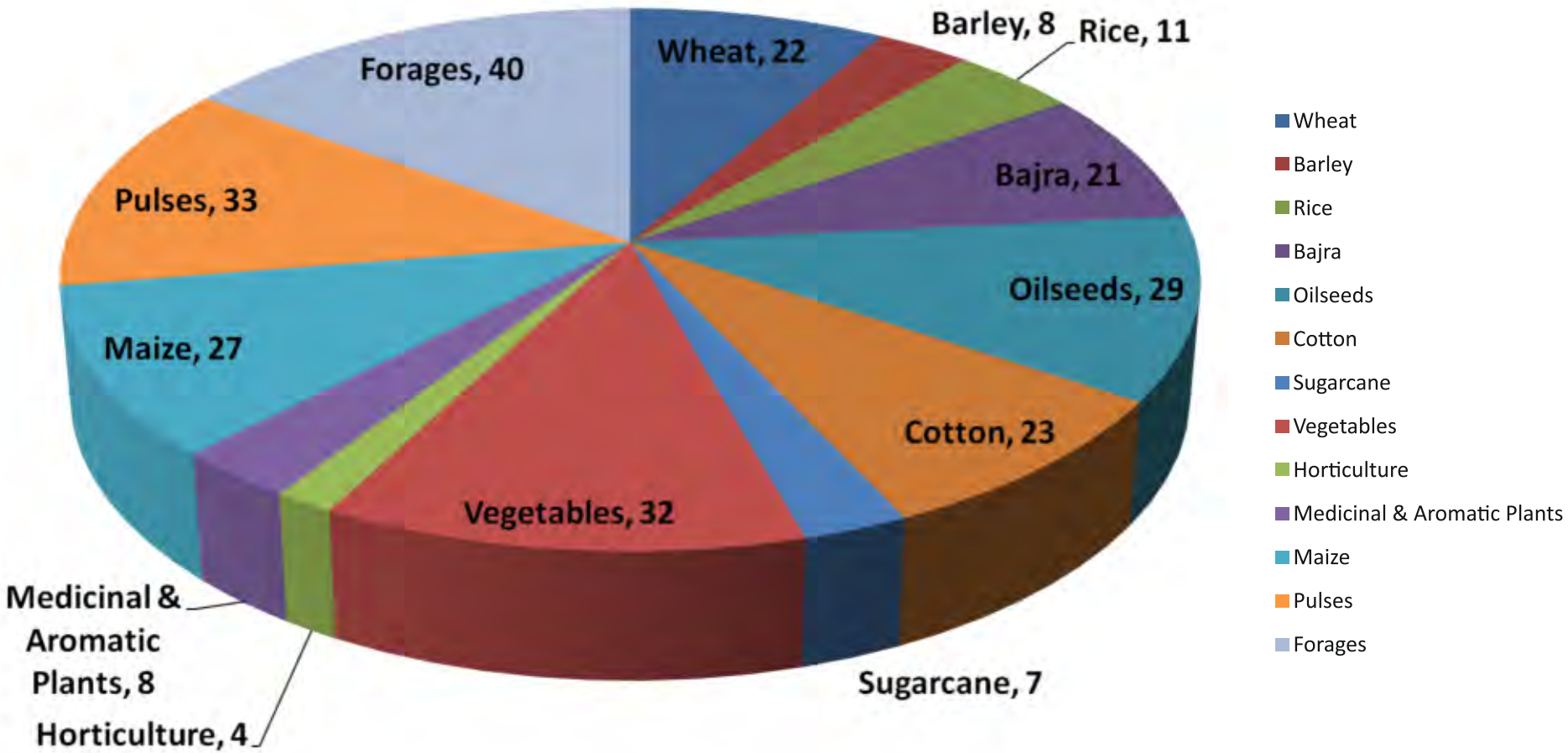
Varieties of CCS HAU
Continued Efforts Towards Food Security

Directorate of Research
Chaudhary Charan Singh Haryana Agricultural University, Hisar

