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KUFRI NEELKANTH: PURPLE SKIN COLOURED SPECIALITY POTATO VARIETY OF INDIA

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ABSTRACT: Kufri Neelkanth is a medium maturing, main season, high yielding speciality table potato variety suitable for cultivation in North Indian plains. It is a clonal selection from the cross between MS/89-1095 x CP3290. Its plants are tall and vigorous with field resistance to late blight. It produces attractive purple coloured ovoid tubers with shallow eyes and light yellow flesh, possess good keeping quality. Kufri Neelkanth possess comparatively higher anti-oxidants as compared to other red skin varieties. It is fertilizer responsive and capable of yielding 35–38 t/ha under optimum agronomical practices

KEYWORDS: Kufri Neelkanth, potato, speciality variety, high yield, late blight, keeping quality, North Indian plains

INTRODUCTION

In India, mostly white/yellow skinned or flesh-coloured potatoes are preferred, however red skinned potatoes are liked in eastern part of India and Jammu & Kashmir. In some pockets of Bareilly district of Uttar Pradesh, locally grown cultivar known as Bareilly red is famous among the consumers owing to its dark red tubers with variegated flesh colour and waxy texture (Luthra *et al.* 2015a). The potatoes with red, purple, blue or orange skins and/or fleshes originate from the accumulation of anthocyanins in the specific parts of different classes of pigments, that is, carotenoids and anthocyanins. Carotenoids produce white, yellow or saffron yellow colours of the skins and/or fleshes. Anthocyanins produce red, purple, blue or orange colours and different coloured potatoes. Both carotenoids and anthocyanins are antioxidants having protective or disease preventive properties. Such coloured potatoes are liked by people to add colour and taste/ interest to meal. CPRI has developed eight indigenous varieties with red skin and white or white-cream flesh colour. In India, some potato varieties having purple black or purple skin with low yield potential are locally grown in some pockets of North Eastern region and Himachal Pradesh. These locally adapted varieties remain popular due to slow rate of degeneration and are also liked for better taste (Luthra *et al.* 2015b). Keeping in view the liking of people for potatoes with different skin colours and the nutritional advantage carried by such coloured potatoes, the efforts were directed to develop a new high yielding, late blight resistant variety having good keeping quality with purple skinned tubers and yellow flesh colour. The work in this respect led to development of new speciality potato variety Kufri Neelkanth.

BACKGROUND

Kufri Neelkanth (MS/08-1565) was bred and selected at Modipuram, a regional

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station of the Central Potato Research Institute, Shimla. The clone was derived from a cross between MS/89-1095 x CP3290 made in 2006 at Kufri. Female parent MS/89-1095 is indigenous medium maturing advanced clone, which produces yellow skinned ovoid shaped, medium-deep eyed, white fleshed tubers with moderate resistance to late blight (Luthra *et al.* 2020). The male parent CP3290 (Hope Hely) is an exotic variety from Hungary which produces white skinned, long-ovoid shaped, shallow eyed, white fleshed tubers with late blight resistance. The cross was made in 2006 at Central Potato Research Station, Kufri, Himachal Pradesh. The pedigree of Kufri Neelkanth is described in fig.1. The clone was in single hill (2007-08), five-hill plots (2009-10), 30 hill plots (2010-11), multiple row trials (2011-12) and replicated trials (2012-13 and 2013-14) at ICAR-CPRI regional station, Modipuram. The advanced clone MS/8-1565 was introduced in All India Coordinated Research Project on Potato (AICRP on Potato) in 2014 for multi-location evaluation across the country.

Under AICRP, the advanced clone MS/8-1565 was evaluated in replicated trials during 2014-15 (4 locations), 2015-16 (8 locations) and in on-farm trials (2016-17) at 8 locations). It showed wider adaptability and higher yield than the controls. The data were analyzed following standard statistical procedures as described by Gomez and Gomez (1984) using the software Windostat 8.5 (Ameerpet, Hyderabad, India). Based on its performance, the clone was recommended for release in 34rd AICRP Potato group meeting held during 16-18 September, 2017 at BCKV, Kalyani, West Bengal and subsequently it was released and notified as variety in the name of Kufri Neelkanth by Central Sub-Committee on Crop Standards Notification and Release of Varieties for Horticultural Crops, Ministry of Agriculture, Department of Agriculture and Co-operation, Government of India, New Delhi vide No.3-69/2018-SD'lV dated 20th Dec. 2018.

