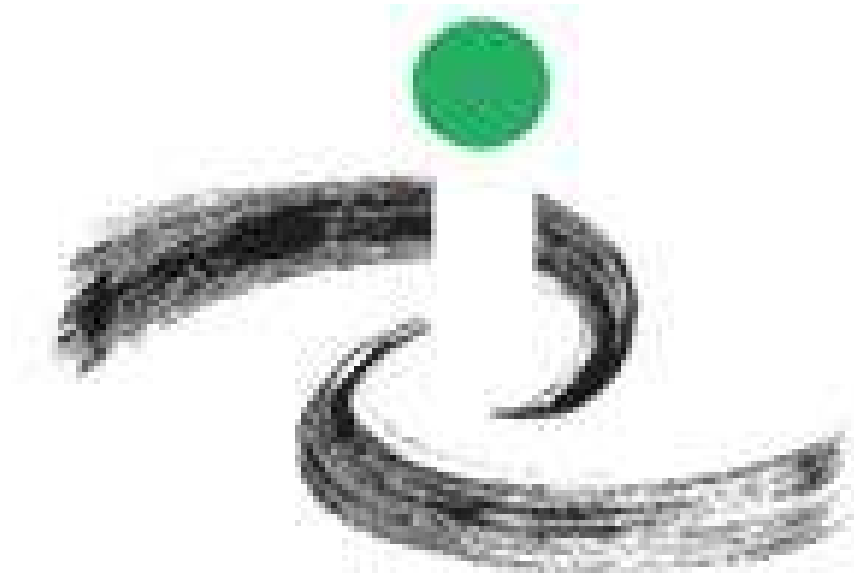


National Innovation Foundation-India



Bungalow 1, Satellite Complex,
Jodhpur Tekra, Premchand Nagar, Vastrapur
Ahmedabad 380 015, Gujarat, India

www.nifindia.org

info@nifindia.org

079 -2673 2095 /2456

WHITE FLOWERED CARDAMOM VARIETY

(K.J. Baby, Idukki, Kerala)

Special features:

- 1) Pure white flowers (labellum is without purple colour markings) and dark green bold capsules with sturdy, robust tillering, higher and deep root biomass
- 2) White coloured flowers may reduce the insect-pest infestation
- 3) Dark green bold capsules with 18 or more no. of seeds per capsule -which leads to higher and profuse yield and fetch higher market acceptability
- 4) High and deep root biomass – which is a desirable trait for drought endurance. - IISR, Calicut.

Comparative features:

More number of seeds per capsule, oil percentage and higher yield of an average 1000-1200 kg/acre.

Diffusion status:

- Distribution started in 2003 and disseminated to about 400-500 farmers till now. It covers about 1000 acres of land in Idukki district.
- Marketing potential In the cardamom producing area of the world.



A NEW VARIETY OF CARDAMOM – 'WONDER CARDAMOM'

(Sabu Varghese, Idukki, Kerala)

Special features:

- 1) Branched panicles: longer and more number of tillers/clump
- 2) Higher adaptability: location specific selection suitable for lower elevations.
- 3) Recovery percentage is high (3.8 kg green cardamom after drying gives one kg) whereas in other varieties 5 kg or more gives 1 kg.
- 4) Yield per plant is 3.0 to 4.0 kg of dry cardamom compared to 2.5-3.0 kg in Njallani- the most popular variety of the region.
- 5) More tillers per clump (30-50) compared to 25-40 in Njallani.

Comparative features:

High recovery percentage (dry cardamom from fresh) and higher yield under varied growth conditions.

Diffusion Status:

- He has distributed around 2000 of farmers in various places like Wyanad, Idukki, Kottayam, Kodaikanal (Tamilnadu) and Madakkara (Karnataka).



AN IMPROVED BLACK PEPPER VARIETY – 'NP77'

(R. G. Hegade, Siddapura, Karnataka)

Special features:

- 1) Bold pepper seeds: higher dry pepper weight thus higher productivity (3000kg/acre fresh berries)
- 2) Resistant to quick wilt and drought tolerant: Robust growth of plant prevents losses due to quick wilt
- 3) Higher oil content than the commercial cultivated varieties

Comparative features:

High yield early maturing variety.

