-fortified with higher grain zinc content (40.0 ppm), resistant to leaf and stem rust**
11.	Durum Wheat	Pusa Gehun Gaurav (HI-8840)	Open Pollinated Variety	Maharashtra, Karnataka and plains of Tamil Nadu	ICAR-Indian Agricultural Research Institute Regional Station, Indore-Madhya Pradesh	Suitable for irrigated conditions durum wheat variety, average grain yield 30.2 q/ha, **terminal heat tolerant,** resistance to stem and leaf rusts, biofortified durum wheat with **higher zinc(41.1 ppm) and iron (38.5 ppm) and protein content (~12%)**
12.	Barley	DWRB-219	Open Pollinated Variety	Punjab, Haryana, Delhi, Rajasthan, (excluding Kota and Udaipur division), Western Uttar Pradesh (except Jhansi division), Jammu and Kathua district of Jammu and Kashmir, Paonta	ICAR-IIWBR (Indian Institute of Wheat & Barley Research) Karnal-Haryana	Irrigated/ limited irrigationcondition of NWPZ, **average yield**54.49 q/ha, **Maturity** 132 days, Resistant to yellow rustand moderately resistant for leaf rustdisease of barley, : Tolerant to lodging, **Protein content** : 11.4%

				Valley and Una district of Himachal Pradesh and tarai region of Uttarakhand		
13.	Maize	Pusa Popcorn Hybrid – 1 (APCH 2)	Hybrid	ICAR – Indian Agricultural Research Institute, New Delhi	Punjab, Haryana, Delhi, Uttarakhand (Plain), Uttar Pradesh (Western region), Maharashtra, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu	Suitable for irrigated *Rabi* ecology, yield: 46.04 q/ha (NWPZ), 47.17 q/ha (PZ), maturity 120.2 days (NWPZ), 102.1 days (PZ), **higher popping percentage (97.3% in NWPZ and 98.3% in PZ**) and popping expansion ratio (18), resistant to moderately resistant to charcoal rot
14.	Maize	Pusa Bio fortified Maize Hybrid – 4 (APH4)	Hybrid	ICAR – Indian Agricultural Research Institute, New Delhi	Punjab, Haryana, Delhi, Uttarakhand (Plain),Uttar Pradesh (Western region), Maharashtra, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Gujarat,	Suitable for *Kharif* season, yield 84.33 q/ha (NWPZ), 71.13 q/ha (PZ), 56.58 q/ha (CWZ), maturity 79.8 days (NWPZ), 93.9 days (PZ), 86.4 days (CWZ), rich in **provitamin-A (6.7 ppm), lysine (3.47%) and tryptophan (0.78%), resistant to moderately resistant to MLB, BLSB, TLB**

					Madhya Pradesh, Chhattisgarh, Rajasthan	
15.	Maize	Pusa HM4 Male Sterile Baby Corn-2 (ABS H4-2)	Hybrid	ICAR-Indian Agricultural Research Institute New Delhi	Bihar, Jharkhand, Odisha, Uttar Pradesh (Eastern region), West Bengal, Maharashtra, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Gujarat, Madhya Pradesh, Chhattisgarh, Rajasthan	Suitable for irrigated conditions during *Kharif* season, yield 19.56 q/ha (NEPZ), 14.07 q/ha (PZ) & 16.03 q/ha (CWZ), maturity 53 days, **100% male sterility**, no anther exertion, resistant to moderately resistant to charcoal rot
16.	Maize	IMH 230 IMHSB 20R-6	Single cross Hybrid	ICAR-Indian Institute of Maize Research, Ludhiana, Punjab	NEPZ viz. Eastern Uttar Pradesh, Bihar, Jharkhand, Orissa, West Bengal.	Suitable for irrigated ***Rabi* season, high yield 92.36 q/ha,** maturity 145.2 days, moderately resistant to biotic stresses, MLB, ChR and TLB, moderately tolerant to *Chilopartellus*, fall armyworm
17.	Maize	IMH 231 IMHS	Single cross	ICAR-Indian Institute of Maize	NEPZ viz. Eastern Uttar	Suitable for *Kharif* irrigated condition, high yield 70.28 q/ha, maturity 90

		B 20K-10	Hybrid	Research, Ludhiana, Punjab	Pradesh, Bihar, Jharkhand, Orissa, West Bengal, Assam	days, **moderately tolerant to water logging, tolerant to lodging,** moderately resistant to TLB, MLB, resistant to FSR, moderately tolerant *Chilopartellus*, fall armyworm
18.	Maize	Pusa Popcorn Hybrid – 2 (APCH 3)	Hybrid	ICAR – Indian Agricultural Research Institute, New Delhi	Maharashtra, Karnataka, Andhra Pradesh, Telangana and Tamil Nadu	Suitable for irrigated ***Rabi* season, yield 45.13 q/ha,** maturity 102.5 days, moderately Resistant to TLB
19.	Sorghum	DSH-6 (CSH-49) (SPH-1943)		ICAR-AICRP on Sorghum and Small millets, University of Agricultural Sciences, Dharwad, Karnataka	Tamil Nadu, Karnataka, Telangana,Gujarat, Rajasthan	Suitable for **rainfed ecology *Kharif* season**, grain yield 38.77 q/ha, fodder yield 116 q/ha, maturity early (100-105 days), non-lodging, fertilizer responsive, good stay green trait, moderately tolerant to grain mold disease, moderately susceptible to shoot fly
20.	Pearl millet	MH 2417 (Pusa-1801)	Hybrid	NCT of Delhi	ICAR - Indian Agricultural Research Institute, New Delhi	It is a **dual purpose** hybrid suitable for *kharif* cultivation under irrigated and **rainfed conditions**; high grain yield 33.34 q/ha and dry fodder yield 175 q/ha. It has high **iron (70 ppm) and zinc 57 ppm** content; resistant to all five important diseases of pearl millet, *viz* downy mildew, foliar blast, rust, smut and ergot.

