



**ICAR-Indian Institute of Oilseeds Research**

**आईसीएआर-भारतीय तिलहन अनुसंधान संस्थान**

**Rajendranagar, Hyderabad-500 030, Telangana**

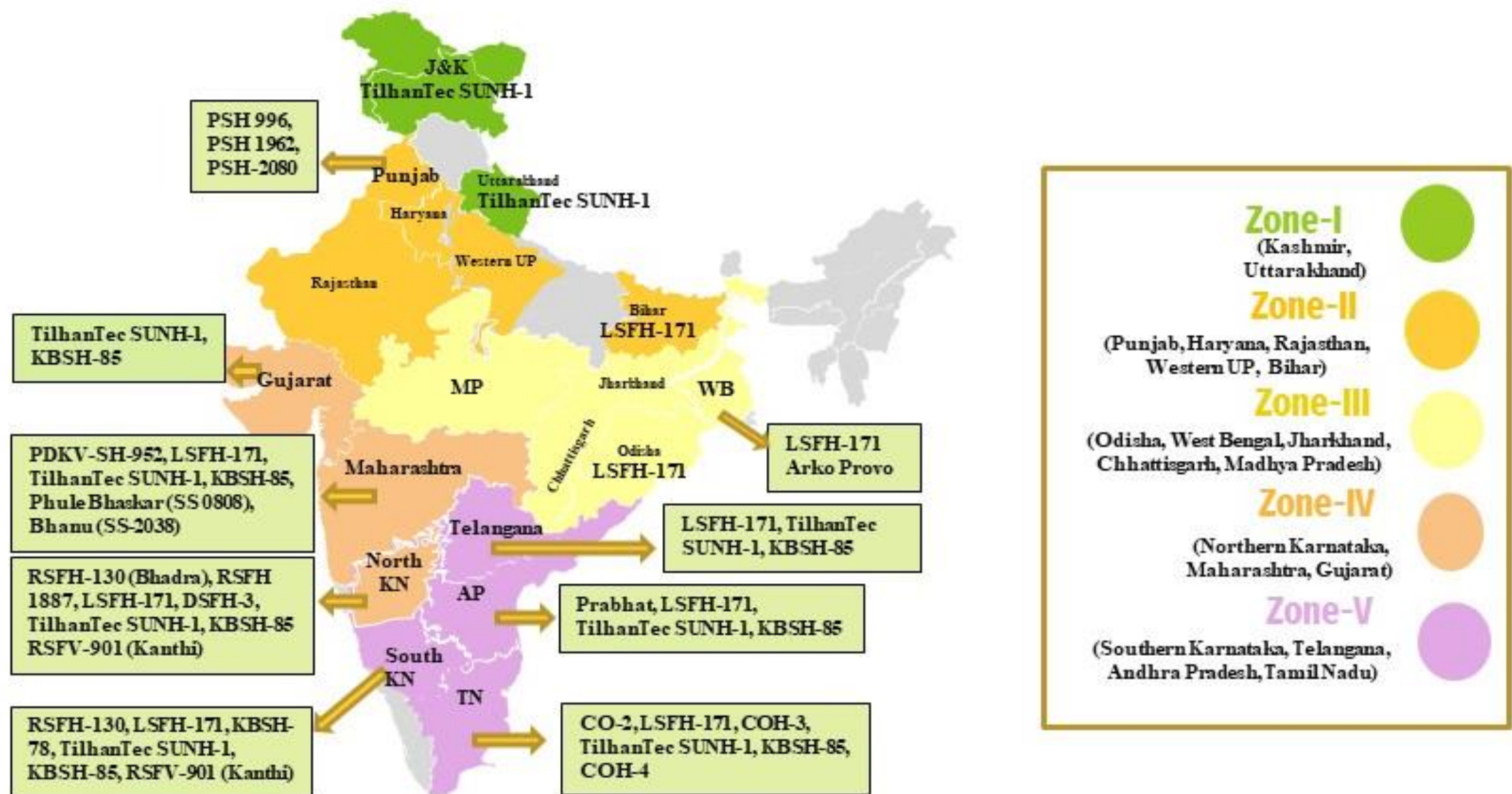
**राजेंद्रनगर , हैदराबाद-500 030, तेलंगाना**