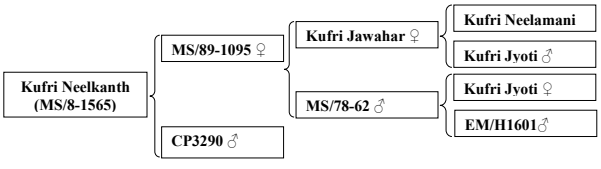

Fig. 1. Pedigree of Kufri Neelkanth

VARIETAL DESCRIPTION

Plants

Plants: Medium, plant canopy compact, stem medium thick, predominantly green, secondary stem colour red brown throughout highly scattered, wings poorly developed and wavy.

Foliage: Grey green, leaves intermediate, leaf width medium, leaflets ovate lanceolate, leaflet coalescence absent, rachis coloured, midrib green.

Inflorescence

Flowering: Medium (Fig. 2), inflorescence medium, floral stalk medium coloured, floral

Fig. 2. Morphological characteristics of Kufri Neelkanth: Leaf, flowers, tuber and sprout

stalk-pedicle articulation clearly visible and located above the middle, calyx light red brown, corolla blue violet, corolla shape semi-stellate, anther yellow, anther cone normally developed, stylar length equals stamen column and stigma bi-lobed.

Tubers

Size: Medium to large, 8-9 tuber per plant, *Shape*: ovoid. *Skin:* smooth, *purple*. *Eyes*: shallow, predominantly apical. *Eyebrows:* normal. *Flesh*: yellow with mealy texture.

Sprout

Purple, spherical, pubescence at sprout base is weak, sprout tip closed, frequency of sprout root initials medium, protrusions of lenticels weak and lateral shoots short.

YIELD PERFORMANCE

Station trials

In station trials at Modipuram during 2012-13 & 2013-14, advanced clone MS/8-1565 (37 t/ha) yielded 20 and 41 % higher total tuber yield as compared to controls Kufri Lalima (31 t/ha) and Kufri Sindhuri (26 t/ha) at 75 days (**Table 1**). The clone produced nearly 91% marketable tuber yield as compared to Kufri Lalima (93%) and Kufri Sindhuri (83%). At 90 days (**Table 1**), clone MS/8-1565 (43 t/ha) yielded 8 and 18 % higher total tuber yield over Kufri Lalima (40 t/ha) and Kufri Sindhuri (36 t/ha). The clone produced nearly 92% marketable tuber yield as compared to Kufri Lalima (95%) and Kufri Sindhuri (91%).

Multi-location testing

Under AICRP (Potato), during 1st year trials, based on pooled analysis of four locations Jalandhar, Kalyani, Modipuram and Patna, advanced clone, MS/8-1565 (30 t/ha) out yielded the controls Kufri Lalima (29 t/ha), Kufri Sindhuri (26t/ha) and Kufri Lalit (28 t/ha) by a margin of 3, 15 and 7% at 75 days (**Table 2**). At 90 days crop duration

Table 2. Total tuber yield (t/ha) of MS/8-1565 in replicated trials (2014-15) at 75 days

Locations/ Genotypes	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
Jalandhar	34.08	34.54	30.23	36.16
Kalyani	26.94	26.39	24.54	23.10
Modipuram	31.73	29.07	25.95	27.61
Patna	26.77	26.29	23.40	24.60
Mean	29.88	29.07	26.03	27.87
% yield increase		2.79	14.79	7.21
CD (0.05)	Genotypes:1.65, Genotype × location: 3.29			

Table 1. Performance of MS/8-1565 at Modipuram during 2012-2014 (DAP*days after planting)

Genotypes	2012-13		2013-2014		Average		% yield increase	
	75 DAP*	90 DAP	75 DAP	90 DAP	75 DAP	90 DAP	75 DAP	90 DAP
	Total tuber yield (t/ha)							
MS/08-1565	38.00	43.48	35.60	42.13	36.80	42.81		
Kufri Lalima	28.92	37.31	32.50	41.96	30.71	39.64	19.86	8.00
Kufri Sindhuri	23.72	35.58	28.55	37.06	26.14	36.32	40.78	17.90
CD (0.05)	1.96	1.78	0.93	1.91				
	Marketable tuber yield (t/ha)							
MS/08-1565	34.48	40.47	32.31	38.69	33.40	39.58		
Kufri Lalima	26.9	35.87	30.42	39.26	28.66	37.57	16.52	5.36
Kufri Sindhuri	18.56	32.21	24.67	34.09	21.62	33.15	54.50	19.40
CD (0.05)	2.17	2.18	1.18	1.61				

(**Table 3**), MS/8-1565 (39 t/ha) yielded 12 and 9% higher than Kufri Sindhuri (35 t/ha) and Kufri Lalit (36 t/ha) and remained at par with Kufri Lalima (39 t/ha). MS/8-1565 produced nearly 91 and 93% marketable yield at 75 and 90 days, respectively.