Diffusion Status:

More than 200 farmers are cultivating this variety in Siddapura district and adjoining area.



IMPROVED GRAM VARIETY - 'SUSHIL LAXMI'

(Balasaheb Appasaheb Patil, Kolhapur, Maharashtra)

Special features:

- 1) Twin poded variety (Two flower & pods emerging from single axil)
- 2) Higher yield 13-15 quintals per acre
- 3) Higher forage yield and stability of yield performance under irrigated as well as non-irrigated conditions

Comparative features:

Twin podedness, bold grain size, grain colour and diffusion variety.

Diffusion status:

The diffusion and popularity of the variety in the states of Maharashtra, Madhya Pradesh and Karnataka makes wider adaptability and stability of the variety.



IMPROVED VARIETIES OF WHEAT, PADDY, PIGEONPEA AND MUSTARD

(Prakash Singh Raghuvanshi, Varanashi, Uttar Pradesh)

Special features:

1) Wheat:

Three wheat varieties namely, Kudrat 5, Kudrat 9, Kudrat 17 (developed from Kalyan sona and RR21 varieties) having Higher yield (65-70q/ha), lengthy spikes; water lodging resistant due to robust stem; high protein content (14%).

2) Paddy:

Paddy variety Kudrat 1 developed from HUVR-2-1 having high yield (60-70 q/ha) with higher no of tillers (30-35/plant) and seeds (280-290 seeds/tiller)

Comparative features:

Wheat: Higher number of ear bearing tillers; lengthy spikes; more number of seeds per spike; robust stem; high protein content.

Paddy: Higher number of ear bearing tillers; more number of seeds per spike.



continued....

Special features:

3) Pigeon pea:

High yielder (36 Qts/ha), Bold seeds, robust stem, more number of pods per plant.

4) Mustard:

Bunchy siliquae, 40 seeds per siliqua, higher oil content (42.3%) & synchronous maturity.

Comparative features:

Pigeon pea: Bold seeds, robust stem, more number of pods per plant.

Mustard: Bunchy siliquae, higher number of seeds per siliqua, higher oil content.

Diffusion status:

Developed varieties are well known in different districts of Uttar Pradesh and also in different states like MP, Chhattisgarh, Maharashtra, Rajasthan.



IMPROVED VARIETY OF ARHAR (PIGEON PEA) – ‘RICHA 2000’

(Raj Kumar Rathore Sihor, Madhya Pradesh)

Special features:

- 1) Pods at apical region and in bunch: Higher yield and productivity
- 2) Synchronous maturity: Easy to harvest, minimizes labour cost
- 3) Seed rate requirement per acre for “*Richa 2000*” is very less (3-4 kg/acre) as compare to *ICPL 87* (8-10 kg/acre)

Comparative features:

Double harvest / season (December and April) and higher yield an average yield is 24 quintals/acre.

Diffusion Status:

The diffusion and popularity of the variety in the states of Madhya Pradesh, Maharashtra, Andhra Pradesh and Karnataka.



HIGH YIELDING GROUNDNUT VARIETY – MORALO'

(Thakarsibhai Savalia, Junagadh, Gujarat)

Special features:

- 1) Strong peg attachment: Minimum losses occur during uprooting of plants
- 2) It is very much suitable for iron deficiency soil.
- 3) Ridges less capsules: Facilitates harvesting with minimum loss
- 4) Sweet taste of seeds: Leads to good market acceptability

Comparative features:

Oil percent & sweetness of grains.

Diffusion Status:

The variety is highly popular among the farmers across the states of Gujarat, Maharashtra, Karnataka and Madhya Pradesh.



IMPROVED VARIETY OF PADDY 'DRK'

(Dadaji Ramaji Khobragade, Chandrapur, Maharashtra)

Special features:

HMT:

This variety has an average yield of 40 – 45 quintals per hectare with short grains, high rice recovery (80%), better smell and cooking quality in comparison with the parent ones.

DRK:

Intermediate plant height (130 cm.) and average yield is 60-80 quintals per hector. Grain is short slender with white in colour. Having good aroma and cooking quality, Awns are absent on panicles, High recovery rate (upto 80%) and resistant to biotic and abiotic stress

Comparative features:

HMT: Most remarkable feature of the variety is the thinness of grain. It has been included as a standard reference for thinness by Protection of Plant Variety and Farmers' Right Authority (PPV&FRA).