# Mapping of Varieties and Hybrids of Oilseeds



# Mapping of varieties and hybrids of Sunflower

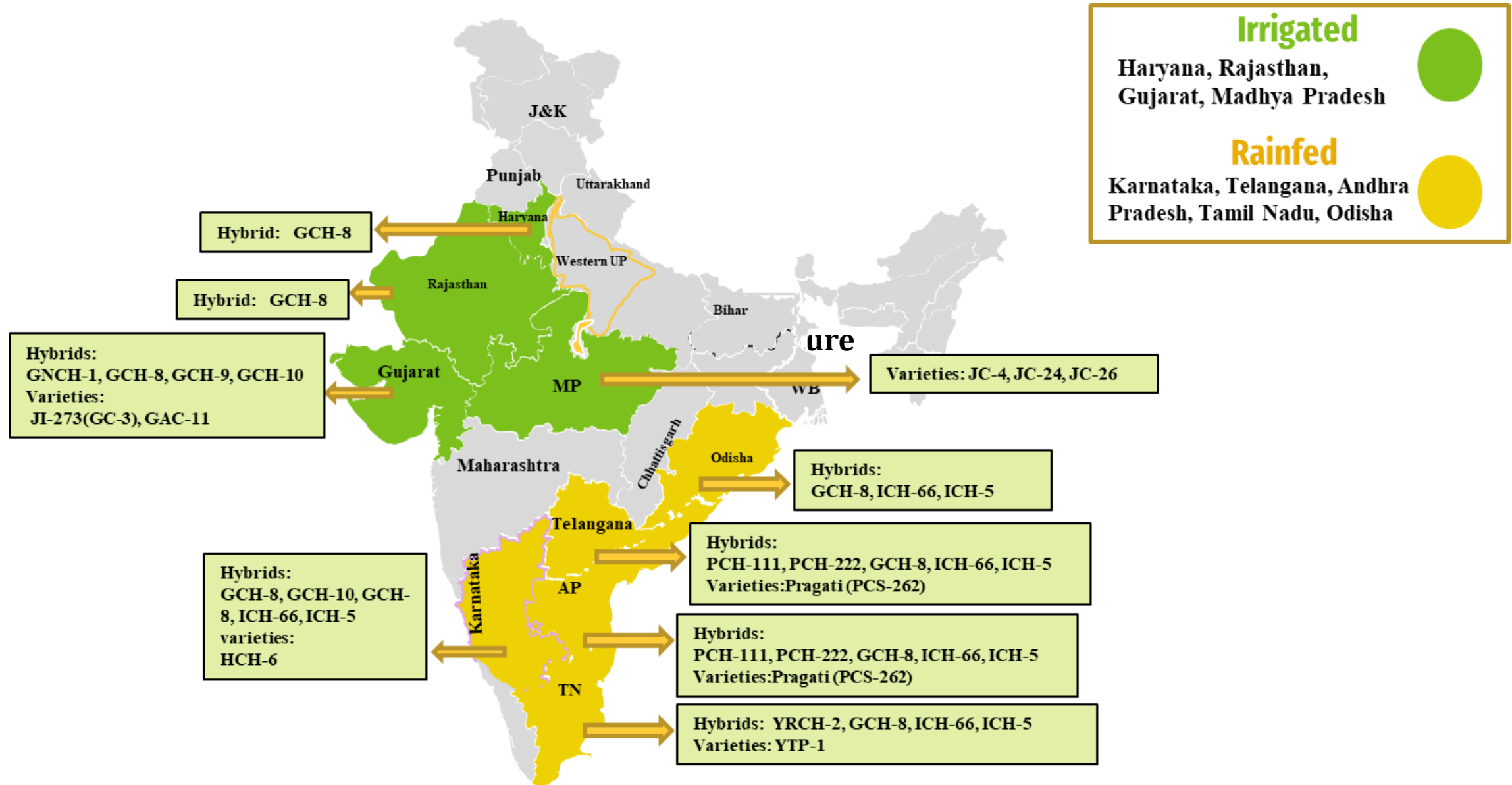


## List of Variety/ Hybrid of Sunflower

S. No.	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
1.	TilhanTec SUNH-1 (H)	2021	Uttarakhand, Jammu & Kashmir, Gujarat, Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu and Telangana	Yield (Kg/ha): 2002; Days to maturity: 90-100; Oil content (%): 37-41 Suitable for both Kharif and Rabi seasons under rainfed and irrigated condition. Resistant to downy mildew, moderately resistant to Alternariaster leaf blight and powdery mildew
2.	PSH 996 (H)	2015	Punjab	Yield (kg/ha): 1951; Days to maturity: 96; Oil content (%): 39 Medium, high yielding hybrid, moderately resistant to downy mildew and charcoal root rot.
3.	PSH 1962 (H)	2016	Punjab	Yield (kg/ha): 2054; Days to maturity: 99; Oil content (%): 41; Suitable for irrigated condition
4.	PSH-2080 (H)	2019	Punjab	Yield (kg/ha): 2636; Days to maturity: 96; Oil content (%): 43.70; High yield and oil content
5.	LSFH-171 (H)	2018	Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Odisha, Bihar & West Bengal	Yield (kg/ha): 1800-2000; Days to maturity: 95-100; Oil content (%): 35 Resistant to downy mildew
6.	Arko Provo (WBSH-2021) (V)	2022	Gangetic alluvial zones of West Bengal under irrigated condition during Rabi season	Yield (kg/ha) : 3245; Days to maturity: 105-110; Oil content (%): 38.5; Suitable for irrigated condition during Rabi/ Summer season of West Bengal and also suitable for irrigated ecosystem of zone III. Resistant to leaf curl, collar rot and moderately resistant to alternaria leaf spot, powdery mildew and downy mildew
7.	RSFV-901 (Kanthi) (V)	2012	Karnataka	Yield (kg/ha): 1200-1400; Days to maturity: 95-100; Oil content (%): 40.5; Tolerant to necrosis (Ilar group)
8.	RSFH-130 (Bhadra) (H)	2012	Karnataka	Yield (kg/ha): 1200-1500; Days to maturity: 95-100; Oil content (%): 40; Tolerant to necrosis
9.	RSFH 1887 (H)	2016	Karnataka	Yield (kg/ha): 1800 – 2500 (I), 1200-1600 (R); Days to maturity: 95-100; Oil content (%): 38 – 40; Tolerant to viral necrosis and Alternaria leaf spot

S. No.	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
10	DSFH-3 (H)	2018	Karnataka (Rabi)	Yield (kg/ha): 1800-2000; Days to maturity: 95-98; Oil content (%): 38-39; Early and high seed yield and oil content
11.	KBSH-85 (H)	2022	Zone IV (Gujarat, Maharashtra and Northern Karnataka) and Zone V (Andhra Pradesh, Southern Karnataka, Tamil Nadu and Telangana State)	Yield (kg/ha) : 1829; Days to maturity: 90-100; Oil content (%): 35.7; Suitable for Kharif under both rainfed and irrigated condition, Resistant to downy mildew under artificial epiphytotic conditions
12.	Phule Bhaskar (SS 0808) (V)	2016	Maharashtra	Yield (kg/ha): 1807; Days to maturity: 85; Oil content (%): 38; Moderately resistant to necrosis and powdery mildew
13.	Bhanu (SS-2038) (V)	2016	Maharashtra	Yield (kg/ha): 1600-1800; Days to maturity: 80-85; Oil content (%): 38;
14.	PDKV-SH-952 (H)	2017	Maharashtra	Yield (kg/ha) : 1600 –1800; Days to maturity: 90; Oil content (%): 38; Moderately Resistant to powdery mildew
15.	RSFV-901 (Kanthi) (V)	2012	Karnataka	Yield (kg/ha): 1200-1400; Days to maturity: 95-100; Oil content (%): 39-42l, Tolerant to necrosis (Ilar group)
16.	KBSH-78 (H)	2018	Zone 5 of Karnataka	Yield (kg/ha) I: 1700-2300, R: 1000-1200; Days to maturity: 82-85; Oil content (%): 39-41; Short duration and medium height hybrid
17.	Prabhat (NDSH 1012) (H)	2017	Andhra Pradesh	Yield (kg/ha): R: 1500-2000, I: 2000-2500; Days to maturity: 90 – 95; Oil content (%): 40; Tolerant to downy mildew
18.	CO-2 (H)	2012	Tamil Nadu	Yield (kg/ha): 1900-2200; Days to maturity: 85-90; Oil content (%): 38-40; Moderate resistant to Alternaria leaf spot, rust, and tolerant to thrips and leaf hopper
19.	COH-3 (H)	2018	Tamil Nadu	Yield (kg/ha): 1613 (K), 1822 (R); Days to maturity: 90-95; Oil content (%): 42; Non lodging and fertilizer responsive. Moderately resistant to leaf spot, necrosis and powdery mildew.
20.	COH-4 (H)	2023	Tamil Nadu	Yield (kg/ha): 2182 (K), 1898 (R); Days to maturity: 90-95; Oil content (%): 41; High volume weight (46 g/100ml), High oil content (40-42%), Moderately resistant to powdery mildew and Alternaria, moderately resistant to sucking pest and leaf feeders.

# Mapping of varieties and hybrids of Castor



## List of Variety/ Hybrid of Castor

S. N	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
1.	GNCH-1 (H)	2017	Gujarat	Yield (kg/ha): 2500-3000; Days to maturity: 90-150; Oil content (%): 48; Resistant to wilt
2.	GCH-8 (H)	2018	All castor growing areas of India	Yield (kg/ha): 1895 (R), 3588 (I); Days to maturity : 120-180; Oil content (%): 48; Resistant to wilt and tolerant to root rot
3.	GCH-9 (H)	2018	Gujarat	Yield (kg/ha): 3781; Days to maturity: 180-210; Oil content (%): 48.3; Contains high ricinoleic acid (90.23%), resistant to Fusarium wilt, resistance to Macrophomina root rot
4.	GCH-10 (H)	2020	Castor growing irrigated areas of Gujarat State	Yield (kg/ha): 3898; Days to maturity: 89-112; Oil content (%): 50.03; A high yielding, medium maturing, wilt resistant hybrid
5.	PCH-111 (H)	2012	Andhra Pradesh, Telangana, Tamil Nadu, Odisha, Maharashtra under rainfed conditions	Yield (kg/ha): 1400-1500 (R), 2200-2500 (I); Days to maturity : 85-90; Oil content (%): 48; Resistant to Fusarium wilt and moderately tolerant to sucking pests, semilooper and spodoptera, resistant to wilt and tolerant to root rot
6.	PCH-222 (H)	2012	Andhra Pradesh, Telangana- rainfed and irrigated conditions	Yield (kg/ha): 1600-1800 (R); 3500-3800 (I); Days to maturity : 85-90; Oil content (%): 49; Resistant to Fusarium wilt and tolerant to root rot
7.	GCH-8 (H)	2018	All castor growing areas of India	Yield (kg/ha): 1895 (R), 3588 (I); Days to maturity : 120-180; Oil content (%): 47-48; Resistant to wilt and tolerant to root rot
8.	ICH-66 (H)	2019	Rainfed regaions of Peninsular India- Andhra Pradesh, Telangana, Tamil Nadu, Karnataka, Odisha	Yield (kg/ha): 1500 (R); Days to maturity: 94-97; Oil content (%): 46-49; Resistant to wilt, root rot and leaf hoppers

S. N	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
9.	ICH-5 (H)	2021	Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Odisha and Maharashtra	Yield (kg/ha): 1671; Days to maturity: 97-108; Oil content (%):44.4 - 45.6; Suitable for timely sowing under rainfed castor growing regions, Resistant to downy mildew, fusarium wilt and macrophomina root rot, leaf hopper
10.	YRCH-2 (H)	2017	Tamil Nadu	Yield (kg/ha) : 2089; Days to maturity : 120-180; Oil content (%): 48; Resistant to wilt, tolerant to semilooper, spodoptera, leafhopper and capsule borer.
11.	Jl-273 (GC-3) (V)	2012	Gujarat	Yield (kg/ha): 2340; Oil content (%): 49.6; Resistant to wilt, tolerant to Macrophomina root rot
12.	GAC-11 (V)	2019	Suitable under irrigated areas of middle Gujarat, early maturing and high yielding wilt resistant.	Yield (kg/ha): 3230; Days to maturity: 85-90;
13.	JC-4 (V)	2018	Madhya Pradesh- Kharif/ early Rabi	Yield (kg/ha): 2640 kg/ha (I); Days to maturity: 100-120; Oil content (%):46-47.5 Tolerant to wilt and root rot
14.	JC-24 (V)	2018	Madhya Pradesh- Kharif/ early Rabi	Yield (kg/ha): 2745 (I); Days to maturity: 95-110; Oil content (%): 45-46; Tolerant to wilt, root rot and nematode complex
15.	JC-26 (V)	2020	Madhya Pradesh	Yield (Kg/ha): 2384; Days to maturity: 98-128; Oil content (%): 46-49.5; Suitable for rainfed and irrigated condition, Kharif/ early Rabi. Moderately resistant to wilt and root rot diseases
16.	Pragati (PCS-262) (V)	2016	Telangana	Yield (kg/ha): 1500-2500; Days to maturity: 80-85; Oil content (%): 48; High seed yield, resistant to wilt
17.	HCH-6 (V)	2016	Karnataka	Yield (kg/ha): 1800 (R); Days to maturity: 90-150; Oil content (%): 48; Resistant to fusarium wilt and white fly
18.	YTP-1 (V)	2019	Suitable for irrigated and rainfed tracts, Tamil Nadu	Yield : 3110 kg/ha Oil content: 49% Maturity: 115-120 days Resistant to wilt, semilooper, spodoptera, thrips and capsule borer