During 2nd year replicated trials, based on pooled analysis of 8 locations (Hisar, Jalandhar, Kalyani, Kanpur, Modipuram, Pantnagar, Patna and Raipur), advanced clone MS/8-1565 (31 t/ha) out yielded the controls Kufri Lalima (27 t/ha), Kufri Sindhuri (27 t/ha) and Kufri Lalit (30 t/ha) by margin of 14, 16 and 3% at 75 days (**Table 4**). At 90 days crop duration (**Table 5**), MS/8-1565 (41 t/ha) yielded 18, 19 and 12% higher than Kufri Lalima (34 t/ha), Kufri Sindhuri (34 t/ha) and Kufri Lalit (36 t/ha). MS/8-1565 produced nearly 88 and 89% marketable yield at 75 and 90 days, respectively.

In On-farm trials, based on pooled results of 8 locations (Hisar, Jalandhar, Kalyani, Kanpur, Modipuram, Pantnagar, Patna and Raipur), advanced clone, MS/8-1565 (29 t/ha) out yielded the controls Kufri Lalima (27 t/ha), Kufri Sindhuri (25 t/ha) and Kufri Lalit (27 t/ha) by margin of 10, 18 and 7% at 75 days **(Table 6)**. At 90 days crop duration **(Table 7)**, MS/8-1565 (37 t/ha) yielded 14,

Table 3. Total tuber yield (t/ha) of MS/8-1565 in replicated trials (2014-15) at 90 days

Locations/ Genotypes	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
Jalandhar	48.85	52.13	40.10	48.34
Kalyani	33.06	32.32	30.56	27.55
Modipuram	41.69	39.48	39.96	38.88
Patna	31.98	31.45	27.94	29.36
Mean	38.89	38.84	34.64	36.03
% yield increase		0.13	12.27	7.94
CD (0.05)	Genotypes:2.15, Genotype × location: 4.29			

Table 4. Total tuber yield (t/ha) of MS/8-1565 in replicated trials (2015-16) at 75 days

Locations/ Genotypes	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
Hisar	38.82	19.17	32.19	39.28
Jalandhar	32.78	34.54	30.00	33.66
Kalyani	21.96	21.78	21.89	24.15
Kanpur	27.95	26.98	25.49	28.86
Modipuram	37.14	33.88	29.06	32.80
Pantnagar	31.97	30.59	28.22	26.81
Patna	41.99	37.05	35.79	38.08
Raipur	18.48	15.95	14.77	19.93
Mean	31.39	27.49	27.17	30.45
% yield increase		14.19	15.53	3.09
CD (0.05)	Genotypes:1.06, Genotype × location:3.01			

Table 5. Total tuber yield (t/ha) of MS/8-1565 in replicated trials (2015-16) at 90 days

Locations/ Genotypes	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
Hisar	52.54	33.52	46.00	43.02
Jalandhar	44.82	43.34	42.87	48.71
Kalyani	28.11	29.48	29.03	31.96
Kanpur	34.05	32.30	28.30	35.66
Modipuram	45.72	41.95	38.71	38.86
Pantnagar	33.41	32.01	29.54	28.51
Patna	48.94	41.22	38.17	40.60
Raipur	37.35	20.52	20.16	22.24
Mean	40.62	34.29	34.10	36.20
% yield increase		18.46	19.12	12.21
CD (0.05)	Genotypes:1.63, Genotype × location:4.61			

Table 6. Total tuber yield (t/ha) of MS/8-1565 in On-farm trials (2016-17) at 75 days

