

## Crop – Soyabean



### 1. Seasons and Varieties :

<b>Adipattam</b> (June - July)	Co 1 (Irrigated), Co 2, Co(Soy) 3
<b>Purattasipattam</b> (Sep. - Oct.)	
<b>Masipattam</b> (February - March)	
<b>Rice fallows</b>	Co 1, Co 2*
* Under protected irrigation.	

### 2. Description of the Variety :

Variety	Co 1	Co 2	Co (Soy) 3
Parentage	Re-selection from a Thailand variety	Cross derivative of UGM 21 x JS 335	Cross derivative of UGM 69 x JS 335
Year of release	1980	1995	2005
50% flowering	37 days	30-40 days	39 – 41 days
Duration (days)	90-100	80-90	90-100
Grain yield (Kg/ha)			
Rainfed	1080	1340	-
Irrigated	1640	1650	1700
Height (cm)	58	30 - 40	53.5
Branches	6	-	5 - 6
Flower colour	Pink	Pink to purple	Pink
Colour of grain	Cream	Creamy yellow	Creamy yellow with brown hilum
100 seed weight (g)	12.5	13 - 14	10.95 – 11.75

### 3. Soyabean Varieties Released/Notified in India :

1	Ahilya-1 (NRC 2)	M.P.	103-106	25-30	Resistant to Rhizoctonia, pod blight, green mosaic virus, bacterial blight and tolerant to Cercospora leaf spot and Anthracnose	White flowers, tawny pubescence, yellow seed coat, grey to black hilum, good germinability, determinate.
3	Ahilya-3 (NRC 7)	M.P.	90-99	25-35	Resistant to bacterial blight, green mosaic virus, bacterial pustules, phyllody, soybean mosaic, Myrothecium and Cercospora leaf spots, tolerant to stem fly, girdle beetle, green and grey semilooper, leaf miner and defoliators.	Determinate, grey pubescence, purple flowers, yellow seed coat, brown hilum, high oil content, resistant to pod-shattering.
4	NRC 37 (Ahilya 4)	Madhya Pradesh, Rajasthan, Maharashtra (Vidharbha & Marathwada), Bundhelkhand region of UP	96-102	35-40	Moderately resistant to collar rot, bacterial pustule, pod blight and bud blight like syndrome. Moderately resistant to stem fly and leaf miner. Non lodging under optimum plant population, non shattering behaviour upto 10 days after harvest maturity	Erect, determinate plants with out anthocyanin colouration in the hypocotyl, white flowers, tawny pubescence, small to medium, spherical yellow seeds with light to dark brown hilum.
5	Alankar	Northern plains	115-120	20-25	Resistant to bacterial pustules, tolerant to yellow mosaic	White flowers, tawny pubescence, yellow seed coat, light brown hilum and determinate
6	Ankur	Northern plains	115-120	20-25	Resistant to bacterial pustules and rust	White flowers, tawny pubescence, yellow seed coat and light brown hilum
7	ADT-1	Cauvery delta of Tamil Nadu	85-90	15-Dec	Tolerance to leaf miner and leaf webber	Determinante, grey pubescence, yellowish white seed coat, brown hilum, suitable as relay crop in rice fallows
8	Birsa soy 1	Uplands of Jharkhand state	110	20-24	Moderately resistant to Bacterial pustule and bacterial blight, resistant to soybean mosaic, yellow mosaic and Cercospora leaf spot	Determinate plants with white flowers, dark green leaves and black seeds with dull white hilum
9	Bragg	Throughout India	112-115	15-20	Resistant to bacterial pustules, susceptible to YMV.	White flowers, grey pubescence, yellow seed coat, black hilum, brown pods, determinate.
10	Co-1	Tamil Nadu	85-90	17-20	Resistant to stem fly & pod borer, moderately resistant to YMV.	Purple flowers, creamy yellow seed coat, relatively low hull and linolenic acid content, determinate.
11	Co Soya-2	Tamil Nadu	75-80	13-14	Tolerant to YMV and leaf miner.	Purple flower, determinate, dark green leaves, yellow seed.
12	Durga (JS 72-280)	Central zone	102-105	20-22	Tolerant to bacterial pustules.	White flowers, tawny pubescence, yellow seed coat, black hilum, tall and indeterminate, fast growing.