21.	Finger millet	VL Mandua- 402	Open Pollinated Variety	ICAR-Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora, Uttarakhand	Uttarakhand	Suitable for **rainfed situations**, average seed yield 2261 kg/ha, matures in 111 days, higher calcium (368 mg/100g) in comparison to the check VL *Mandua* 324 (294 mg/100g) and VL 376 (318.9 mg/100g)
22.	Proso millet	CPRMV-1 (DHPM- 60-4/PMV 466)	Open Pollinated Variety	ICAR-AICRP on Sorghum and Small millets, University of Agricultural Sciences, Dharwad, Karnataka	Karnataka and Tamil Nadu	Suitable for **rainfed *Kharif* season**, yield 24-26 q/ha, maturity 70-74 days, resistant to brown spot, leaf blast, leaf blight, moderately resistant to banded blight, tolerant to shootfly
23.	Barnyard millet	VL Madira - 254	Open Pollinated Variety	ICAR-Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora, Uttarakhand	Uttarakhand	Suitable for **rainfed situations**, average yield 1,719 kg/ha, matures in 101 days
PULSES						
24.	Chickpea	Pant Gram 10 (PG 265)	Open Pollinated Variety	ICAR-AICRP on Pulses, G.B. Pant University of Agricultur	Uttar Pradesh, Bihar, Jharkhand, West Bengal	Suitable for *desi* timely sown **rainfed / irrigated** conditions of *Rabi* season in NEPZ, yield 17.79 q/ha, maturity 130 days, moderately

				e and Technology, Pantnagar, Uttarakhand	and Assam	resistant to wilt, collar rot, stunt, tolerant to pod borer
25.	Chickpea	Nandyal Gram 1267 (NBeG 1267)	Variety	ICAR-AICRP on Pulses, Main Centre, RARS, Nandyal, Acharya N G Ranga Agricultural University, Andhra Pradesh	South zone (Andhra Pradesh, Telangana, Karnataka and Tamil Nadu)	Suitable for **mechanical harvesting in rainfed** as *desi* variety during *Rabi*, could also be grown with 1-2 protected irrigations in normal fertility condition, yield of 20.95 q/ha, maturity early (90-95 days), seed protein 15.96%
26.	Pigeon pea	Phule Pallavi (Phule Tur-12-19-2)	Open Pollinated Variety	ICAR-AICRP on Pulses, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra	Maharashtra, Gujarat, Madhya Pradesh and Chhattisgarh during Kharif	Suitable for normal sown **rainfed/irrigated areas** of Cenrtal Zone in *Kharif* season, yield 21.45 q/ha, mid-early 157-159 days, moderately resistant wilt and sterility mosaic disease
27.	Pigeonpea	NAAM-88	Variety	ICAR-AICRP on Pulses, University of Agricultural Sciences, Raichur, Karnataka	Karnataka, Telangana, Andhra Pradesh, Tamil Nadu	Suitable for **rainfed/irrigated areas in *Kharif* season**, yield 14.90 q/ha, maturity early (142 days), moderately resistant to wilt
28.	Lentil	Pant Lentil 14 (PL 320)	Open Pollinated	ICAR-AICRP on Pulses, G.B. Pant	Punjab, Haryana, Delhi, North-	Suitable for timely sown **rainfed / irrigated** conditions of *Rabi* season in NWPZ,

			Variety	University of Agriculture and Technology, Pantnagar, Uttarakhand	West & Central Rajasthan, Western Uttar Pradesh, Plains of Uttarakhand and and Jammu and Kashmir	yield 15.55 q/ha, maturity 128 days, high seed **protein content (25.72%),** resistant to rust, *Stemplylium* blight, moderately resistant to wilt, *Ascochyta* blight, moderately resistant to pod borer, aphid
29.	Lentil	RKL 20-26(D) Kota Masoor 6	Variety	ICAR-AICRP on Pulses, Agricultural University, Kota, Rajasthan	North Western Plain Zone and Central Zone of India	Suitable for **rainfed normal sown conditions** in *Rabi* season, yield 17.37 q/ha in NWPZ, 16.0 q/ha in CZ, maturity 125 days (NWPZ), 111 days (CZ), protein (21.07 %), moderately resistant to rust and wilt
30.	Lentil	PSL-17	Open Pollinated Variety	National Capital Region of Delhi	Division of Genetics, ICAR-Indian Agricultural Research Institute, New Delhi	**Suitable for salinity conditions,** seed yield 12.95 q/ha, maturity 125 days, **iron 67.0 ppm, zinc 41 ppm,**protein 28.8%, moderately resistant to wilt and rust
31.	Field pea	Pant Pea 484	Open Pollinated Variety	ICAR-AICRP on Pulses, G.B. Pant University of Agriculture and Technology, Pantnagar,	Punjab, Haryana, Delhi, North-West & Central Rajasthan, Western Uttar Pradesh, Plains of	Suitable for timely sown **rainfed / irrigated** conditions of *Rabi* season in NWPZ, yield 23.33 q/ha, maturity 120 days, protein content 26.17%, resistant to *Ascochyta* blight, moderately resistant to rust, powdery mildew,

				Uttarakhand	Uttarakhand and Jammu and Kashmir	moderately resistant to aphid, pod borer
32.	Faba bean	HFB-3 (HB 14-21)	Variety	ICAR-AICRP on Pulses, CCS Haryana Agricultural University, Hisar, Haryana	Northern plain zone of the country (Haryana, Punjab, Delhi) & Central Zone (Uttar Pradesh and Chhattisgarh).	Suitable for irrigated, timely sown *Rabi* season in high fertility conditions, yield 23.65 q/ha, medium maturity (129 – 137 days), seed **protein 28.05%,** moderately resistant to *Alternaria* leaf blight, root rot
33.	Mungbean	Lam Pesara 610 (LGG 610)	Variety	ICAR-AICRP on Pulses, RARS, Lam, Guntur, Acharya N.G. Ranga Agricultural University. Andhra Pradesh	South zone states, Andhra Pradesh, Telangana, Tamilnadu, Karnataka, Kerala and Odisha during rabi season for both rice fallows and upland conditions	Suitable for **rice fallows and upland situations** during *Rabi* season for mechanical harvesting, yield 11.17 q/ha, maturity 74 days, protein (23.16%), resistant to mungbean yellow mosaic virus

34.	Mungbean	PMS-8	Open Pollinated Variety	National Capital Region of Delhi	Division of Genetics, ICAR-Indian Agricultural Research Institute, New Delhi	Suitable for **Salt affected conditions** [ECe 5.8-6.5 dS/m], Average seed yield 494.5 q/ha, Matures in 70 days
OILSEEDS						
35.	Safflower	ISF-123-sel-15	Variety	ICAR-Indian Institute of Oilseeds Research, Hyderabad, Telangana	Karnataka, Maharashtra, Andhra Pradesh, and Telangana	Suitable for **late sown rainfed condition**, yield 16.31 q/ha, maturity 127 days, oil content high (34.3%), resistant to *Fusarium* wilt, moderately tolerant to highly susceptible aphid infestations
36.	Safflower	ISF-300	Variety	ICAR-Indian Institute of Oilseeds Research, Hyderabad, Telangana	Maharashtra, Karnataka, Andhra Pradesh, Telangana, Madhya Pradesh, Chhattisgarh	Suitable **for timely sown rainfed/irrigated** condition, yield17.96 q/ha, maturity134 days, oil content 38.2%, **resistant to *Fusarium* wilt**
37.	Soybean	NRC 197		ICAR-Indian Institute of Soybean Research, Indore, Madhya Pradesh	Himachal Pradesh and Uttarakhand	Suitable for **rainfed *Kharif* season**, yield 16.24 q/ha, maturity 112.67 days, non-shattering, tolerant to lodging, resistant to insect-pest complex, resistant to stem fly, highly resistant to semilooper, moderately resistant to *Spodoptera litura*