Locations/ Genotypes	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
Hisar	25.92	31.67	21.05	30.06
Jalandhar	27.08	-	27.35	27.98
Kalyani	21.44	21.89	20.00	22.78
Kanpur	46.16	30.32	32.20	29.91
Modipuram	35.15	32.99	28.43	32.43
Pantnagar	24.44	23.43	23.82	23.43
Patna	39.59	28.80	31.83	32.88
Raipur	13.64	17.22	13.60	18.44
Mean	29.18	26.62	24.79	27.24
% yield increase		9.62	17.71	7.12

Table 7. Total tuber yield (t/ha) of MS/8-1565 in on-farm trials (2016-17) at 90 days

Locations/ Genotypes	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
Hisar	34.65	34.83	22.63	34.73
Jalandhar	41.68	-	39.12	42.43
Kalyani	27.33	28.77	28.22	29.11
Kanpur	52.10	36.47	39.08	33.34
Modipuram	47.75	43.68	41.70	45.52
Pantnagar	25.03	27.62	24.40	24.03
Patna	46.82	33.26	35.61	39.60
Raipur	16.65	19.48	17.79	20.28
Mean	36.50	32.02	31.07	33.63
% yield increase		13.99	17.48	8.53

18 and 9% higher than Kufri Lalima (32 t/ ha), Kufri Sindhuri (31 t/ha) and Kufri Lalit (34 t/ha). MS/8-1565 produced nearly 87 and 85% marketable yield at 75 and 90 days, respectively.

Overall performance of MS/8-1565 in AICRP (Potato)

Based on pooled mean of three years (2014-2017) results of replicated/on-farm trials, advanced clone MS/8-1565 (30 t/ha) produced 9, 16 and 6% higher total tuber yield than Kufri Lalima (28 t/ha), Kufri Sindhuri (26 t/ha) and Kufri Lalit (29 t/ ha) at 75 days (**Table 8**). However at 90 days, MS/8-1565 (39 t/ha) produced 10, 16 and 10% higher total tuber yield than Kufri Lalima (35 t/ha), Kufri Sindhuri (33 t/ha) and Kufri Lalit (35 t/ha). The clone produced nearly 89% marketable tuber yield which was higher than Kufri Sindhuri (86%) and at par with Kufri Lalima (88% and Kufri Lalit (90%).

Tuber dry matter

Advanced clone MS/8-1565 possessed at par tuber dry matter content (%) of 18 and 19% at 75 and 90 days crop duration respectively as compared to Kufri Lalima and

Table 8. Total tuber yield (t/ha) of MS/8-1565 over locations/ years under AICRP (Potato)

Duration	Year	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit
		Total tuber yield t/ha			
75 days	2014-15	29.88	29.07	26.03	27.87
	2015-16	31.39	27.49	27.17	30.45
	2016-17	29.18	26.62	24.79	27.24
	Mean	30.15	27.73	26.00	28.52
	% yield increase		8.74	15.98	5.72
90 days	2014-15	38.89	38.84	34.64	36.03
	2015-16	40.62	34.29	34.10	36.20
	2016-17	36.50	32.02	31.07	33.63
	Mean	38.67	35.05	33.27	35.29
	% yield increase		10.33	16.23	9.59
		Marketable tuber yield t/ha			
75 days	2014-15	27.10	26.34	22.74	26.05
	2015-16	27.78	24.58	22.79	27.44
	2016-17	25.37	22.74	21.62	23.57
	Mean	26.75	24.55	22.38	25.69
	% yield increase		8.95	19.51	4.14
90 days	2014-15	36.06	35.33	30.66	33.65
	2015-16	36.19	30.64	29.39	32.83
	2016-17	31.16	26.12	25.77	28.71
	Mean	34.47	30.70	28.61	31.73
	% yield increase		12.29	20.50	8.64

Kufri Sindhuri in station trials at Modipuram **(Table 9)**. In AICRP trials, conducted during 2014-15, 2015-16 and 2016-17 **(Table 10)**, the advanced clone (MS/8-1565) maintained 17 and 18% tuber dry matter over the locations at 75 and 90 days respectively.

Keeping quality

At station trials, the variety Kufri Neelkanth showed medium tuber dormancy (>6weeks), comparatively less weight loss, rottage, sprout weight and firm tuber appearance after 75 days of on-farm storage (**Table 11**); therefore, adjudged to be of a good keeper. MS/8-1565 clearly showed advantage of very good keeping quality by

virtue of having less physiological (12%) and total weight loss (13%) as compared to popular red skin varieties Kufri Lalima (13 and 17%) and Kufri Sindhuri (14 and 29%).