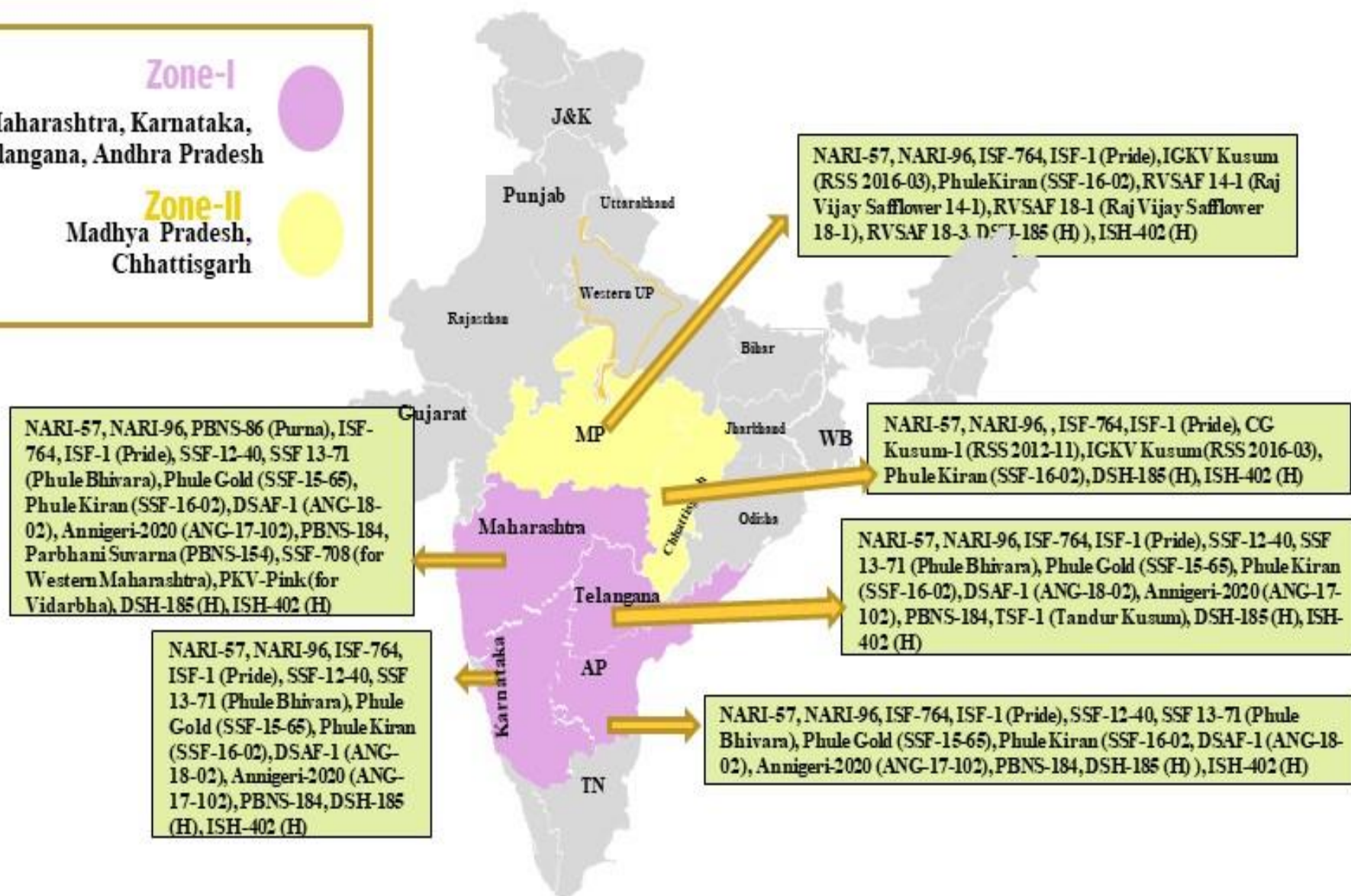
# Mapping of varieties and hybrids of Safflower