38.	Soybean	NRC 149		ICAR-Indian Institute of Soybean Research, Indore, Madhya Pradesh	Punjab, Haryana, Delhi, North Eastern Plains of Uttar Pradesh, Plains of Uttarakh and and Eastern Bihar	Suitable for **rainfed *Kharif* season,** yield 24.0 q/ha, maturity 127 days, non-shattering, non-lodging, highly resistant to stemfly, defoliators, white fly, YMV, pod blight, *Rhizoctonia* aerial blight
39.	Groundnut	Girnar 6 (NRC GCS 637)		ICAR-Directorate of Groundnut Research, Junagadh, Gujarat	Recommended for Zone I (Rajasthan, Uttar Pradesh, Punjab states and Haryana) of India	Suitable for timely sown *Kharif* season, yield 30.30 q/ha, maturity123 days, oil content 51%, protein content 28%, moderately tolerant to **early and late seasons drought**, moderately resistant to early leaf spot, rust, *Alternaria* blight, collar rot, stem rot, dry root rot, less incidence of leaf hoppers, thrips, *Spodoptera*
40.	Groundnut	TCGS 1707 (ICAR KONARK) Spanish Bunch		ICAR-AICRP on Groundnut, Acharya N.G. Ranga Agricultural University, Tirupati, Andhra Pradesh	Odisha and West Bengal	Suitable for timely **sown rainfed/ irrigated *Kharif*,** yield 24.76 q/ha, maturity 110-115 days, oil content 49%, protein content29%, moderately resistant to foliar diseases (LLS and Rust), soil borne diseases (collar rot, stem rot and dry root rot), moderately resistant to sucking pests (LH and thrips)
41.	Sesame	Tanjila (CUMS-09A)	Open Pollinated	ICAR-AICRP on Oilseeds, Institute of Agricultur	West Bengal, Bihar, Odisha, Maharas	Suitable for irrigated, **summer crop with early or late sown condition,** seed yield 963 kg/ha - 1147.7 kg/ha, oil

			Variety	al Science, University of Calcutta, Kolkata, West Bengal	htra, Chhattisgarh, Telangana, Karnataka, Tamil Nadu and Kerala	yield 438.5 kg/ha - 558.0 kg/ha, oil content 46.17%, maturity 91days, high degree of resistance to diseases like root rot, phyllody and powdery mildew, no major insect pests are reported
FORAGE CROPS						
42.	Forage Pearl Millet	JPM 18-7 (Jawahar Pearl Millet 18-7)	Open Pollinated Variety	ICAR-AICRP on Forage Crops, Jawahar Lal Nehru Krishi Viswha Vidyalaya, Jabalpur, Madhya Pradesh	Rajasthan, Punjab, Haryana, Gujarat, Madhya Pradesh, Maharashtra, Uttar Pradesh, Chhattisgarh, Telangana, Andhra Pradesh, Tamil Nadu and Karnataka	Suitable for **rainfed/ irrigated** under normal fertility condition during rainy season, yield 440-480 q/ha (green fodder), maturity 120-130 days, moderately resistance to leaf blast, grasshopper, Pyrilla and leaf defoliators
43.	Berseem	Jawahar berseem 08-17 (JB 08-17)	Open Pollinated Variety	ICAR-AICRP on Forage Crops, Jawahar Lal Nehru Krishi Viswha Vidyalaya, Jabalpur, Madhya Pradesh	Madhya Pradesh, Maharashtra, Gujarat, Chhattisgarh and Uttar Pradesh	Suitable for irrigated **multi-cut** during winter season, yield 620-650 q/ha (green fodder), maturity 190-200 days, tolerance for leaf spot and blight

44.	Forage Multicut Oat	Him Palam Forage Oat-1 (PLP-24)	Open Pollinated Variety	ICAR-AICRP on Forage Crops, CSK Himachal Pradesh Krishi Viswhavidyalaya, Palampur, Himachal Pradesh	Himachal Pradesh, Jammu and Kashmir and Uttarakhand	Suitable for timely sown, normal fertility and irrigated condition, yield 260-300 q/ha (green fodder yield), maturity 180-185 days, **resistant to powdery mildew**
45.	Oat	Jawahar Oat 13-513 (JO-13-513)	Open Pollinated Variety	ICAR-AICRP on Forage Crops, Jawahar Lal Nehru Krishi Viswha Vidyalaya, Jabalpur, Madhya Pradesh	Punjab, Haryana, Uttar Pradesh, Uttarakhand, Odisha, Bihar, Jharkhand, Assam and Uttar Pradesh	Suitable for Oat growing areas of eastern and north-western zone, yield 225-250 q/ha (green fodder yield), maturity 135-145 days, moderately resistance to leaf blight
46.	Forage Maize	Pusa Forage Maize Hybrid-1 (AFH-7)	Hybrid	ICAR-Indian Agricultural Research Institute, New Delhi	Tarai region of Uttarakhand, Punjab, Haryana and Rajasthan	Suitable for irrigated, Kharif season, green fodder yield 413.1 q/ha, maturity 95-105 days, **higher acid detergent fiber (ADF) - 41.9%, neutral detergent fiber (NDF) - 62.5%, *In-Vitro* dry matter digestibility (IVDMD) - 56.4%, resistant to Maydis leaf blight (MLB),** moderately resistant to *Chilo partellus*
47.	Fodder Maize	HQPM 28	Hybrid	ICAR-AICRP on Forage Crops, CCSHaryana	All fodder growing areas of Central Zone	Suitable for Central Zone during K*harif*season, yield 427.6 q/ha (green fodder), 79.06 q/ha (dry matter), 20.9 q/ha (seed yield), 7.0 q/ha (crude protein),