Table 9. Mean tuber dry matter content (%) of MS/8-1565 at Modipuram

Crop duration	MS/08-1565	Kufri Lalima	Kufri Sindhuri
75 Days	17.83	17.92	16.61
90 Days	18.68	19.56	18.91

*Mean of 2012, 2013 and 2014

Table 10. Mean* tuber dry matter content (%) of MS/8-1565 in AICRP trials

Crop duration	Year	MS/8-1565	Kufri Lalima	Kufri Sindhuri	Kufri Lalit	CD (0.05)
75 days	2014-15*	16.66	17.73	16.81	15.63	0.64
	2015-16**	15.99	17.13	17.14	16.64	0.33
	2016-17**	17.06	17.01	17.53	16.74	
	Mean	16.57	17.29	17.16	16.34	
90 days	2014-15*	18.48	19.04	19.88	17.04	0.71
	2015-16**	16.94	18.13	17.98	16.50	0.36
	2016-17**	17.96	17.97	18.32	17.62	
	Mean	17.79	18.38	18.73	17.05	

*Jalandhar, Modipuram and Patna; **Hisar Jalandhar Kalyani Kanpur, Modipuram and Patna; ***Hisar, Kalyani, Kanpur, Modipuram, Pantnagar, Patna and Raipur

In AICRP trials at Modipuram location (**Table 12**), the variety showed less physiological (9%) and total weight loss (10%) as compared to Kufri Sindhuri (11 and 16% respectively). The very good keeping quality of MS/8-1565 will benefit small/marginal farmers who are unable to store potato in cold store and have to store potatoes through traditional methods at their farm for short term (up to 75 days) and then sell their produce in the market.

Nutritional values

MS/8-1565 christened as Kufri Neelkanth is first ever purple skin speciality potato variety possessing yellow flesh colour developed and released by ICAR-CPRI. The purple skin and yellow flesh colour are known to enhance the anti-oxidants (anthocyanins and carotenoids) in potatoes, which are beneficial to human health in improving the immunity against different health disorders (Luthra *et al.* 2019, Luthra *et al.* 2020). The clone is suitable for speciality sector due to its unique purple coloured ovoid shallow eyed tubers. It leads to less

Table 11. Storage behavior (pooled over 2012, 2013, 2014) at Modipuram

Genotypes	Dormancy (<or> than 6 weeks	% Sprouting		Weight loss (%) at 75 days of storage			
		At 6 weeks	At 75 days	Sprout	Rottage	Physiological	Total
MS/8-1565	> 6 weeks	69.20	93.83	0.28	0.13	12.42	12.83
Kufri Lalima	> 6 weeks	50.00	50.00	0.07	4.07	13.30	17.44
Kufri Sindhuri	> 6 weeks	51.00	62.87	0.05	14.37	14.15	28.57

Temperature: Minimum: 17-28°C, Maximum: 26-40°C; Relative humidity: Minimum: 18-53%, Maximum: 43-82%

Table 12. Nutritional status in specialty purple coloured advanced clone MS/8-1565 (mean of 2018 & 2019)

Genotypes	Carotenoids in flesh (µg/100g FTW)	Anthocyanins (mg/100g FTW)		
		Flesh	Peel	Flesh + Peel
Kufri Neelkanth	351	1.22	83.58	84.81
Kufri Sindhuri	149	4.22	61.40	65.62
Kufri Lalima	77	3.38	36.92	40.30
Kufri Lalit	76	1.31	32.40	33.71
Kufri Bahar	24	0.95	2.75	3.70

peeling losses than Kufri Lalima and Kufri Sindhuri. The tubers of MS/8-1565, seldom exhibits external/internal defects and are not susceptible to skin damage at harvest. On the basis of two years analysis of nutritional components (**Table 12**), MS/8-1565 possessed higher carotenoids (351 ug/100 g fresh tuber weight, FTW) in edible part (flesh) as compared to Kufri Sindhuri (149), Kufri Lalima (77), Kufri Lalit (76) and Kufri Bahar (24). Due to the purple skin colour, Kufri Neelkanth possessed higher anthocyanins in whole tuber (flesh+peel) basis (84.81 mg/100g FTW) as compared to Kufri Sindhuri (65.62), Kufri Lalima 40.30), Kufri Lalit (33.71) and Kufri Bahar (3.70). The results as per table 12 revealed that major portion of anthocyanins lies in peel of MS/8-1565, therefore, it is advised to boil or bake the potatoes to minimize the loss of anthocyanins as compared to peeling the raw potatoes, where, peel along with some portion of flesh is also removed leading to loss of many phytonutrients. The new clone MS/8-1565 with its unique purple skin colour will be a new addition towards colourful potatoes. It will also develop increased interest of consumers for potatoes thereby expanding the promotion of potatoes.