13	Gaurav (JS 72-44)	Central zone	104-106	20-25	Susceptible to bud blight, defoliators, girdle beetle and stem fly	Purple flowers, tawny pubescence, yellow seed coat, light black hilum and determinate
14	Gujarat soybean 1 (J-231)	Low rainfall areas of Gujarat	90-95	15-20	Fairly tolerant to disease and pests in Gujarat	Purple flowers, grey pubescence, yellow seed coat, brown hilum and determinate
15	Gujarat soybean 2 (J-202)	Medium to high rainfall areas of Gujarat	105-110	22-25	Fairly tolerant to disease and pests in Gujarat	Purple flowers, grey pubescence, yellow seed coat, brown hilum and determinate
16	Hara soy (Himso 1563)	Himachal Pradesh, Uttaranchal	108-130 days with a mean of 117 days	15-20	Immune to bacterial pustule, highly resistant to brown spot, bacterial blight, and resistant to frog eye leaf spot and pod blight. Highly tolerant to pest complex. Resistant to pod shattering. First ever culinary purpose variety in soybean.	Semi-determinate growth habit, green seed with black hilum, transparent seed coat and green cotyledons. Dark green leaves with smooth surface. The leaves remain green in colour even at senescence. White flower, dark brown pubescence on stem, leaves and pods, pods turn black on maturity. Green seeds, round, bold with black hilum.
17	Hardee	Southern zone	105-110	15-20	Fairly tolerant to bacterial pustules, susceptible to yellow mosaic	White flowers, grey pubescence, yellow seed coat, rosy hilum, determinate and suitable for inter cropping
18	Indira soy 9	Madhya Pradesh, Assam, West Bengal, Bihar, Jharkhand, Meghalaya, Sikkim, Arunachal Pradesh, Nagaland and Tripura	106	22-23	Resistant to rust. Moderately resistant to stem tunneling and girdle beetle and leaf folder. Performs well under low to moderate plant densities	Light grey pubescence throughout the plant parts, broad light medium size green leaves, yellow seeds of medium size with black hilum and intermediate lustre.
19	Improved Pelican	Southern zone	112-115	15-20	Susceptible to bacterial pustules and yellow mosaic	Purple flowers, tawny pubescence, yellow seed coat, brown hilum, brown pods
20	JS 2	Central zone especially Madhya Pradesh	90-95	18-20	Resistant to bacterial pustule, tolerant to Macrophomina	Purple flowers, tawny pubescence, pods with dense brown pubescence, yellow seed coat, light brown hilum, determinate, highly shattering
21	JS 71-5	Malwa Plateau of MP	90-95	20-24		Purple flowers, yellow seed coat, black hilum, semi-dwarf, plant height 30 to 40 cms, determinate, poor seed longevity.
22	JS 75-46	Central zone	100-106	25-30	Tolerant to bacterial pustules, tolerant to Macrophomina	Purple flowers, tawny pubescence, pods with dense brown pubescence, yellow seed coat, light brown hilum, determinate, highly shattering.