				Agricultural University, Regional Research Station, Karnal, Haryana	(Uttar Pradesh (Bundelkhand region), Maharashtra, Madhya Pradesh, Chhattisgarh)	maturity 98 days, three-way**Quality Protein Maize (QPM) hybrid,** good for silage, resistant to *Maydis* leaf blight, BLSB and at par with checks for resistance against fall army worm
48.	Forage Sorghum	CSV 57F (SPV 2801) (UTFS 111)	Open Pollinated Variety	ICAR-AICRP on Forage Crops, G.B. Pant University of Agriculture & Technology, Pantnagar	Haryana, Punjab, Uttarakhand, Gujarat, Uttar Pradesh, Rajasthan and Delhi	Suitable for **rainfed *Kharif*,** yield - 435q/ha (green fodder); 139q/ha (dry fodder), maturity130-135 tolerant to major leaf disease viz. grey leaf spot, sooty stripe, *Anthracnose*, zonate leaf spot, tolerant to shoot fly, stem borer
SUGARCANE						
49.	Sugarcane	Karan 17 (Co 17018)	Variety	ICAR-Sugarcane Breeding Institute, Coimbatore, Tamil Nadu	North West Zone (Haryana, Punjab, western and central Uttar Pradesh, Rajasthan, Uttarakhand)	Suitable for irrigated timely to late sown season,yield914.8 q/ha, maturity 330-360 days, **sucrose18.38%, CCS 12.78%,** tolerant to salinity, resistant to moderately resistant to red rot, resistant to susceptible to smut, mostly resistant to moderately resistant to YLD, least susceptible to shoot borer, stalk borer and top borer
50.	Sugarcane	IKHSU-16 (CoLk 16202)	Open Pollinated Variety	ICAR-Indian Institute of Sugarcane Research,	Punjab, Haryana, Uttarakhand, Rajastha	Suitable for irrigated condition, yield 932 q/ha, **sucrose (%) 17.74, CCS 114.3 q/ha, maturity early** (10

				Lucknow, Uttar Pradesh	n, Central and Western Parts of Uttar Pradesh	months), **tolerant to drought,** moderately resistant to CF08 and CF13 of red rot pathogen, smut, wilt
51.	Sugarcane	IKHSU-17 (CoLk 16470)	Open Pollinated Variety	ICAR-Indian Institute of Sugarcane Research, Lucknow, Uttar Pradesh	Eastern Part of Uttar Pradesh, Bihar, Jharkhand, West Bengal and Assam	Suitable for irrigated condition, yield 825.0 q/ha, CCS yield 95. 9 q/ha, sucrose 17.37%, maturity 360 days**, excellent performance under waterlogged conditio**n, moderately resistant to red rot, smut, least susceptible to major insect-pests
52.	Sugarcane	CoPb 99 (CoPb 17215)	Open Pollinated Variety	ICAR-AICRP on Sugarcane, PAU Regional Research Station, Kapurthala, Punjab	Punjab, Haryana, Uttarakhand, Rajasthan, Central and Western Parts of Uttar Pradesh	Suitable for growing in medium and high fertile soil under irrigated subtropical climatic conditions during spring season, yield - CCS 112.7 q/ha, mean **cane yield 901.4 q/ha, sucrose 18.01%,** maturity – mid-late (12 months), moderately resistant / resistant to prevalent races of red rot, less susceptible towards early shoot borer, stalk borer and top borer
FIBRE CROPS						
53.	Cotton	CICR-H Bt Cotton 65 (ICAR-CICR 18 Bt)	Hybrid	ICAR-Central Institute of Cotton Research, Nagpur, Maharashtra	Central Zone	Suitable for **rainfed condition**, yield 15.47 q/ha, maturity 140-150 days, resistant to most of the diseases viz; bacterial blight, grey mildew, *Alternaria*, *Corynospora* leaf spot, *Myrothcieum*, tolerant to most of the pests

						viz; jassids, aphids, thrips, leaf hopper
54.	Cotton	CICR-H Bt Cotton 40 (ICAR - CICR-PKV 081 Bt)	Hybrid	ICAR-Central Institute of Cotton Research, Nagpur, Maharashtra	South Zone	Suitable for **rainfed condition**, yield 17.30 q/ha, maturity 140 to 150 days, resistant to jassids, thrips, whitefly, aphids, tolerant to bacterial leaf blight, *Alternaria* leaf blight, Gray mildew
55.	Cotton	Shalini (CNH 17395) (CICR-H Cotton 58)	Hybrid	ICAR-Central Institute for Cotton Research, Nagpur, Maharashtra	Madhya Pradesh, Maharashtra & Gujarat	Suitable for rainfed*Kharif* condition, yield 14.41 q/ha, maturity 160 to 165days, **brown linted naturally colour cotton suitable for handloom weaving**,tolerant to sucking pests, bollworms, resistant to disease free for *Alternaria* leaf spot, bacterial blight,*Corynespora* leaf spot in the Central Zone under rainfed conditions
56.	Cotton	CNH-18529 (CICR-H NC Cotton 64)	Hybrid	ICAR-Central Institute for Cotton Research, Nagpur, Maharashtra	Chhattisgarh,Gujarat, Madhya Pradesh and Maharashtra)	Suitable for **rainfed and irrigated conditions** of Central Zone, yield of 10.11 q/ha, maturity 160-165 days, tolerant to aphids, jassids, whitefly, thrips, *Heliothis armigera*, pink bollworms, resistant to moderately resistant to *Alternaria* leaf spot, grey mildew, bacterial blight, *Corynespora* leafspot, rust
57.	Cotton	PDKV Dhawal (AKA-	Hybrid	AICRP on Cotton, Dr. Panjabrao	Madhya Pradesh, Maharas	Suitable for timely sown *Kharif* under **rainfed situation**, yield 12.84 q/ha, maturity 160-180 days,

		2013-8)		Deshmukh Krishi Vidyapeeth, Akola, Maharashtra	htra and Gujrat	tolerant to leaf hoppers, bacterial leaf blight, *Myrothecium* leaf spot, *Alternaria* leaf spot,Grey mildew
58.	White Jute	JRC 9	Variety	ICAR-Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata, West Bengal	West Bengal, Odisha, Bihar, Uttar Pradesh, Tripura and Assam	Suitable for timely **sown rainfed/ irrigated** condition, yield 31.97 q/ha, maturity110 – 120 days (fibre), 120-130 days (seed), fibre fineness - 1.74 tex, fibre strength - 13.88 g/tex, tolerant to stem rot and root rot, tolerant to yellow mite, Bihar hairy caterpillar, jute semilooper
POTENTIAL CROPS						
59.	Buckwheat	Him Tara (EC125940)	Variety	ICAR - National Bureau of Plant Genetic Resources - Regional Station, Shimla, Himachal Pradesh	Northern Hill zone (Himachal Pradesh and Uttarakhand)	Suitable **for rainfed *Kharif* hilly** areas, seed yield 14.04 q/ha, maturity 92.06 days triangular dark brown seeds with protein content of 13.10% and low phenolic content, no disease or insect pest infestation reported
60.	Amaranth	Him Gauri (IC037156)	Variety	ICAR - National Bureau of Plant Genetic Resources - Regional Station, Shimla, Himachal Pradesh	Northern Hills Zone (NHZ) Himachal Pradesh and Uttarakhand	Suitable for grain purposes cultivation during rainfed*Kharif* season in **mid to high hilly areas**, seed yield 24.06 q/ha, maturity 128.46 days, significantly **higher Lysine content (7.18 g/ 16g N), higher total protein content (13.52 %),** no disease or insect pest infestation reported