Varieties/Hybrids Released by CCS HAU, Hisar - 265



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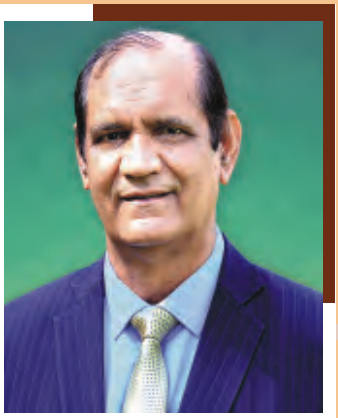

Foreword

I am immensely pleased to know that the Directorate of Research has come up with a compilation of varieties and hybrids of different field, vegetable and horticultural crops released by Chaudhary Charan Singh Haryana Agricultural University, Hisar since its inception in the form of a book **"Varieties of CCSHAU : Continued Efforts Towards Food Security"**.

The role of improved high yielding cultivars in attaining enhanced agricultural productivity is well known and well documented. Of course, there are other factors such as better management, input support and irrigation facilities which supplemented the performance of semi-dwarf high yielding wheat and rice varieties during the Green Revolution period, but the improved varieties have been the single most effective delivery system for showcasing genetic combinations at farmers' fields.

Improved varieties are the result of years of hard work by team of dedicated researchers and are silent harbinger of peace, progress and overall upliftment of the society. CCS HAU Hisar has played a pivotal role in the State and Nation's agriculture by evolving 265 varieties of various cropsincluding cereals, pulses, oilseeds, fibre and sugar crops, vegetables and fruit crops since its inception in 1970. The varieties have been developed for characters like improved productivity, biotic and abiotic stresses resistance and improved nutrient composition. Many of these varieties have been recommended at National and State level and some of these have attained a landmark status in the country and the food grain production of the state has increased from 4.8 million tonnes in 1970-71 to 18.4 million tonnes in 2019-20.

I appreciate the sincere efforts made by the Directorate of Research, CCS HAU, Hisar in documenting all crop varieties developed and released at National and State level since the inception of this University, in a comprehensive form, which include varieties/hybrids currently in cultivation and those not in seed chain alongwith their main featuresin the form of a book **"Varieties of CCSHAU : Continued Efforts Towards Food Security"**. I am sure that this document will be of immense benefit to researchers, extension personnel, students, farmers and other stakeholders.

(Samar Singh)

Landmark Varieties

Wheat : WH 283 (Good Chapatti making quality)

Wheat : C 306 (Desi variety, low input)

First Cotton Hybrid of India : AAH 1

Bajra : HHB 67 Improved
(First hybrid involving male parent developed by Marker Assisted Selection)

Sugarcane : CoH 119 (Spring planting)

Maize : HM 4 (First babycorn hybrid of India)

Rice : Taraori Basmati (Widely adapted high aroma variety)

Rice : HKR 47
(Semi dwarf Non-scented variety with long slender grains)

Director of Research
CCS Haryana Agricultural University
Hisar-125004, Haryana, India

Haryana has made progress in leaps and bounds in all fields of agriculture producing about 6.5 per cent of total food grains of the country from only 1.3 per cent geographical area and it contributes about 16 per cent to the national food reserve. Since the inception of Haryana in 1966, the production has increased 8 times in rice, 6 times in wheat and 5 times in oilseeds and the state is leading in the productivity of pearl millet and mustard besides being a preference for basmati rice exporters.

Over the years, CCS Haryana Agriculture University has contributed prominently in the progress of the state by providing technical support to the hard working farmers of the state in the form of improved varieties/hybrids of different crops, and their management practices. It has added to the grain requirement of the country through the spread of these varieties across the length and breadth of the country. Apart from improved yield, varieties have also been developed for improved quality and resistant to major insect-pests of the targeted area and abiotic stress. Large efforts have been put for raising good crops under different management systems and thereby providing a good Package of Practices of each crop.