**Zone-I** 

Maharashtra, Karnataka,  
Telangana, Andhra Pradesh

**Zone-II** 

Madhya Pradesh,  
Chhattisgarh





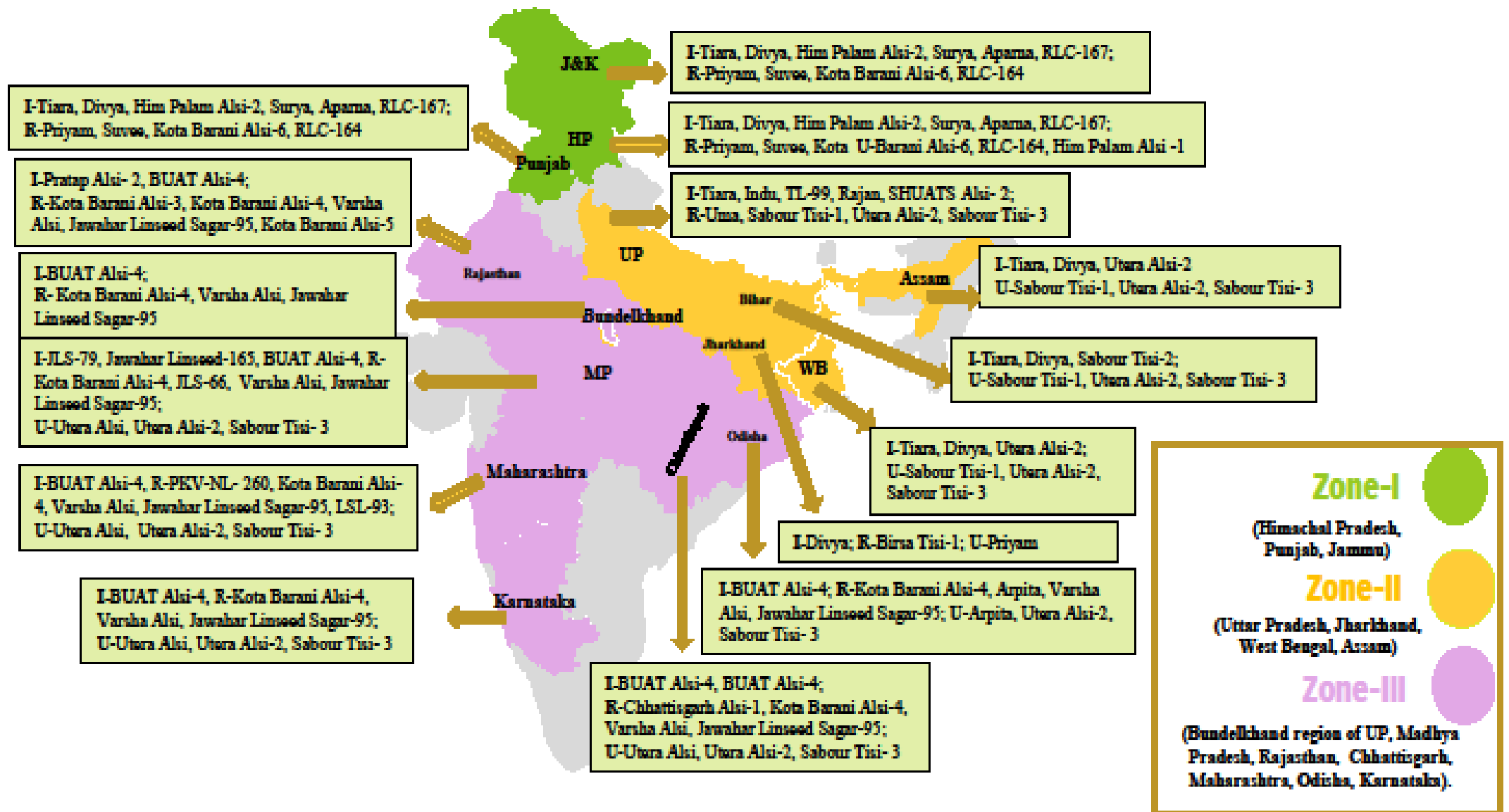
## List of Variety/ Hybrid of Safflower

S.No.	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
1.	SSF-708 (V)	2012	Western Maharashtra	Yield (kg/ha): 1300-2200; Days to maturity:115-120; Oil content (%): 29; Moderately tolerant to aphid
2.	PKV-Pink (V)	2013	Vidharbha region of Maharashtra	Yield (kg/ha): 1500; Days to maturity: 135-140; Oil content (%): 30; Moderately tolerant to wilt
3.	NARI-57 (V)	2015	Maharashtra, Karnataka, Madhya Pradesh, West Bengal, Rajasthan, Uttar Pradesh, Punjab, Jharkhand	Yield (kg/ha): 1500; Days to maturity: 118-151; Oil content (%): 29; Resistant to wilt
4.	NARI-96 (V)	2018	Maharashtra, Telangana, Andhra Pradesh, Madhya Pradesh, Chattisgarh, Rajasthan	Yield (kg/ha): 2023; Days to maturity: 116-165; Oil content (%): 33.21; Higher tolerance to wilt than national checks A-1 and PBNS-12 and on par with the national checks for Alternaria
5.	PBNS-86 (Purna) (V)	2018	Maharashtra	Yield (kg/ha): 1800-2000 (I), 1000-1200 (R); Days to maturity: 135; Oil content (%): 30; Moderately tolerant to wilt, Alternaria and aphids
6.	ISF-764 (V)	2019	All India	Yield (kg/ha): 1583 (R), 2274 (I); Days to maturity: 125-130; Oil content (%): 31; Spiny variety, Resistant to lodging and seed shattering, High yielding variety
7.	ISF-1 (Pride) (V)	2019	Identified for releases for all India	Yield (kg/ha): R: 1236, I: 1864; Days to maturity: 125-130; Oil content (%): 30.5; 1 <sup>st</sup> high oleic variety with Oleic acid content- 76%
8.	SSF-12-40 (V)	2019	Zone-I (Maharashtra, Karnataka, Andhra Pradesh & Telangana)	Yield (kg/ha): 1713; Days to maturity: 120-125; Oil content (%): 32.9; Moderately tolerant to Aphid
9.	SSF 13-71 (Phule Bhivara) (V)	2019	Maharashtra, Karnataka, Telangana and Andhra Pradesh	Yield (kg/ha): 1683; Days to maturity: 125; Oil content (%): 29.5; Moderate resistance to aphid and Alternaria leaf spot

S. No.	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
10.	Phule Gold (SSF-15-65) (V)	2021	Maharashtra, Karnataka, Telangana and Andhra Pradesh	Yield (kg/ha): 1642; Days to maturity: 125; Oil content (%): 31.48; Moderately tolerant to aphid
11.	Phule Kiran (SSF-16-02) (V)	2021	Maharashtra, Karnataka, Telangana, Andhra Pradesh, Madhya Pradesh and Chhattisgarh	Yield (kg/ha): 1727; Days to maturity:124; Oil content (%): 28.39l Moderately tolerant to aphid and Alternaria leafspot
12.	DSAF-1 (ANG-18-02) (V)	2021	Karnataka, Maharashtra, Telangana and Andhra Pradesh	Yield (Kg/ha): 1802, Days to maturity: 125-127; Oil content (%): 28.2; Suitable for Rainfed and Irrigated area, resistant/ moderately resistant to wilt
13.	Annigeri- 2020 (ANG-17-102) (V)	2021	Maharashtra, Karnataka, Telangana and Andhra Pradesh	Yield (kg/ha): 1795; Days to maturity: 123-130; Oil content (%): 28.6 Fertilizer responsive, suitable for regular sowing
14.	PBNS-184 (V)	2022	Zone I (Maharashtra, Andhra Pradesh, Telangana & Karnataka )	Yield (kg/ha): 1531; Days to maturity: 120-124; Oil content (%): 31.3; Suitable for Rainfed Condition, Moderately resistant to Fusarium wilt and tolerant to Alternaria leaf spot disease. Moderately tolerant to aphid pest.
15.	Parbhani Suvarna (PBNS-154) (V)	2022	Maharashtra	Yield (kg/ha): 1579; Days to maturity: 124-126 (R); 134-136 (I); Oil content (%): 30.90; Moderately resistant to Fusarium Wilt disease. Tolerant to Alternaria Leaf spot diseases. Moderately resistant to Aphid pest.
16.	DSH-185 (H)	2018	All India	Yield (kg/ha): 1740; Days to maturity: 121-143; Oil content (%): 28; Resistant to wilt

S. No.	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
17.	ISH-402 (H)	2023	All India (Telangana, Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Karnataka, Maharashtra)	Yield (kg/ha): 2325; Days to maturity: 121-125 (Hot region); 139-145 days (Cooler region); Oil content (%): 31.2; Resistant to lodging, no shattering. Suitable for rainfed and irrigated conditions; CGMS based hybrid;
18.	TSF-1 (Tandur Kusum) (V)	2019	Safflower growing areas of Telangana	Yield (kg/ha): 1200-1500 (R); Days to maturity: 120-130; Oil content (%): 28-29; Resistant to Fusarium wilt, tolerant to Alternaria leaf spot, moderately tolerant to aphid
19.	IGKV Kusum (RSS 2016-03) (V)	2021	Chhattisgarh plains and Madhya Pradesh	Yield (kg/ha): 2710; Days to maturity: 138-140; Oil content (%): 34.26; Moderately resistant to fusarium wilt
20.	RVSAF 14-1 (Raj Vijay Safflower 14-1) (V)	2021	Madhya Pradesh	Yield (kg/ha): 1750; Days to maturity: 127-135; Oil content (%): 30; Suitable for rainfed & irrigated sown conditions. High yielding, spiny bold seeded early maturing tolerant to aphids
21.	RVSAF 18-1 (Raj Vijay Safflower 18-1) (V)	2021	Madhya Pradesh	Yield (kg/ha): 1746; Days to maturity: 127-131; Oil content (%): 38.99; Suitable for rainfed & irrigated sown conditions. Moderately resistant to Alternaria leaf spot, resistant for Fusarium wilt
22.	RVSAF 18-3 (V)	2022	Madhya Pradesh	Yield (kg/ha): 1726; Days to maturity: 127-132; Oil content (%): 33.3-33.5; Spiny and high oil content 33.29%.
23.	CG Kusum-1 (RSS 2012-11) (V)	2020	Chhattisgarh plains	Yield (kg/ha): 1677 kg/ha; Days to maturity: 120-125; Oil content (%): 32-33; Moderately resistant to Alternaria leaf spot
24.	IGKV Kusum (RSS 2016-03) (V)	2021	Chhattisgarh plains and Madhya Pradesh	Yield (kg/ha): 2710; Days to maturity: 138-140; Oil content (%): 34.26; Moderately resistant to fusarium wilt