61.	Grain Amaranth	RMA 120 (Jodhpur Rajgira 2)	Variety	ICAR-All India Network Project (AINP) on Potential Crops, Agriculture University Jodhpur, Mandor, Rajasthan	WZ (Rajasthan, Gujarat, Maharashtra); NPZ (U.P.); EZ (Odisha, Jharkhand) and CZ (Chhattisgarh)	Suitable for plains areas of the country in *Rabi* irrigated high fertility condition, 14.05 q/ha seed yield, maturity early (119-128 days), **high protein content (12.60%), oil content (8.33%) and lysine 4.72%,**no major disease and insect pest observed
62.	Grain Amaranth	Gujarat Amaranth 8 (GA 8) SKNA 1407	Variety	ICAR-AINP on Potential Crops, S.D. Agricultural University Sardarkrushinagar, Gujarat	WZ (Gujarat, Rajasthan, Maharashtra), NPZ (Utter Pradesh, CZ (Chhattisgarh), EZ Jharkhand and Odisha)	Suitable for cultivation in plain areas of the country in Rabi season, yield 14.55 q/ha, maturity 97 – 168 days (mean 127.33 days), **protein content 12.21, oil content 8.09% and lysine content 5.03%**, least incidence of insect pest and diseases
63.	Grain Amaranth	VL Chua 140	Open Pollinated Variety	ICAR - Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora, Uttarakhand	Uttarakhand, Himachal Pradesh	Suitable for **rainfed *Kharif* ecology**, yield 16.86 q/ha, maturity 125-127 days, fertilizer responsive, no major insect pests and disease incidence was reported at any of the location
64.	Winged bean	PWB 17-18 (Phule	Variety	ICAR-AINP on Potential	WZ (Maharashtra), CZ	Suitable for irrigated well drained soil having medium fertility

		Shrawani)		Crops, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra	(Chhattisgarh), NPZ (Uttar Pradesh) and EZ (Jharkhand state)	in *Kharif* season, seed yield 13.81 q/ha, green pod yield 142.96 q/ha, maturity late - 160 – 168 days (seed), 85 – 95 days (seed to pod), **contains 24.95% protein, 16.01% oil, no disease and pests observed**
65.	Adzuki bean	Him Jwala (IC341939)	Variety	ICAR - National Bureau of Plant Genentic Resources, Shimla, Himachal Pradesh	Northern Hills zone (Himachal Pradesh, Uttarakhand) and part of Northeastern States	Suitable for Northern hilly areas during rainfed*Kharif* season, yield 19.54 q/ha, maturity 108 days, nutrition rich (**protein 21.07%, K 1729 mg/100 g, Na 154 mg/100 g, Ca 286 mg/100 g, Fe 8.4 mg/100 g)**, no disease or insect pest infestation was reported under natural field conditions
66.	Pillipesara	Prathama (OUAT Kalinga Pillipesara-1) (IC 524667)	Variety	ICAR-AINP on Potential Crops, Odisha University of Agriculture & Technology, Bhubaneswar, Odisha	Odisha (Eastern Zone) & Tamil Nadu (Southern Zone)	Suitable for early sowing irrigated uplands / medium lands in *Kharif*, yield – seed 1.82 q/ha, green biomass - 157.46 q/ha **containing crude protein (17.3%), crude fibre (17.62%), ether extract (1.17%), acid soluble ash (1.60%),** maturity medium (83 days), no disease or insect pest infestation was reported under natural field conditions, resistant to YMV
67.	Kalingada (Watermelan)	SKNK 1407 (Gujarat Kalingada 3)	Variety	ICAR-AINP on Potential Crops, S.D. Agricultural University	Gujarat and Rajasthan	Suitable **for rainfed *Kharif* season,** yield 217 kg/ha (seed), 89.81q/ha (fruit), maturity 77 - 87 days, tolerant to drought, seeds contain **higher amount of oil (33.35 %), protein,**

				Sardarkrushinagar, Gujarat		**(18.13 %), Fe (5.97 mg/100g),good amount of crude fiber, phenol, Zn, lysine**, no major diseases and insect-pests were observed
68.	Perilla	Poorvottar Perilla-2 IC-615382	Variety	ICAR-Regional Centre for North Eastern Hill Region Umiam, Meghalaya	NHZ and NEHZ (Uttarakhand, Manipur, Meghalaya, Mizoram, Sikkim, Arunachal Pradesh and Nagaland)	Suitable for rainfed*Kharif* hilly ecosystem for Northern Hill Zone (NHZ) and North Eastern Hill Zone (NEHZ), yield 10.33 q/ha, maturity medium-late (163.63 days), lodging tolerant, very useful as **oriental medicine as an anti-asthmatic, antibacterial, antidote, antimicrobial, antipyretic, antiseptic, antispasmodic, antitussive, aromatic, carminative, diaphoretic, emollient, expectorant, pectoral, restorative, stomachic, and tonic,** no diseases were observed at both vegetative and reproductive stages, resistant to aphids
69.	Perilla	Poorvottar Perilla-1 (IC-615369)	Variety	ICAR-Regional Centre for North Eastern Hill Region Umiam, Meghalaya	NHZ and NEHZ (Uttarakhand, Manipur, Meghalaya, Mizoram, Sikkim, Arunachal Pradesh and Nagaland)	Suitable for rainfed*Kharif* hilly ecosystem for Northern Hill Zone (NHZ) and North Eastern Hill Zone (NEHZ), yield 11.15 q/ha, maturity medium-late (160.63 days), lodging tolerant, **very useful as oriental medicine as an anti-asthmatic, antibacterial, antidote, antimicrobial, antipyretic, antiseptic, antispasmodic, antitussive, aromatic, carminative, diaphoretic,**

						emollient, expectorant, pectoral, restorative, stomachic, and tonic, no diseases were observed at both vegetative and reproductive stages, resistant to aphids
HORTICULTURAL CROPS						
Fruits						
70.	Mango	Arka Udaya	Hybrid	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	All mango growing states	It is a hybrid between Amrapali x Arka Anmol. Trees are semi-vigorous and having the bunch bearing habit.The fruits have pink blush on peel and good quality. Fruit is oblong in shape with the average weight of 200-250 g, orange yellow thick pulp with high TSS 24 (^{0}Brix), 13.55 mg/ 100 g of total carotenoids and long keeping quality of 12-15 days. It is late bearing, having yield potential of 18-20 t/ha at the spacing of 5 m x 5 m.
71.	Mango	Ambika	Hybrid	ICAR-Central Institute for subtropical Horticulture, Lucknow-Uttar Pradesh	All mango growing states	It is a climate resilient hybrid (Amrapali x Janardan Pasand) recommended for subtropical and tropical regions. It is a regular bearer, high yielding and late in maturity type. Fruits have attractive dark red blush on yellow coloured peel, pulp dark yellow, firm with scanty fibre. Fruits weigh about 300-350 g, TSS is moderate (21°Brix), rich