23	JS 76-205	Madhya Pradesh esp. Hoshangabad, Narsinghpur and adjoining districts	105-110	20-25	Resistant to bacterial pustules and seed and seed ling rot, tolerant to Anthracnose	Purple flowers, brown pubescen, black seed coat, buff coloured hilum, medium tall plants, suited to low input conditions.
24	JS 79-81	Madhya Pradesh	102-105	25-32	Resistant to bacterial pustule, bacterial blight and tolerant to green mosaic and susceptible to YMV	Purple flowers, detrminate, yellow seed coat, brown hilum and resistant to shattering and lodging
25	JS 80-21	Central zone	105-110	25-30	Tolerant to bacterial pustules, viral diseases and foliar insect-pests.	Purple flowers, tawny pubescence, yellow seed coat, brown/black hilum, determinate, high seed germinability. Perform well in eastern states.
25	JS 90-41	M.P.	87-98	25-30	Moderately resistant to stemfly, semilooper and tolerant to major diseases	Purple flower, tawny pubescence, semi-determinate, lanceolate leaves, 4-seeded pods, greenish yellow seed, blackish hilum.
26	JS 93-05	Central zone (Maharashtra, Madhya Pradesh, Rajasthan, Gujarat and Bundhelkhand region of Uttar Pradesh).	90-95	20-25	Resistant to major diseases and insect pests.	Semi determinate, violet flowers, lanceolate leaves, four seeded pods, glabrous stem & pods, non shattering, black hilum.
27	JS 335	Central zone	95-100	25-30	Resistant to bacterial pustule, bacterial blight and tolerant to green mosaic. Susceptible to YMV.	Purple flowers, semi-determinate, resistant to shattering, black hilum. Performs well in Eastern and Southern states.
28	Kalitur	Madhya Pradesh and Bundhelkhand region of M.P.	120-130	18-20	Susceptible to soybean mosaic, tolerant to bacterial pustules	Purple flowers, tawny pubescen, black seed coat, black hilum, small seeded semi indeterminate
29	Sneh (KB 79)	Karnataka	85-93	17-18	Resistant to Alternaria, bacterial pustules, YMV, soybean mosaic. Moderate tolerance to Cercospora and bud blight.	Purple flowers, grey pubescence, determinate yellow seed, brown hilum.
30	KHSb 2	Karnataka	115-120	20-25	Moderately tolerant to bacterial pustules	Purple flowers, tawny pubescence, yellow seed coat, black hilum, semi determinate
31	Lsb 1	Andhra Pradesh	65-71	15-Dec	--	Determinate, white flowers, light green leaves, cream coloured seed in 4 seeded pods



32	Lee	Northern hill zone	105-115	21-25	Susceptible to yellow mosaic, defoliators, bacterial pustules and girdle beetle	Purple flowers, tawny pubescence, yellow seed coat, black hilum, light brown pods and determinate
33	MACS-13	Central zone	90-100	25-30	Resistant to bacterial pustules, tolerant to viral diseases and leaf-miner.	Purple flowers, tawny pubescence, yellow seed coat, brown pod black hilum, indeterminate.
34	MACS-57	Maharashtra (Rabi/Summer)	85-100	25-30	Resistant to soybean mosaic bacterial pustules and bud blight.	Semi-determinate, purple flowers, tawny pubescence, yellow seed coat, light brown hilum, suitable for Kharif & Rabi.
35	MACS-58	Central zone	90-100	25-30	Resistant to bacterial pustules & leaf spot, tolerant to YMV.	Purple flowers, tawny pubescence, yellow seed coat, light brown hilum, tall semi-determinate, suitable for mechanical harvesting.
36	MACS-124	Southern zone	95-105	25-30	Resistant to bud blight, soybean mosaic and bacterial pustules.	Purple flowers, tawny pubescence, yellow seed coat, dark brown hilum, semi-determinate resistant to lodging.
37	MACS-450	Southern zone	90-95	25-40	Resistant to leaf spot, bud blight, yellow mosaic, soybean mosaic, bacterial pustule. Highly resistant to stemfly and defoliators.	Purple flowers, medium tall, semi-determinate, tawny pubescence, yellow seed, black hilum.
38	MAUS 1	Maharashtra	90-95	25-30	Moderately resistant to YMV, soybean mosaic, bacterial pustules and leaf spots. Moderately resistant to leaf miner, stem fly and girdle beetle	Determinate, white flowers, tawny pubescence, yellow seed coat, brown hilum, tolerant to pod shattering
39	Pooja (MAUS 2)	Southern zone	105-110	25-35	Resistant to green mosaic, bacterial pustule, rust and leaf spots. Moderately resistant to leaf miner, stem fly and blue beetle.	Semi-determinate, grey pubescence, yellow seed coat, light brown hilum, resistant to pod-shattering.
40	MAUS 32	Maharashtra	100-105	23-29	Resistant to moderately resistant of common diseases and pests	Semideterminate, violet flowers, yellow seeds, brown hilum
41	MAUS 47	Maharashtra, Madhya Pradesh and Rajasthan	80-85	25-30	Resistant/tolerant to Soybean mosaic virus, Bud blight, Collar rot, Anthracnose, Cercospora and Rhizoctonia. Resistant to Grey semilooper, Tobacco caterpillar, leaf miner and moderately resistant to stem fly and leaf folder. Resistant to lodging, tolerant to shattering and requires low seed	Determinate plants with tawny pubescence, violet flowers, tan to dark brown pods, yellow, round seeds and brown hilum.