# Mapping of varieties and hybrids of Linseed



## List of Variety/ Hybrid of Linseed

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
1.	Tiara	2015	Himachal Pradesh, Uttarakhand, Meghalaya, Sikkim, Arunachal Pradesh, Uttar Pradesh, Jammu & Kashmir and West Bengal	Yield (kg/ha):1290; Days to maturity: 100-110 (Fibre), 135-150 (Seed), Tolerant to fusarium wilt
2.	Divya	2016	Punjab, Haryana, Himachal Pradesh and Uttarakhand	Yield (kg/ha): 1540; Days to maturity:170-180; Oil content (%): 39.81; Suitable for rainfed area, resistant to rust, moderately resistant to Alternaria blight, wilt and bud fly
3.	Him Palam Alsi-2	2018	Himachal Pradesh, Haryana, Jammu & Kashmir	Yield (kg/ha): 1689; Days to maturity:174; Oil content (%): 35.27; Suitable for cultivation in irrigated areas, resistant to rust, moderately resistant to powdery mildew and bud fly.
4.	Surya	2019	Jammu & Kashmir, Himachal Pradesh, Punjab and Haryana	Yield (kg/ha): 1430; Days to maturity: 155-172; Oil content (%): 35.49; Suitable for timely sown and irrigated conditions, highly resistant to rust, moderately resistant to wilt, Alternaria blight and powdery mildew.
5.	Aparna	2020	Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana	Yield (kg/ha): 1342; Days to maturity: 168; Oil content (%): 37.0; Suitable for irrigated condition, moderately resistant against rust and bud fly
6.	RLC-167	2020	Jammu & Kashmir, Himachal Pradesh, Punjab, Chhattisgarh	Yield (kg/ha): 1297; Days to maturity: 160 (Jammu, Himachal Pradesh, Punjab), 118-122 (Chhattisgarh); Oil content (%): 34.3; Suitable for irrigated condition, resistant to rust, moderately resistant against bud fly and Alternaria leaf blight
7.	Priyam	2017	Punjab, Haryana, Himachal Pradesh and Uttar Pradesh	Yield (kg/ha): 1250; Days to maturity: 174; Oil content (%): 37.48; Suitable for rainfed area, and moderate fertility condition during Rabi season, highly resistant to bud fly and rust
8.	Kota Barani Alsi-6	2020	Jharkhand (Kanke), Uttar Pradesh (Kanpur, Faizabad,), Bihar (Sabour, Dholi,), West Bengal (Berhampore), Silloganiunder	Yield (kg/ha): 1277; Days to maturity: 130-135; Oil content (%): 35; Suitable for irrigated conditions, moderately resistant to wilt powdery mildew, rust and Alternaria blight

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
9.	RLC-164	2020	Jammu & Kashmir, Himachal Pradesh, Punjab, Chhattisgarh	Yield (kg/ha): 1160; Days to maturity: 161; Oil content (%): 32.6; Suitable for rainfed condition, resistant to rust, moderately resistant to Alternaria blight and bud fly
10.	Him Palam Alsi -1	2019	Himachal Pradesh	Yield (kg/ha): 760; Days to maturity: 183; oil content (%): 36.15%; Suitable for Utera system of cultivation under assured moisture condition during Rabi season, highly resistant reaction to rust, powdery mildew, wilt and resistant to bud fly.
11.	Indu	2017	Uttar Pradesh	Yield (kg/ha): 960; Days to maturity: 134-140; oil content (%): 39; Suitable for rainfed area, resistant to rust, powdery mildew and bud fly
12.	TL-99	2019	Uttar Pradesh, Bihar, Jharkhand, West Bengal, and Nagaland	Yield (kg/ha): 1270; Days to maturity: 115-132; oil content (%): 36.56; Suitable for irrigated condition, a low linolenic variety (4.0%), moderately resistant to powdery mildew, Alternaria blight, wilt and resistant to rust.
13.	Rajan	2019	Uttar Pradesh	Yield (kg/ha): 1528; Days to maturity: 130-135; oil content (%): 38; Suitable for timely sown irrigated condition, brown & medium bold seeded. Moderately resistant to wilt, powdery mildew and bud fly,
14.	SHUATS Alsi- 2	2021	Uttar Pradesh	Yield (kg/ha): 1110; Days to maturity: 123-125; oil content (%): 37.40; Suitable for irrigated conditions in high/ low fertility soils of Uttar Pradesh during Rabi season; resistant to powdery mildew & rust and moderately resistant to wilt and Alternaria blight
15.	Uma	2017	Uttar Pradesh	Yield (kg/ha): 870; Days to maturity: 123-135; Oil content (%): 37.68; Suitable for rainfed area, tolerant to wilt Alternaria blight and rust
16.	Sabour Tisi-1	2018	Uttar Pradesh excluding Bundelkhand, Bihar, Jharkhand, West Bengal and	Yield (kg/ha): 686; Days to maturity: 120-122; Oil content (%): 37.68; Suitable for timely sown under Utera/ rainfed/ high/ low fertility condition during Rabi season, moderately resistant to Alernaria blight and bud fly.

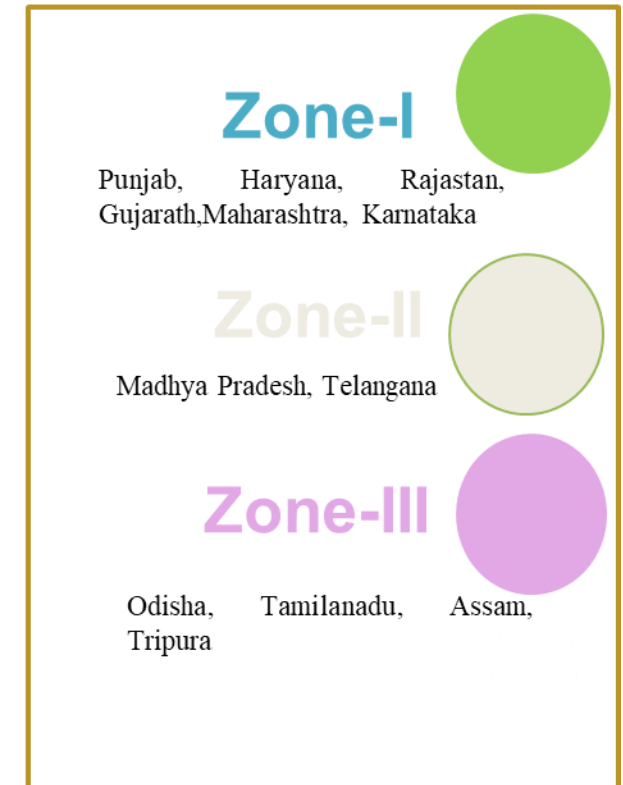
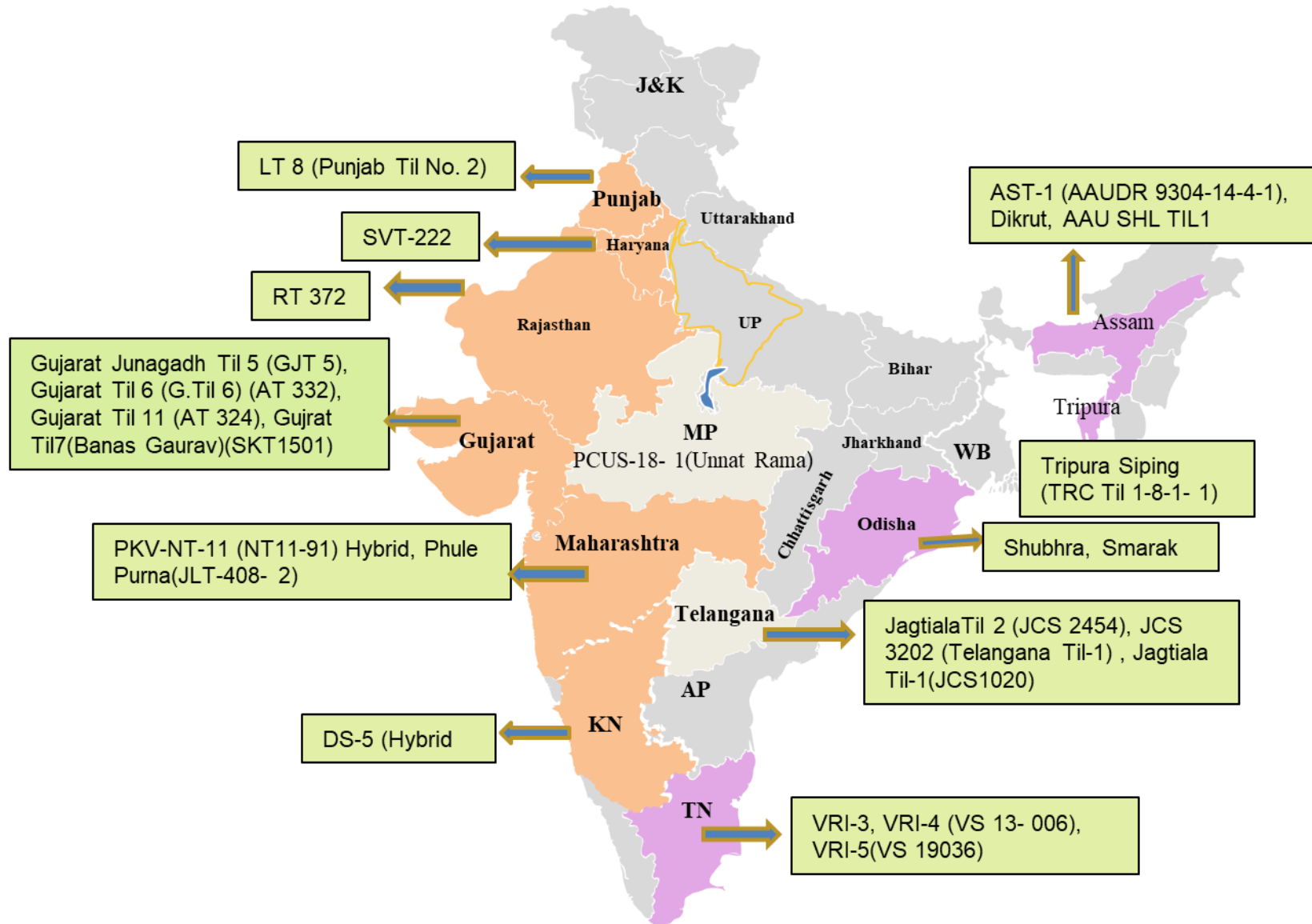
S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
17.	Utera Alsi-2	2018	Uttar Pradesh, Bihar, Jharkhand, Odisha, Chhattisgarh and Madhya Pradesh	Yield (kg/ha): 570; Days to maturity: 115-122; Oil content (%): 34.80; Suitable for rice-based relay cropping system.
18.	Sabour Tisi- 3	2021	Uttar Pradesh (Excluding Budelkhand), Bihar, Jharkhand, West Bengal, Assam, Nagaland, Bundelkhand of Uttar Pradesh, Madhya Pradesh, Rajasthan, Maharashtra, Chhattisgarh, Odisha and Karnataka	Yield (kg/ha): 547; Days to maturity: 118; oil content (%): 38.2; Suitable for Utera cultivation for high/ low fertility regions during Rabi season, resistant to wilt and powdery mildew; moderately resistant to rust; moderately susceptible to Alternaria blight.
19.	Sabour Tisi-2	2021	Bihar	Yield (kg/ha): 1520; Days to maturity:122; oil content (%): 37.8; Suitable for irrigated situations in high/low fertility soils during Rabi season; resistant to wilt, rust, powdery mildew and moderately resistant to Alternaria blight
20.	Birsa Tisi-1	2021	Jharkhand	Yield (kg/ha): 1520; Days to maturity:122; oil content (%): 37.8; Suitable for irrigated situations in high/low fertility soils during Rabi season; resistant to wilt, rust, powdery mildew and moderately resistant to Alternaria blight
21.	BUAT Alsi-4	2020	Rajasthan, Madhya Pradesh, Maharashtra, Odisha, Chhattisgarh and Karnataka.	Yield (kg/ha): 1260; Days to maturity: 120-122; oil content (%): 32.0; Suitable for irrigated condition; moderately resistant against bud fly, powdery mildew and Alternaria leaf blight
22.	Kota Barani Alsi-4	2015	Uttar Pradesh, Madhya Pradesh and Rajasthan	Yield (kg/ha): 1100; Days to maturity: 120-126; oil content (%): 40.37; moderately resistant to Alternaria blight and powdery mildew
23.	Varsha Alsi	2018	Rajasthan, Madhya Pradesh, Bundelkhand region of Uttar Pradesh, Odisha, Maharashtra, Chhattisgarh and Karnataka	Yield (kg/ha): 1033; Days to maturity: 114; oil content (%): 35.7; Suitable for rainfed cultivation; moderately resistant to powdery mildew and bud fly.