						in mangiferin content. Yields about 80 kg/plant by about 10 years of planting It has good potential for both internal and export markets.
72.	Mango	Arunika	Hybrid	ICAR-Central Institute for subtropical Horticulture, Lucknow-Uttar Pradesh	All mango growing states	It is a dwarf hybrid developed by crossing between Amrapali x Vanraj. It is a regular bearer and late in maturity. Fruits are smooth, orange yellow peel with red blush, keeping quality excellent with pleasant flavour. Medium fruit weight (190-210 g), good TSS (24.6°Brix), pulp orange-yellow, with scanty fibres and rich in mangiferin and lupeol contents. Yields about 70 kg/plant by about 10 years of planting under improved cultural practice. **It has wider adaptability, suitable for growing in subtropical and tropical regions.**
73.	Pomegranate	Solapur Anardana	Hybrid	ICAR-National Research Centre on Pomegranate, Solapur, Maharashtra	All pomegranate growing states	It is a processing variety developed from three-way cross of Bhagawa x [(Ganesh x Nana) x Daru]. Fruits big (280 g), maturity period is 148-150 days, with potential yield of 30.72 kg/tree. It has red aril and rind, red good TSS (16.6°Brix), high titratable acidity (4.8%), vit. C (18.20 mg/100 g), moderate anthocyanins (456 mg/100 g with good **anardana** recovery (21.6%). **It is moderately bacterial blight and drought tolerant.**

74.	Guava	Lalit	Open Pollinated Variety	ICAR-Central Institute for subtropical Horticulture, Lucknow- Uttar Pradesh	Uttar Pradesh	Fruits are round, medium sized with thick pericarp (>1.5 cm). The variety is heavy having saffron yellow-colored fruits (185-200 g) with red blush, pulp firm, pink in colour with good sugar & acid blend. It has about 250 mg/100 g vit. 'C' content. Fruits have high lycopene content (4.5-6.5 mg/100 g pulp) and is a **dual-purpose variety suitable for both table and processing purpose**.
75.	Guava	Arka Kiran	Open Pollinated Variety	ICAR-Indian Institute of Horticultural Research, Bangalore, Karnataka	Andhra Pradesh, Karnataka and Maharashtra Tamil Nadu,	Climate resilient variety having semi-vigorous growth habit. Fruits are round, medium sized (180 to 190 g), **pulp is dark red, with medium soft seeds (4-6 kgf), rich in lycopene (7.41 mg/100 g pulp) and medium in ascorbic acid (190 to 200 mg/100g) with stable flavour**. It yields 38 to 40 kg /tree/year after 4 th year of planting. **It has wider adaptability is tropical and sub-tropical regions.**
76.	Bael	Swarna Vasudha	Open Pollinated Variety	ICAR - Research Complex for Eastern Region, Patna, Bihar	Jharkhand	It is a medium vigorous, regular bearing, big fruits (1100 to 1800 g), high yield under rainfed condition (43.8 kg/plant), high pulp recovery (>80%), TSS(>40°Brix), acidity (0.54%). The fruit is low seed content (<2%) with thin shell (< 2 mm). The plant is semi vigorous

						having yield potential of 17-19 t/ha in High Density Planting (5 m x 5 m).
77.	Pummelo	Arka Chandra	Individual Plant Selection	ICAR-Indian Institute of Horticultural Research, Bangalore, Karnataka	All Citrus growing states	Arka Chandra (clone 18-5)is a clonal selection from accession 18 that is being maintained in the field gene bank at IIHR, Bengaluru. The tree is medium-sized (2.0-3.0 m) and spreading. It is a medium vigorous, Average yield 35-40 fruits/plant/season after 4 years of planting). Fruit weight ranged from 0.8-1.0kg, spheroid fruit shape and has white pulp, TSS (11-12°B), acidity (0.89%) and sweet in taste with **lower amount of Naringenin (344.75 ng/ml).**
	Vegetables					
78.	Tomato	Pusa Shakti	Open Pollinated Variety	ICAR-Indian Agricultural Research Institute, New Delhi	Chhattisgarh, Odisha, Andhra Pradesh and Telangana	This tomato variety is suitable for open-field cultivation during May-October. Ripe fruits have a thick pericarp (7.00 mm), moderate TSS (4.8°Brix), and lycopene (6mg/100 g) content. Due to the thick pericarp, it is easy to transport. **It is also tolerant to high temperatures.**The average yield is 351 q/ha.
79.	Tomato	Pusa Tomato Hybrid 6	Hybrid	ICAR-Indian Agricultural	Chhattisgarh, Orissa, Telangana and	**This tomato hybrid is resistant to four diseases including, ToLCD (tomato leaf curl disease, late blight, Fusarium-wilt**

				Research Institute, New Delhi	Andhra Pradesh	**and bacterialwilt.** It has h**igh Vit. C (29 mg/100 ml of juice) and** is suitable for both Kharif and rabi seasons with duration of 130-150 days after planting. The fruits (80-90 g) are heart-shaped with thick pericarp (0.5 cm), moderate TSS (>4.50°Brix), high acidity (>0.4%). Average yield is 900 q/ha in *kharif* (autumn-winter) and 600 q/ha in *rabi* (spring-summer).
80.	Bottle gourd	Kashi Shubhara	Open Pollinated Variety	ICAR-Indian Institute of vegetable Research , Varanasi, Uttar Pradesh	Uttar Pradesh, Bihar, Jharkhand and Punjab	**This variety is suitable for *kharif, zaid* and off-season production under low tunnel/ protected structure.** Fruits are light green, smooth cylindrical (gutka type) and medium long (28-30 cm). **Suitable for packaging, distance transportation and export due to better keeping quality.** The yield potential is 600 q/ha.
81.	Okra	Arka Nikita	Hybrid	ICAR-Indian Institute of Horticultural Research, Bengaluru	Karnataka	**Genic Male sterility based F_1 hybrid resistant to YVMV disease**. Fruits are dark-green, tender, smooth and **free from spines, and rich in iodine (33.38 µg/100 g FW).** It has yield potential of 21 to 24 t/ha.
82.	Indian bean	Kashi Bouni Sem-207	Open Pollinated Variety	ICAR-Indian Institute of vegetable Research , Varanasi,	Punjab, Uttar Pradesh, Bihar, Jharkhand, Rajastha	**Bushy in growth habit** (plant height 65-70 cm). First picking starts at 90-95 days after seed sowing and pods are available up to last week of March. Pods are 10-12 cm