42	MAUS 61	Maharashtra, Andhra Pradesh, Karnataka and Tamilnadu	95-100	26-28	Resistant to major diseases and pests	Semi determinate, Violet flowers, glabrous leaves, pods covered with leaves, non shattering
43	MAUS 61-2	Central zone (Maharashtra, Madhya Pradesh, Rajasthan, Gujarat and Bundhelkhand region of Uttar Pradesh).	100-105	20-30		Semi determinate, purple flowers, glabrous leaves, yellow seeds with light brown hilum, resistant to pod shattering.
44	MAUS 71	North Eastern Zone Maharashtra, Chattisgarh, Jharkhand, Bihar, Orissa, West Bengal, Assam, Arunachal Pradesh, Manipur, Nagaland, Meghalya and Mizoram	93-100	18-30		Semi determinate, purple flowers, glabrous leaves, yellow seed with black hilum, resistant to pod shattering.
45	Monetta (EC-2587)	Central & Southern zone	80-85	20-23	Field tolerance to insect-pests	Purple flowers, tawny pubescence, brown pods, yellow seed coat, light brown hilum, determinate, very early, suitable for intercropping and highly pod shattering.
46	Palam soya	Himachal Pradesh and Uttaranchal	---	--	Resistant to frog eye leaf spot	-----
47	PK 262	Northern hill zone and Northern plain zone	120-125	25-30	Tolerant to yellow mosaic and bacterial pustules	White flowers, grey pubescence, yellow seed coat, brown hilum, determinate with thick stem
48	PK 308	Northern hill zone and Northern plain zone	110-115	20-25	Resistant o bacterial pustule	White flowers, grey pubescen, yellow seed coat, brown hilum, narrow leaves and determinate
49	PK 327	Northern hill zone and Northern plain zone	100-105	20-25	Resistant to bacterial pustules, tolerant to rhizoctonia	Purple flowers, grey pubescence, yellow seed coat, brown hilum and determinate
50	PK-416	Northern hill & northern plain zones	115-120	30-35	Resistant to YMV & bacterial pustules, tolerant to Rhizoctonia.	White flowers, tawny pubescence, yellow seed coat, brown hilum, semi-determinate. Performs well in Punjab, Haryana and also in central zone.
51	PK 471	Southern zone	90-95	25-30	Resistant to bacterial pustules and Phytophthora	White flowers. tawny pubescence, yellow seed coat, brown hilum and determinate

52	PK-472	Northern plain & central zones	100-105	30-35	Resistant to bacterial pustules & YMV, tolerant to Rhizoctonia.	White flowers, grey pubescence, yellow seed coat, brown hilum, determinate, dark green foliage. Performs well in central, eastern and southern states.
53	PK-564	Northern plain zone	105-115	30-35	Resistant to YMV and bacterial pustules, tolerant to Rhizoctonia.	White flowers, tawny pubescence, yellow seed coat, dark brown hilum, determinate and sturdy plant type.
54	Pant Soybean 1024	Northern plain zone	115-118	25-30	Resistant to YMV, rust, bacterial pustules and Rhizoctonia aerial blight.	White flowers, tawny, pubescence, narrow leaves, determinate, brown hilum, resistant to pod shattering.
55	PK 1029	Southern zone	90-95	25-30	Resistant to YMV, rust, bacterial pustules and tolerant to Rhizoctonia.	White flowers, tawny pubescence, yellow seed coat, black hilum, determinate, resistant to pod shattering.
56	Pant Soybean 1042	Northern plain zone	110-119	30-35	Resistant to YMV, bacterial pustule and moderately resistant to Rhizoctonia aerial blight. Tolerant to insect-pests.	Tawny pubescence, white flowers, yellow seed coat, brown hilum, tolerant to pod-shattering, determinate.
57	PS 1092	Tarai and Babar regin of Uttar Pradesh, Uttaranchal and up to mid hills of uttaranchal	118	25-35	Resistant to yellow mosaic, Bacterial pustule, Cercospora leaf spot and tolerant to Rhizoctonia aerial blight	Determinate, Violet flower, dark green leaves, yellow seeds with black hilum
58	Punjab 1	Central, northern plain & northern hill zones	95-100	25-30	Susceptible to bacterial pustules, less susceptible to blue beetle.	Purple flowers, yellow pods with brown pubescence, yellow seed coat, small seeds, light brown hilum, high pod-shattering, early, good germinability, suitable for food uses.
59	Pusa-16	Northern plain & Northern hill zones	105-115	25-30	Resistant to Rhizoctonia & bacterial pustules, tolerant to YMV, tolerant to major insect-pests.	Purple flowers, tawny pubescence, yellow seed coat, grey hilum, compact plant, good germinability.