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
24.	Jawahar Linseed Sagar-95	2018	Bundelkhand part of Uttar Pradesh, Rajasthan, Madhya Pradesh and Central Peninsular India (Zone-III)	Yield (kg/ha): 1085; Days to maturity: 113-133; oil content (%): 42.85; Suitable for rainfed farming; resistant to rust and moderately resistant to wilt.
25.	JLS-66	2018	Madhya Pradesh	Yield (kg/ha): 1200; Days to maturity: 107-114, oil content (%): 42.85; Suitable for rainfed area; moderately resistant to powdery mildew, rust and major insect pests
26.	JLS-79,	2016	Madhya Pradesh	Yield (kg/ha): 1730; Days to maturity: 117-120; oil content (%): 36.85; Suitable for rainfed area; Brown seeded; resistant to rust moderately resistant to wilt, powdery mildew and bud fly. Suitable for Intercropping with pulses. High Omega-3 content
27.	Jawahar Linseed-165	2020	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab and Haryana	Yield (kg/ha): 1392; Days to maturity: 165; oil content (%): 33.84; Suitable for irrigated condition; moderately resistant against most obnoxious pest i.e.; bud fly (dsyneuralini), high level of resistance to rust diseases, moderately resistance to wilt and powdery mildew
28.	Pratap Alsi- 2	2015	Rajasthan	Yield (kg/ha): 1960; Days to maturity: 129-135; oil content: 41.81; Suitable for irrigated area; Early maturity and Brown seeded; moderately resistant to Alternaria blight, powdery mildew, wilt and bud fly.
29.	Kota Barani Alsi-3	2015	Rajasthan	Yield: 1370; Days to maturity: 119-124; oil content (%): 38.73; Suitable for rainfed area, resistant to rust and moderately resistant to alternaria blight, powdery mildew and bud fly



S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
30.	Kota Barani Alsi-5	2020	Rajasthan and adjoining area of Madhya Pradesh	Yield (kg/ha): 1150; Days to maturity: 140; oil content (%): 35-36; Suitable for rainfed and un-irrigated conditions; moderately resistant to wilt and alternaria blight diseases, moderately resistant to bud fly
31.	Chhattisgarh Alsi-1	2016	Chhattisgarh	Yield (kg/ha): 840; Days to maturity: 129-135, oil content (%): 36.40; Suitable for rainfed area; moderately resistant to Alternaria blight, powdery mildew, wilt and bud fly
32.	Utera Alsi	2018	Chhattisgarh, Odisha, Madhya Pradesh, Bihar, Jharkhand and	Yield (kg/ha): 570; Days to maturity: 118; Suitable for moisture stress Rabi season, i.e., rice-based relay cropping ecosystem, moderately resistant to linseed bud fly.
33.	PKV-NL- 260	2015	Maharashtra	Yield (kg/ha): 960; Days to maturity: 102-106; oil content (%): 37.67; Suitable for rainfed area; moderately resistant to powdery mildew and bud fly
34.	LSL-93	2019	Maharashtra	Yield (kg/ha): 960; Days to maturity: 105; oil content (%): 37.95; Suitable for rainfed conditions; moderately resistant to major disease like powdery mildew, Alternaria and rust.
35.	Arpita	2016	Odisha, Maharashtra, Madhya Pradesh, Chhattisgarh, Karnataka, Andhra Pradesh	Yield (kg/ha): 1299; Days to maturity: 101-107; oil content (%): 35.67; Suitable for rainfed area; resistant to Alternaria blight, powdery mildew and wilt. Moderately resistant to Bud fly

# Mapping of varieties and hybrids of Sesame



## List of Variety/ Hybrid of Sesame

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
<b>Tamil Nadu</b>				
1	VRI-3	2018	Tamilnadu	Moderately resistant to Macrophomina and shoot webber cum capsule borer,, average yield,850-950 Kg/ha, maturity 75-80 days, Oil content 50-52%
2	VRI-4 (VS 13-006)	2021	Zone I (Maharashtra, Telangana, Karnataka), Zone II (Andhra Pradesh, Bihar, Madhya Pradesh) and Zone III (Odisha, Andhra Pradesh, West Bengal and Tamil Nadu) of India	Resistant to phyllody and Cercospora leaf spot diseases and moderately resistant to powdery mildew, Alternaria leaf spot and Dry root rot diseases, average yield,900-1000 Kg/ha, maturity 85-90 days, Oil content 46-48%
3	VRI-5(VS 19036)	2022	Tamil Nadu	Suitable for cultivation during Rabi and summer seasons (both irrigated and rainfed condition), average yield 795 Kg/ha, maturity 75-80 days (Seed to seed), moderately resistant to stem and root rot, phyllody and powdery mildew diseases as well as sucking pests
<b>Odisha</b>				
4	Shubhra	2014	Odisha	Suitable for kharif and summer season, yield 800- 900 kg/ha, oil content- 48-52%, maturity 78-84 days, white seeded, tolerant to alternaria and suitable for delayed shattering 2015 Gazette Notification No. SO 268 (E) Dated 28.01.2015
5	Smarak	2014	Odisha	Suitable for kharif season, yield :8.00-9.00 q/ha., oil content- 48-50%, golden yellow bold seeded, maturity 80-85 days and having synchronous maturity, tolerant to alternaria and suitable for delayed shattering 2015 Gazette Notification No. SO 268 (E) Dated 28.01.2015