Usage

The clone is suitable for specialty sector due to its unique and attractive purple coloured ovoid tubers with shallow eyes, which leads to less peeling losses compared to Kufri Lalima and Kufri Sindhuri, both having round shaped tubers with deep eyes and thus high peeling losses (Kumar *et al*. 2014). The tubers of MS/8-1565, seldom exhibits external/internal defects and are not susceptible to skin damage at harvest. The new clone (MS/8-1565) is easy to cook (15-20 minutes) and cooked/boiled potatoes are free from discolouration. It possesses pleasant flavour, mealy texture and good organoleptic taste. Thus, the desirable tuber characters, good keeping and culinary quality of Kufri Neelkanth will favour its acceptance.

Disease resistance

The variety Kufri Neelkanth possesses field resistance to late blight **(Table 13)** as compared to the red skinned late blight susceptible varieties like Kufri Lalima and Kufri Sindhuri. Also, the tubers of this variety seldom exhibit external or internal defects and are not susceptible to skin damage at harvest.

Agronomic management

Normal agronomical schedule for medium maturing varieties is required for production of optimum tuber yield of Kufri Neelkanth. *Planting time*: 15 October-5 November in north-central plains. *Seed rate*: 35-40 q/ha. *Seed size*: 40-60 g. *Spacing*: Plant spaced at 20 cm in 60 cm rows provides optimum tuber size distribution for seed or table potatoes. *Fertilizer:* For seed crop, dose of 175, 80, 100 kg/ha of nitrogen, phosphorous and potassium, respectively is recommended, where half of N and full P_2O_5 and K_2O is applied at planting and remaining half N is given at earthing-up. For ware crop, at Modipuram, optimum nitrogen, phosphorous and potassium levels are 240, 40 and 100 kg/ha, respectively. Nutrient management in other agro-ecologies may differ and thus needs to be fine-tuned or

Table 13. Late blight reaction of MS/8-1565 during 2013 and 2014

Modipuram (Meerut)		Kufri (Shimla)	
Genotypes	AUDPC	Genotypes	AUDPC
MS/08-1565	456	MS/08-1565	267
Kufri Lalima	570	Kufri Himalini	150
Kufri Sindhuri	719	Kufri Giriraj	476
Kufri Lalit	526	Kufri Jyoti	450

regional recommendation may be followed for optimum productivity of this variety. *Irrigations:* Local recommended irrigations schedules may be followed. *Plant Protection Measures:* For management of cutworms, white grubs, beetles and leaf eating caterpillars, apply cartap hydrochloride 4G @20 kg/ha during earthing-up. It will also take care of sucking pest like leaf hopper and aphids. For seed crop, place yellow sticky traps (15x30 cm^2 size) just above the canopy height @ 60 traps/ha at equidistance from each other for mass trapping of white flies/ aphids. Seed treatment with imidacloprid (200SL) @ 0.04% (4 ml/10 lit) for 10 minutes before planting. First spray with imidacloprid (200SL) @ 0.03% (3 ml/10 lit of water) at 85% crop emergence. Second spray with thiamethoxam (25 WG) @ 0.05% (5 gm/10 lit of water) after 10-15 days of first spray.

ADAPTABILITY

Kufri Neelkanth has performed well in multi-location trials conducted under AICRP (All India Coordinated Research Project on Potato) and has been recommended for cultivation in North Indian plains. Kufri Neelkanth thus can serve as a better choice for farmers and consumers where presently only red skinned potato varieties are available. Kufri Neelkanth is speciality potato variety due to purple skin and yellow flesh colour and will attract growers, traders and consumers due to very good organoleptic taste. The variety has also promise for export to Bangladesh, Bhutan, Nepal, Pakistan and Philippines, where red skin potatoes are traditionally preferred. (Pandey *et al.* 2000, Luthra *et al.* 2004).

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