60	Pusa-20	Northern hill zone	105-120	25-30	Resistant to Rhizoctonia & bacterial pustules, tolerant to YMV and major insect-pests.	White flowers, tawny pubescence, yellow seed coat, black hilum, compact plant. Performs well in central zone.
61	Pusa 22	Northern plain zone, North eastern zone and parts of central zone	110-120	25-30	Highly tolerant to yellow maosaic, resistant to bacterial pustule, rhizoctonia wilt and Alternaria blight and tolerant to bud blight	Purple flowers, tawny pubescence, creamy seed coat, brown hilum and tall plants
62	Pusa-24	Northern plain & Northern hill zones	110-115	25-30	Resistant to bacterial pustules, tolerant to Rhizoctonia, YMV and major insect-pests.	White flowers, tawny pubescence, yellow seed coat, black hilum, compact plant.
63	Pusa 37	Northern plain zone, North eastern zone and parts of central zone	110-115	25-30	Susceptible to yellow mosaic, resistant to bacterial pustule, rhizoctonia wilt and Alternaria blight and tolerant to bud blight	White flowers, tawny pubescence, yellow seed coat, black hilum and medium tall plants
64	Pusa 40	Southern zone	95-100	25-30	Susceptible to yellow mosaic, resistant to bacterial pustule, rhizoctonia wilt and Alternaria blight and tolerant to bud blight	Purple flowers, tawny pubescence, yellow seed coat, brown hilum and semi dwarf plants
65	RAUS 5	North Eastern Zone Maharashtra, Chattisgarh, Jharkhand, Bihar, Orissa, West Bengal, Assam, Arunachal Pradesh, Manipur, Nagaland, Meghalaya and Mizoram	96-104	30-35	Resistant to girdle beetle and moderately resistant to stem fly and defoliators	Determinate, tawny pubescence, purple flower, seed yellow, hilum light to dark brown,
66	Shilajeet	Northern hill zone and Northern plain zone	100-105	20-25	Resistant to bacterial pustules, tolerant to Rhizoctonia	Purple flowers, tawny pubescence, yellow seed coat, light brown hilum and determinate
67	Shivalik	Himachal Pradesh	120-125	25-32	Resistant to yellow mosaic	White flowers, light creamy pubescence, yellow seed coat, dark brown hilum, medium tall plant
68	SL 96	Punjab	110-112	18-20	Tolerant to yellow mosaic virus	White flowers and lodging resistant
69	SL 295	Punjab	120-130	20-25	Resistant to yellow mosaic virus	White flower, tawny pubescence, determinate, yellow seed coat, black hilum.
70	Type 49	Central zone	125-130	20-25	Susceptible to yellow mosaic, bacterial pustules and bud blight	Purple flowers, grey pubescence, yellow seed coat, brown hilum and good germinability
71	VL Soya -1	Uttar Pradesh and Uttaranchal	110-113	20-25	Tolerant to Cercospora leaf spot	White flowers, tawny pubescence, black seed coat, medium tall and determinate
72	VL Soya-2	Northern hill zone	104-116	25-30	-	Purple flowers, less pubescence with white hairs, black hilum, light coloured pods, 4-5 days earlier than Bragg.
73	VL Soya-21	Northern U.P.	120-122	20-25	Resistant to Cercospora leaf spot, bacterial pustules, pod-rot.	White flowers, brown pubescence, determinate, yellow seed coat, brown hilum, good germinability.
74	VL Soya -47	North western hills under rainfed condition	126	23	Resistant/ tolerant to Anthracnose, Cercospora leaf spot, Bacterial leaf blight and Frog eye leaf spot. Tolerant to grey semi loopers (G. gemma) larvae, Aphids and pod damage by green semi loopers. No shattering.	Determinate plants with white pubescence, white flowers, yellow shiny seeds with brown hilum.