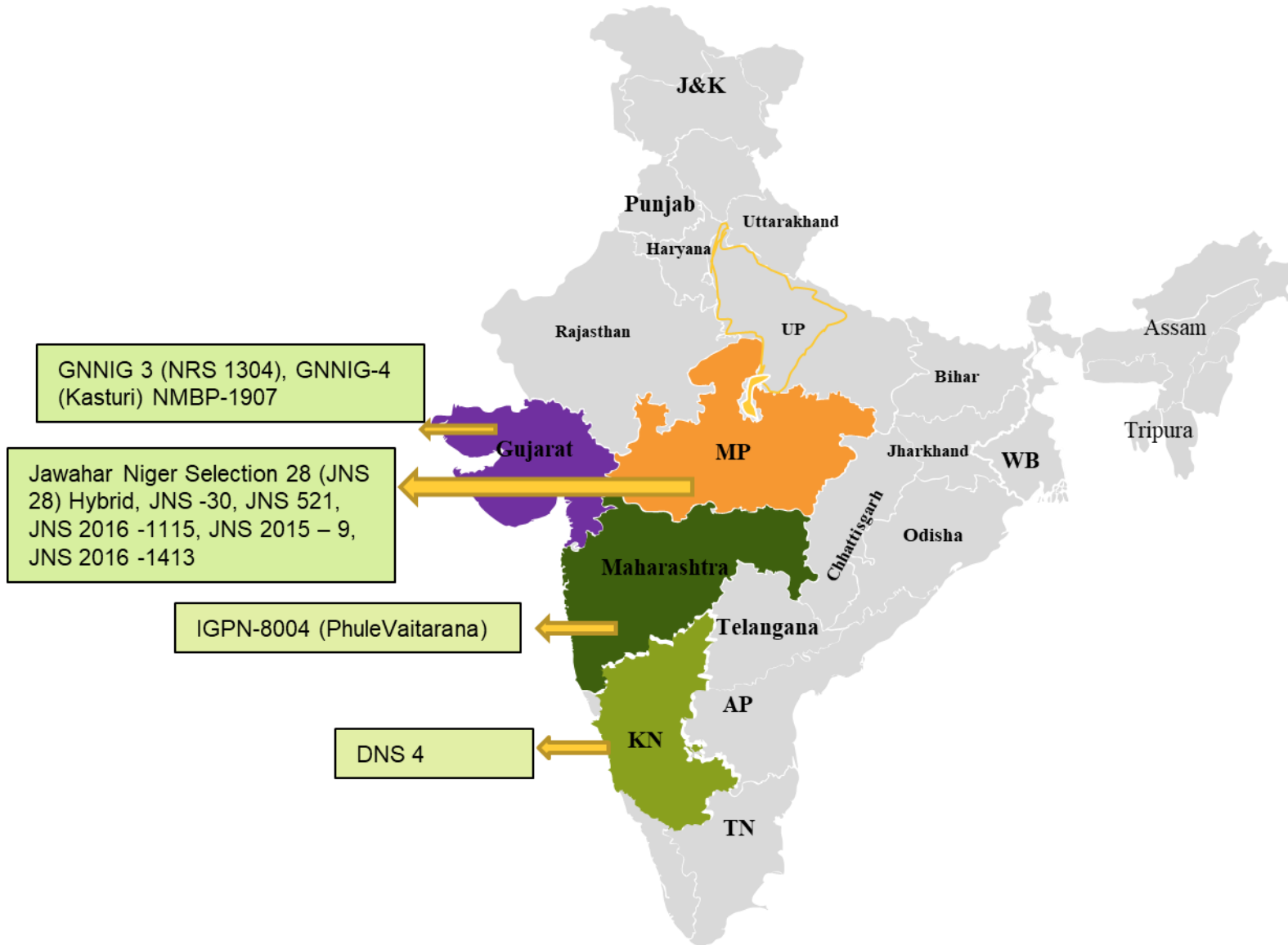
S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
<b>Punjab</b>				
6	LT 8 (Punjab TilNo. 2)	2016	Punjab	Suitable for kharif season, yield 700-800 kg/ha., oil content- 48-50%, white bold seeded, maturity 85-90 days, tolerant to cercospora leaf blight and phyllody (Gazette Notification No. SO 3540 (E) Dated 22.11.2016)
<b>Rajasthan</b>				
7	RT 372	2020	Rajasthan, Haryana, Punjab, Gujarat, Himachal Pradesh, Uttar Pradesh, Maharashtra and Nagaland	Suitable for rainfed condition, white seeded, moderately resistant to Macrophomina stem & root rot, phyllody, Alternaria leaf spot, shattering resistant, Seed yield: 600-700 kg/ha, maturity : 85- 87 days; oil content : 48-50% Gazette Notification No. SO 500 (E) Dated 29.01.2021
<b>Gujarat</b>				
8	Gujarat Junagadh Til 5 (GJT 5)	2016	Summer, Irrigated condition, Gujarat	Suitable for summer season, Irrigated condition, Yield 900-1000 kg/ha., Oil content- 48-50%, white bold seeded and suitable for export purpose, maturity 90-95 days (Gazette Notification No. SO 3540 (E) Dated 22.11.2016)
9	Gujarat Til 6 (G.Til 6) (AT 332)	2018	Gujarat	Suitable for kharif rainfed conditions of Gujarat state, yield 9-10 q/ha, oil content 49-51%, white bold seeded, maturity 85-90 days. 2019 Gazette Notification No. SO 1498 (E) Dated 01.04.2019
10	Gujarat Til 11 (AT 324)	2021	Telangana, Maharashtra, Karnataka, West Bengal, Madhya Pradesh, Bihar, Andhra Pradesh, Tamil Nadu	Suitable for Irrigated/timely sown summer season, black seeded, moderately resistant to Macrophomina stem & root rot and resistant to Alternaria leaf spot, Cercospora leaf spot and phyllody. oil content: 47-48% Average grain yield 8.4-8.5 q/ha Maturity: 85- 90 days. Gazette Notification No. SO 8 (E) dated 24.12.2021
11	Gujrat Til-7 (Banas Gaurav) (SKT- 1501)	2022	Gujarat	Suitable for cultivation during kharif season, average yield 850-950 Kg/ha, maturity 88-94 days, moderately resistant to powdery mildew and cercospora leaf spot, moderately susceptible to phytophthora blight and macrophomina stem rot. Resistant to leaf webber, mite, resistant to phyllody, white seeded, high oil content (49.06%), high linoleic acid (44.69%) and linolenic acid (0.32%) content

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
<b>Madhya Pradesh</b>				
12	PCUS-18-1(Unnat Rama)	2022	Madhya Pradesh, Bihar, Andhra Pradesh, West Bengal, Odisha and Tamil Nadu	Suitable for Rabi summer cultivation under irrigated in both high and low fertility conditions. Days to maturity: 86-90 (late maturity group) Yield: 9.51 q/ha Oil content: 46.35%, Moderately resistant to Macrophomina stem and root rot and Alternaria leaf spot, Cercospora leaf spot, moderately resistant to Capsule borer, leaf hopper and mirid bug.
<b>Telangana</b>				
13	Jagtiala Til 2 (JCS 2454)	2021	Telangana	Suitable for cultivation during summer, moderately resistant to powdery mildew and Alternaria leaf spot. Moderately tolerant to drought conditions. Seed yield - 950-1000 kg/ha Late duration - 90-95 days Plant height - 75-125 cm, Quality traits: 46-49% oil content. Iron -130.07 mg/kg, Zinc - 69.8 mg/kg and Calcium - 12630 mg/kg, 0.21 % Ecosenoic acid and high in Unsaturated fatty acids viz. 40.86 % Oleic acid & 41.95 % Linoleic acid, Seed color - White. Gazette Notification No. SO 8 (E) dated 24.12.2021
14	JCS 3202 (Telangana Til-1)	2022	Maharashtra, Karnataka and Telangana	Suitable for: Summer Yield: 851 kg/ha (820-980 Kg/ha) Maturity: 91-95 days. Abiotic stress resistance (like Rainfed, Drought, Flood, Submergence; High Temp/ Heat resistant/tolerant): Biotic stress like Diseases / Pests resistance/tolerance: Moderately resistant to Macrophomina stem and root rot, Alternaria leaf spot, Cercospora leaf spot and phyllody Special features (like high in protein / micronutrient or any other feature etc.): Seeds are white in colour and medium in size, Oil content 44.2 %. Gazette Notification No. SO 4065 (E) Dated 31.08.2022
15	Jagtiala Til-1 (JCS-1020)	2022	Telangana	Suitable for cultivation during late kharif and summer seasons, yield 1050- 130kg/ha during Summer under irrigated and 700-800 kg/ha during late kharif with lifesaving irrigations, maturity: 85-95 days during Summer and 95-100 days during late kharif, oil content 46.0-49.0%, moderately resistant to powdery mildew, cercospora leaf spot and phyllody