DRK: High rice recovery and good cooking quality

Diffusion Status:

Varieties are very popular in eastern Vidarbha and occupies almost 80 % of the total area due to its short grains, high rice recovery, better aroma and good cooking quality.



IMPROVED AND HIGH YIELDING VARIETIES OF GUAR (SR-23), MOTH (SR-1) AND KABULI CHANA (SR-1)

(Sundaram Verma, Rajasthan)

Special features:

1) GUAR (SR-23):

The guar variety 'SR-23' is very much suitable for both the conditions of arid and semi arid regions. Flowering and fruiting in every axil from top to bottom. potential yield 25q/ha.

2) MOTH (SR-1)

The moth bean variety 'SR-1' is of short duration (60-65 days) and superior to the other commercially released varieties in respect of yield & resistance against major pests and diseases.

3) KABULI CHANA (SR-1)

The Kabuli chana variety 'SR-1' has bold seeds, as dollar quality gram variety, requires less number of irrigations and is superior in terms of yield and pest resistance. Test wt is 450gm

DiffusionStatus:

Seeds of all developed varieties has been distributed to the farmers of Sikar, Jaipur and Tonk District of Rajasthan from where the reports and feedback of farmers have been encouraging.



IMPROVED VARIETY OF CHILLY 'ALAKHPURA SELECTION' AND ONION

(Balwan Singh *Urf* Balu, Bhiwani, Haryana)

Special features:

CHILLY 'ALAKHPURA SELECTION':

Higher yield an average yield is 400 Qts. (green) and 40 Qts. (dry) per hectare. Good keeping quality, tolerant to heat and humidity and well performing in saline soil .It is suitable for both vegetable and spice purpose.

BALWAN PAYJ:

selection of plants for producing seeds based on the criteria of large bulb size, well shaped of bulb, tightly attached skin, dark red colour.



Comparative features:

CHILLY: Mature fruits are dark red in colour and long in Size, moderate pungency and higher yield.

BALWAN PAYJ: It can be stored for around one year and the germination capacity of its seeds is claimed to be 98 percent



Diffusion status:

The varieties are well known in Hisar, Rohtak and Bhiwani districts of Haryana and adjoining areas.

Improved Cauliflower Variety

(Jagdish Prasad Pareek, Sikar, Rajasthan)

Special features:

1. The variety gives upto 15 kg cauliflower
2. It could be grown in all the three seasons.
3. It is tolerant to hot temperature variations.
4. It is disease resistant and less susceptible to insect attack.
5. The plant is 3-4 feet in height, the thickness of trunk is 1.5-2.5 inch, the size of leaves is 1.5-2 feet wide and leaves are rough.

Comparative features:

Size of the cauliflower is comparatively much higher to the available varieties



WILT TOLERANT GROUNDNUT VARIETY; 'DHIRAJ-101'

(Thummar Dhirajbhai Virjibhai, Amreli, Gujarat)

Specific features:

- 1) The yield is higher than locally cultivated varieties (GG 20 & GG 2).
- 2) Tolerant to wilt disease
- 3) The oil content is also higher at around 52-55 per cent
- 4) It has relatively stronger pods, which remain at a lesser depth than the GG20 in the soil

Comparative features:

Only 0.47 per cent stem rot incidence was found in Dhiraj 101 as compared to 16.37 per cent in the check variety (GG 20)



NEW CARDAMOM VARIETY "ELARAJAN"

(K J Benny Katappana , Kerala)

Special Features:

High yield (12500 kg/ha green) and its high percentage of bold capsules which fetches high market price for farmers. The variety is moderately resistant to disease and pest.

Comparative features:

The characteristic of the variety is uniform bold capsules of 8-9 MM (80-90 %) with high yield. Since the variety has extra bold capsules, it fetches 10% more market prices compared



AN IMPROVED AND HIGH YIELDING VARIETY OF PADDY- NMS-2

(M K Shankara Guru, Mysore, Karanataka)

Special Features:

- 1) The variety is a fine rice of brick red colour
- 2) Yield of this variety is 80 q/ha.
- 3) It gives good quality fodder
- 4) There is no shattering
- 5) Suitable for low external input cultivation

Comparative features:

The test variety NMS 2 recorded grain yield of 7299 kg/ha which is comparatively much higher than traditional variety.