				Uttar Pradesh	n, Gujarat, Haryana and Delhi	in length; 2.50-2.80 cm in width and weigh 9.0 g. **It is tolerant to DYMV and high temperature 35°C).** It has average yield 236 q/ha in 5 pickings.
83.	Indian Bean	Arka Vistar	Open Pollinated Variety	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Karnataka	**It a climate resilient, pole type and photo-insensitive variety.** Pods are long, thick, very broad and dark green coloured. It has pod yield of 37.0 t/ha after 120 days.
84.	Muskmelon	Thar Mahima	Open Pollinated Variety	ICAR-Central Institute for Arid Horticulture, Bikaner, Rajasthan	Rajasthan	Fruits are round (780-900 g) having TSS of 11.58-11.80°Brix. Flesh is salmon orange and 2.8-3.2 cm thick. netted with sutures. It is characterized by deep lobing of leaves with marketable yield of 200 q/ha. **It is tolerant to high temperature.**
85.	Water melon	Thar Tripti	Open Pollinated Variety	ICAR-Central Institute for Arid Horticulture Beechwal, Bikaner-Rajasthan	Madhya Pradesh, Maharashtra and Goa	Fruits are attractive and characterized by green stripes and round shape. The fruit weight 2.3-3.4 kg with light red flesh colour. **TSS ranges from 11.5-12.17°Brix** and rind thickness can range from 5.0-1.8 cm; The first harvest of fruits can be carried out 75-80 days after sowing. It is **tolerant to mosaic disease and has** average yield 400 q/ha.
	Tuber Crops					

86.	Potato	Kufri Chipsona-5	Vegetatively Propagated, self-pollinated	ICAR-Central Potato Research Institute, Shimla, Himachal Pradesh	Haryana, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Gujarat Rajasthan and Chhattisgarh	It produces white cream, ovoid tubers with shallow medium eyes and creamy flesh and has good storability under ambient conditions. Medium maturing (90-100 days), high-yielding variety (35 t/ha) for **processing (chip making) use.** It has 21% tuber dry matter, low sugars (<100 mg/100 g FW) and acceptable chip clolour. **It has moderate resistance to late blight.**
87.	Potato	Kufri Jamunia	Vegetatively Propagated, self-pollinated	ICAR-Central Potato Research Institute, Shimla, Himachal Pradesh	Haryana, Punjab, Uttar Pradesh, Uttarakhand Plains, Madhya Pradesh, Rajasthan, Chhattisgarh, Gujarat, Odisha, Assam, West Bengal and Bihar	It produces dark purple oblong tubers with shallow eyes and purple flesh. Medium maturing (90-100 days), high-yielding variety (32-35 t/ha) suitable for table use. **It has high antioxidants (ascorbic acid: 52 mg, carotenoids: 163 ug, anthocyanins: 32 mg/100 g fresh weight) in flesh, with high tuber dry matter**. It has good keeping quality.
88.	Potato	Kufri Bhaskar	Vegetatively Propagated, self pollinated	ICAR-Central Potato Research Institute, Shimla-Himachal Pradesh	Haryana, Punjab, plains of Uttarakhand, Uttar Pradesh-early season planting) and Central	**It is a heat tolerant variety having mite and hopper burn tolerance.**Early-medium maturing (85-90 days),with good yield potential (30-35 t/ha) and long storability under ambient conditions. It produces white-cream ovoid, tubers with shallow medium eyes and cream coloured flesh.

					plains (Rajasthan, Gujarat, Chhattisgarh for main planting)	
	Spices					
89.	Nutmeg	Kerala Shree	Open Pollinated Variety	ICAR-Indian Institute of Spices Research, Kozhikode, Kerala	Kerala, Tamil Nadu, and other nutmeg growing areas of India	**First farmers participatory variety with bold nuts and fully covered mace**. Dry nut weight of 9.1-11.2 g; Dry mace wt. of 1.6-2.1g. Nut yield of 7560 kg per ha and Mace yield of 1512 kg/ha in 8th year of planting. Nut oil and mace oil are 5.9 and 7.5%, respectively. The oleoresin in mace is 9.1%.
90.	Small Cardamom	IISR Manushree	Open Pollinated Variety	ICAR-Indian Institute of Spices Research, Kozhikode, Kerala	Karnataka and Kerala	**Drought tolerant variety**with average yield of 550 kg dry capsules/ ha under irrigated conditions and 360 kg dry capsules/ha under moisture stress conditions. Over 50 % of the capsules are bold (> 8 mm) and stable.
91.	Small Cardamom	IISR Kaveri	Open Pollinated Variety	ICAR-Indian Institute of Spices Research, Kozhikode, Kerala	Karnataka	**Drought tolerant variety** with average yield of 482 kg dry capsules/ha under irrigated conditions and 308 kg dry capsules/ha under moisture stress conditions Compact flowering variety with 70 % of the capsules are > 8 mm. High essential oil 9.08 % (irrigated conditions), 9.51

						% (moisture stress conditions) content
92.	Fennel	RF-290	Open Pollinated Variety	AICRP on Spices, S.K.N. College of Agriculture, (SKN Agriculture University) Jobner (Rajasthan).	Rajasthan, Gujarat, Uttar Pradesh, Bihar, and Haryana	This variety is most suitable under irrigated normal conditions. Moderately cool weather favours both the yield as well as the quality of the produce. Plants are erect and tall plants, medium maturity type, more branches and umbels per plant, more umbellets and seeds per umbel and long & bold seeds. It has high yield potential. The seed yield of this variety is 2065 kg/ha. **This variety is resistant to ramularia blight.**
93.	Ajwain	Gujarat Ajwain 3	Open Pollinated Variety	AICRP on Spices, Sardarkrushinagar Dantiwada Agricultural University, Jagudan, Sardarkrushinagar, Gujarat	Gujarat, Rajasthan, Haryana, Andhra Pradesh, Uttar Pradesh and Chhattisgarh	High yielding with an average seed yield of 1035 kg/ha. It has a greater number of umbels per plant, number of seeds per umbel, bold seed size (Test weight 1.15 g). It is suited for growing in dry tracts
94.	Mango ginger	IISR Amrit	Open Pollinated Variety	ICAR-Indian Institute of Spices Research, Marikunnu, (Post)	Kerala, Bihar, Odisha, West Bengal, Chhattisg	Bold rhizomes, high yield (45.75 t/ha), light yellow core, desirable flavour (myrcene and β pinene), and contains 0.32% Essential oil. Tolerant to rhizome rot.