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
<b>Maharashtra</b>				
16	PKV-NT-11 (NT-11-91) Hybrid	2015	Maharashtra	Suitable for summer season, yield 800-850 kg/ha., oil 46-48%, dark brown seeded, maturity 88-92 days, tolerant to phyllody, moderately resistant to root rot. 2015 (Gazette Notification No. SO 112 (E) Dated 12.01.2015)
17	Phule Purna (JLT-408-2)	2022	Summer cultivation in Khandesh and adjoining areas of Marathwada region of Maharashtra	Suitable for summer cultivation, yield 705 kg/ha, maturity 84-97 days, FFA% 0.81%, oil content 49.0%. white and bold seed (Av. 1000 seed weight 4.0 g), resistant to cercospora leaf spot, alternaria leaf spot, and powdery mildew mod, resistant to phyllody, macrophomina stem/root rot under field condition
<b>Haryana</b>				
18	Haryana Til-2	2012	Haryana, Panjab, HP, Delhi and J&K	White seed, tolerant to phyllody and leaf curl average yield, 650-750 Kg/ha, maturity 85-90 days, Oil content 48-50%
19	SVT-222	2021	Haryana (high or low fertility rainfed areas)	Shinning white seed colour, seed yield: 6-7 q/ha, oil content: 46-47%, maturing in 84-90 days, suitable to early/ timely sown conditions, moderately resistant to macrophomina stem and root rot, phyllody and powdery mildew diseases and leaf webber and capsule borer 2021 Gazette Notification No. SO 2986 (E) Dated 20.07.2021
<b>West Bengal</b>				
20	CUMS-17 (Suprava)	2018	West Bengal, Odisha, Maharashtra, Chhattisgarh, Telangana, Tamil Nadu and Karnataka	Suitable for irrigated, summer crop, superior performance under timely, early and late sown conditions with very low reductions in seed yield and other agronomic parameters, yield 9.0-12.0 q/ha, oil content -48-50%, Maturity 88-90 days, resistant to diseases like root rot, phyllody and powdery mildew, suitable for high heat and drought situation. 2018 Gazette Notification No. SO 6318 (E) Dated 26.12.2018
<b>Karnataka</b>				
21	DS-5 (Hybrid)	2015	Karnataka	Suitable for kharif season, yield 600-700 kg/ha., oil content- 50-52%, white bold seeded, maturity 90-95 days 2015 (Gazette Notification No. SO 2680 (E) Dated 01.10.2015)

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
<b>Assam</b>				
22	AST-1 (AAUDR 9304-14-4-1), Dikrut	2020	Assam	Suitable for rainfed as well as irrigated condition, lodging tolerant; average seed yield: 850-1000 kg/ha, maturity: 75-78 days 2020 (Gazette Notification No. SO 3482 (E) Dated 07.10.2020)
23	AAU SHL TIL1	2022	Assam	Suitable for: Summer season in Assam Yield: 10-12 q/ha (Potential), 9.04 q/ha (Average) Maturity: 80-85 days Abiotic stress resistance (like Rainfed, Drought, Flood, Submergence; High Temp/ Heat resistant/tolerant): Rainfed Biotic stress like Diseases / Pests resistance/tolerance: Resistant to Phytophthora blight and phyllody among diseases; resistant to leaf webber and moderately resistant to capsule borer among insect pests. Special features (like high in protein / micronutrient or any other feature etc.): High oil content (46-49%) 2022 Gazette Notification No. SO 4065 (E) Dated 31.08.2022
<b>Tripura</b>				
24	Tripura Siping (TRC Til 1-8-1-1)	2018	Tripura	Suitable for both summer as well as late kharif, yield: 13-14 q/ha, Maturity 85-90 days, tolerant to Phytophthora blight, oil content : 42-45% 2018 Gazette Notification No. SO 6318 (E) Dated 26.12.2018

# Mapping of varieties and hybrids of Niger



**Madhya Pradesh** ●

**Gujarat** ●

**Maharashtra** ●

**Karnataka** ●



## List of Variety/ Hybrid of Niger

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
1	Jawahar Niger Selection 28 (JNS 28) Hybrid	2017	All India niger growing areas	Suitable for all Niger growing states, yield 550-650 kg/ha., oil content- 34-36%, maturity 100-110 days, tolerant to cercospora and alternaria leaf spot 2017 (Gazette Notification No. SO 2805 (E) Dated 25.08.2017)
2	JNS-30	2016	Madhya Pradesh	Suitable for rainfed as well as irrigated hill condition kharif /early rabi, yield 550-600 kg/ha., oil content- 35-37% maturity 100-105 days, seed shining black, tolerant to cercospora and alternaria leaf spot. 2016 (Gazette Notification No. SO 3540 (E) Dated 22.11.2016)
3	JNS 521	2021	Madhya Pradesh	Suitable for rainfed as well as irrigated hills and plain condition. Shining black seed, tolerant to Alternaria leaf spots & powdery mildew diseases under field condition. Tolerant to aphids, semilooper and caterpillar Maturity 99 – 109 days, Oil content 37-38%, Average yield 550-600 kg/ha. 2021 Gazette Notification No. SO 8 (E) dated 24.12.2021
4	JNS 2016-1115	2021	All India.	Suitable for rainfed and irrigated condition, tolerant to cercospora leaf spots, alternaria leaf spots & powdery mildew diseases. Moderately tolerant to aphids, semilooper and caterpillar. Maturity 96 – 102 days Average yield 650-700 kg/ha, oil content: 39-40% 2021 Gazette Notification No. SO 8 (E) dated 24.12.2021

S. No	Name of the Variety/ Hybrid	Year of release	Area of Adaption	Salient features
5	JNS 2015-9	2021	Madhya Pradesh	Suitable for rainfed as well as irrigated hills and plain condition. Moderately tolerant to aphids, semilooper and caterpillar. Tolerant to cercospora and Alternaria leaf spots & powdery mildew diseases under field conditions. Maturity 99 – 103 days; oil content 37-38% Average yield 550-600 kg/ha. 2021 Gazette Notification No. SO 8 (E) dated 24.12.2021
6	JNS 2016-1413	2022	Chhattisgarh and Jharkhand	Suitable for: Kharif Season, Yield: 630.4 (av) [650 -750 kg/ha] Maturity: 95 day (av.) Abiotic stress resistance (like Rainfed, Drought, Flood, Submergence; High Temp/ Heat resistant/tolerant) : Escape of problem of moisture scarcity Biotic stress like Diseases / Pests resistance/tolerance: Tolerant to cercospora, Alternaria leaf spot, Powdery mildew, Niger caterpillar, White fly and leaf hopper Special features (like high in protein / micronutrient or any other feature etc.): High oil content (%) 39.5%, 2022 Gazette Notification No. SO 4065 (E) Dated 31.08.2022
6	IGPN-8004 (Phule Vaitarana)	2016	Maharashtra	Suitable for rainfed condition, yield 500-550 kg/ha., oil content- 39-41%, maturity 100-105 days, resistant to leaf spot, seed shining black 2016 (Gazette Notification No. SO 3540 (E) Dated 22.11.2016)
7	DNS 4	2014	Karnataka	Kharif, Zone 3 and 8 Karnataka, robust growth habit, yield 500-600 kg/ha., oil content- 39-41%, shining black bold seeded and maturity 90-95 days, 2014 Gazette Notification No. SO 1919 (E) Dated 30.07.2014
8	GNNIG 3 (NRS 1304)	2017	Gujarat	Yield 400-450 kg/ha., oil content- 32- 34%, bold seeded with shining black colour, maturity: 100-105 days, resistant to Alternaria and Cercospora leaf spot disease 2017 (Gazette Notification No. SO 2805 (E) Dated 25.08.2017)
9	GNNIG-4 (Kasturi) NMBP-1907	2022	Gujarat	Suitable for <i>kharif</i> / late <i>kharif</i> season, bold seeded with seed yield 550-600 Kg/ha, maturity 109-133 days, oil content 37.7%, resistant to Alternaria and Cercospora leaf spot diseases, caterpillar and semi looper under field conditions