A NEW HIGH YIELDING VARIETY OF BLACK PEPPER "PEPPER THEKKEN"

(T. T. Thomas , Idukki, Kerala)

Special Features:

- 1) Its spikes are fully branched, while other pepper varieties are single spiked without branches.
- 2) Each of the spike has about 60-80 branches.
- 3) Each spike including branches and sub-branches bears about 800-1000 berries as against 60-80 berries of locally grown high yielding pepper varieties.

Comparative features:

It is tolerant to the plant diseases



AN IMPROVED AND DROUGHT TOLERANT PADDY VARIETY “CHINNAR-20”

(Ariyammal and Pushpam, Ramanathapuram, Tamil Nadu)

Special Features:

- 1) It takes 110 to 115 days to mature (Short duration).
- 2) The variety is drought tolerant with high yielding capacity (30q/acre).
- 3) Plants are Unique with purple pigmented leaf and culm so weed removing is easy.
- 4) Finer longer grains and good cooking quality.

Comparative features:

It is a short duration and high yielding variety and it is well suited for rain-fed and wetland cultivation.



AN IMPROVED AND HIGH YIELDING VARIETY OF PIGEON PEA “P.R.S. 93”

(P. R. Subramanian, Coimbatore, Tamilnadu)

Special Features:

- 1) Good performance in drought condition
- 2) It gives good yield of 10 to 11q/acre.
- 3) It takes 115-120 day to mature (short duration mature)
- 4) It is suitable for multiple harvesting

Diffusion status:

He has distributed more than 10q seeds to 1500 farmers for sowing. Feedback obtained from the farmers are highly positive. This variety is very popular and it has also been promoted by different media and local publication, since 1998.



IMPROVED VARIETY OF CARROT “LAXMANGARH SELECTION”

(Smt Santosh Pachar, Laxmangarh, Sikar, Rajasthan)

Special Features:

- 1) Length of carrot is up to 1.5 ft
- 2) Percentage of forked roots are very less
- 3) Variety is well adapted to high temperature
- 4) Sweet in taste
- 5) High market price due to better quality.

Diffusion status:

The varieties are well-known in the region of Sikar. The innovator's variety has been performing remarkably well.



Improved variety of Ridge gourd (*Luffa acutangula*)

“Girva selection Long”

(Chunni Lal Meena, Girva, Udaipur, Rajasthan)

Special Features:

- 1) Length of the fruit is 3 to 7 feet.
- 2) The fruit is sweet in taste.
- 3) Plant is tolerant to powdery mildew disease
- 4) The fruits contain very less number of seeds as compared to conventional varieties.
- 5) The vine of the plant grows to a length of 9 to 10 meters with 15-20 fruits per vine.

Diffusion status:

He has distributed the seeds of this variety to few farmers of his area. The results are encouraging and the variety performance is stable.



TRADITIONAL VARIETY OF BRINJAL “KEER BRINJAL”

(Ganga Ram Keer, Virathnagar, Jaipur, Rajasthan)

Special Features:

- 1) Strong spininess of calyx of fruit
- 2) Fruits are larger in comparison to hybrid varieties
- 3) It gives higher yield than other varieties
- 4) Number of seeds per fruit is less than other varieties
- 5) Sweet in taste with better cooking quality

Diffusion status:

Keer community is famous in his locality for conserving the traditional varieties of various vegetables. He was honoured by National Innovation Foundation, India in 2009 with a community award for his round gourd variety.



IMPROVED AND HIGH YIELDING WHEAT VARIETY

(Omprakash Sharma, Kudan, Sikar, Rajasthan)

Special Features:

- 1) It matures around 10 day early than the parental line (C-306)
- 2) Average yield ranges from 40 to 50 q/ha
- 3) It is resistant to water logging condition due to robust stem.
- 4) Length of the ear is up to 15 cm
- 5) It is good for chapatti making
- 6) The variety is also tolerant to drought conditions

Diffusion status:

He has distributed the seeds since last three years and the feedback received from the growers is positive.