				Kozhikode, Kerala	arh and Gujarat	
	Plantation Crops					
95.	Cocoa	Vittal Cocoa Hybrid -1	Hybrid	ICAR-Central Plantation Crops Research Institute, Kasaragod, Kerala	Kerala, Karnataka and Tamil Nadu	Early bearing, stable, high yielder with medium canopy both under arecanut & coconut shades and suitable for high density planting. High dry beans yield 1.5-2.5 kg/tree/year in 15-18 m^2 canopy. Large bean size of international standard (1-1.10 g). It has desirable processing value for chocolate industry with 13% shelling, 87% nib recovery, >50% fat, 1% free fatty acids, **rich in Fe and Zn contents**. **Withstands black pod rot and tea mosquito bug infestation and is tolerant to low moisture stress .**
96.	Cocoa	Vittal Cocoa Hybrid -2	Hybrid	ICAR-CPCRI, Kasaragod, Kerala	Kerala, Karnataka, Tamil Nadu, Andhra Pradesh and Gujarat	Early bearing, high yielder with **black pod rot disease resistance** both under arecanut & coconut gardens. Dry beans yield 1.5-2.5 kg/tree/year in 14-20 m^2 canopy. Large beans (1-1.2 g), have processing value for chocolate industry. It has 13% shelling, **87% nib recovery, >50% fat, 1% free fatty acids, rich in Fe and Zn contents.** Suitable for high density planting and has **field tolerance to**

						tea mosquito bug and low moisture stress.
97.	Cashew	Nethra Jumbo -1	Hybrid	ICAR-Directorate of Cashew Research, Puttur, Dakshina Kannada District, Karnataka	Karnataka	It is a variety suitable for **rainfed** conditions jumbo nuts (12 g), with premium grade kernel (W130), saves the labor on harvesting and ensures about 10% higher price due to bigger size nuts and higher yield over the standard variety Bhaskara and NRCC Selection-2. It is cluster bearing with 5-6 fruits per panicle. The nut size is uniform, Kernels are bold with 3.4 g average weight, and has easy testa peeling.
98.	Cashew	Nethra Ganga (H-130)	Hybrid	ICAR-Directorate of Cashew Research, Puttur, Dakashina kannda, Karnataka	Karnataka	It has bold nuts (12-13 g) and high yielding hybrid with cluster bearing habit, high precocity with 6-8 nuts per panicles. It has high shelling value (29.5%). An early flowering with uniform sweet kernels. It is suitable for high density planting under rainfed conditions.
99.	Coconut	Kalpa Suvarna	Open Pollinated Variety	ICAR-Central Plantation Crops Research Institute, Kasaragod, Kerala	Karnataka and Kerala	It is a dwarf, high yielding, dual purpose coconut variety with green coloured, oblong fruits having **sweet tender coconut water and good quality copra. Early flowering variety (30-36 months after planting),** suitable for processing for tender coconut water and copra production.

100.	Coconut	Kalpa Shatabdi	Open Pollinated Variety	ICAR-Central Plantation Research Institute, Kasaragod, Kerala	Kerala, Karnataka and Tamil Nadu	This is a dual purpose coconut variety, with large fruits, suitable for copra and tender nut production. It bears greenish yellow fruits with **greater volume (612 mL) of good quality tender nut water and high copra content (273 g)**
	Flower Crops					
101.	Marigold	Pusa Bahar	Open Pollinated Variety	ICAR-Indian Agricultural Research Institute, New Delhi	Punjab, Uttar Pradesh, Bihar and Jharkhand, Chhattisgarh, Odisha, Andhra Pradesh and Telangana, Rajasthan, Gujarat, Haryana and Delhi,Madhya Pradesh, Maharashtra and Goa.	This variety is vigorous having plant height of 75-85 cm. It produces compact, flattened, attractive and large size (8-9 cm) flowers of yellow colour (RHS Yellow Group: 9A). It is very floriferous, producing on an average 50-60 large-sized flowers per plant. It is suitable for loose flowers, bedding in gardens as well as other floral decorations (loose flowers). It is flower is summer and tolerate high temperature.
102.	Tuberose	Arka Vaibhav	Hybrid	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	West Bengal, Assam, Punjab, Uttar Pradesh, Bihar, Rajasthan, Delhi,	It produces double-type flowers on medium tall spikes. The flower buds are greenish in colour, florets are white in colour and ideal as a cut flower. The spike yield ranges from 2.5-3.0 lakh spikes/ ha/ year. **It has field**

					Maharashtra, Karnataka and Tamil Nadu	**tolerance to root knot nematode.**
103.	Crossandra	Arka Shreeya	Hybrid	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Andhra Pradesh, Maharashtra and Karnataka	Novel flower colour orange-red florets (Orange Red group 32A), high loose flower yield (2269.2 kg/ac/year), increase yield (172.67%) over Local check. **Moderately resistant to *Phytophthora* wilt.**
104.	Gladiolus	Arka Amar	Hybrid	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Himachal Pradesh, Punjab, Jharkhand, Andhra Pradesh and Maharashtra	The flowers are red colour having red margin and white line on tepals with yellow blotch. It has a long spike (101 cm) with good rachis length (50 cm) and bears 17 florets per spike. It yields 1.81 flower spikes and 2 corms /corm and 23 cormels. **It is highly resistant to *Fusarium* wilt disease.** It is suitable for cut flower, floral arrangement and garden display.
105.	Gladiolus	Arka Aayush	Hybrid	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	West Bengal, Punjab, Rajasthan and Maharashtra	Its florets are with a unique colour: Blotch Red with Yellow border. The florets are open-faced, thick, slightly ruffled and arranged in double rows. It is **resistant to *Fusarium* wilt** disease. Suitable for cut flower, bouquet preparation, floral

						arrangement and garden display.
	Medicinal Plants					
106.	Velvet Bean	Arka Dhanvantari	Open Pollinated Variety	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Karnataka	Long duration variety (180-190 days) with non-itchy trichomes on pods. High seed yield of 2- 2.5 t/ha with high L-Dopa content of 4.5 to 5.5%. **It is highly drought tolerant.**
107.	Velvet Bean	Arka Daksha	Open Pollinated Variety	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Karnataka	Medium duration variety comes to maturity 150-160 days after sowing. It has non-itchy trichomes on pods. Gives seed yield of 1.6- 2 t/ha with high L-Dopa content of 3.5 to 4.5%.
108.	Ashwagandha	Arka Ashwagandha	Open Pollinated Variety	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Karnataka	It is pure line selection with high dry root yield of 11.95 q/ha and total withanolide content of 0.580%. Characterized by pencil thick roots and desired root depth of around 30 cm. **It has early vigour, field tolerance to bacterial wilt, late blight diseases and pests viz., Epilachna beetle, mites and aphids.**
109.	Mandukaparni	Arka Prabhavi	Open Pollinated Variety	ICAR-Indian Institute of Horticultural Research,	Karnataka	It produces 13 tonnes of fresh herb and 2.3 tonnes of dry herb/ ha/ year with **higher asiaticoside content (3.85%) and higher tri-terpenoid content (7.27%). Good**

				Bengaluru, Karnataka		**for herbal industries for extraction of triterpenoids.**