So far, CCS HAU has released 265 crop varieties/hybrids in 56 different crops, which is a great achievement by the Crop Improvement group. I whole heartedly congratulate all the breeders and collaborators working sincerely on these crops for the betterment of the state as well as of the country. No words can suffice my feelings for their dedication and hard work in developing these varieties. By bringing out a compiled publication of these varieties, I am sure we will be able to reach out to the scientists and farmers of different states of India, where these varieties can be grown and will be helpful in poverty alleviation and doubling the income of the farmers.

An effort has been made to collate all the varieties/hybrids released by the university since its inception, in this book entitled, **"Varieties of CCSHAU : Continued Efforts Towards Food Security"**, highlighting their yield potential alongwith major characters and area of release. It will help in achieving self sufficiency in food and feed production.

I dedicate this book to all citizens of India, specially the hard toiling farmers.

(Dr. S.K. Sehrawat)

Varieties/Hybrids developed by CCS HAU, Hisar so far in various Crop Plants, Vegetable crops and Horticultural crops

Sr. No.	Crop	Level of release		Total
		National	State	
1.	Wheat	16	6	22
2.	Barley	3	5	8
3.	Rice	1	10	11
4.	Pearl Millet	13	8	21
5.	Maize	24	3	27
6.	Oilseeds	13	16	29
7.	Pulse	16	17	33
8.	Cotton	3	20	23
9.	Sugarcane	3	4	7
10.	Forage Crops	20	20	40
11.	Medicinal and Aromatic Plants	5	3	8
12.	Vegetable Crops	16	16	32
13.	Horticulture	--	4	4
Total		**133**	**132**	**265**
Registered elite genetic strains			63	63
Genetic strains alloted national identity number			146	146

Crop Sr. No.	Name of the Variety/Hybrid	Varieties /Hybrids Released
1	**Wheat**	22
2	**Barley**	8
3	**Rice**	11
4	**Pearl Millet**	21
5	**Maize**	27
OILSEED CROPS (9 Crops)		
6	Indian Mustard	15
7	Rapeseed (Toria)	2
8	Taramira	1
9	Til (Sesame)	2
10	Castor	1
11	Sunflower	2
12	Yellow Sarson	2
13	Brown Sarson	1
14	Groundnut	3
PULSE CROPS (8 Crops)		
15	Kabuli Chickpea	3
16	Desi (Brown) Chickpea	9
17	Fieldpea	8
18	Lentil	3
19	Mung Bean	7
20	Pigeonpea	2
21	Urd Bean	1
22	**Cotton**	23
23	**Sugarcane**	7
FORAGE CROPS (8 Crops)		
24	Berseem	3
25	Oats	11
26	Sorghum	9
27	Cowpea	2
28	Cluster bean (Guar)	11
29	Senji	2
30	Methi	1
31	Lucerne	1
MEDICINAL & AROMATIC PLANTS (7 Crops)		
32	Fababean	2
33	Dhaincha	1
34	Isabgol	1
35	Mulhatti/Liquorice	1
36	Roshagrass/Palmarosa	1
37	Periwinkle/Sadabahar	1
38	Guayule	1
VEGETABLE CROPS (16 Crops)		
39	Bitter Gourd	1
40	Onion	3
41	Bottle Gourd	2
42	Brinjal	5
43	Cauliflower	1
44	Garlic	1
45	Okra	4
46	Fenugreek	2
47	Coriander	2
48	Indian Melon	1
49	Indian Bean	1
50	Tomato	4
51	Carrot	1
52	Long Melon	1
53	Radish	2
54	Vegetable Peas	1
HORTICULTURAL CROPS (2 Crops)		
55	Marigold	2
56	Guava	2

PREFACE

Chaudhary Charan Singh Haryana Agricultural University (CCSHAU) has come a long way in developing and releasing crop varieties/hybrids as per the climate needs and requirements of the region. The new millennia agriculture is based on all aspects of crop improvement that involves efficient crop production techniques, resistance to insect pests and diseases, nutritional richness, response to improved agri-mechanization practices and better keeping quality with lesser post-harvest losses. Development of cultivars is the ultimate aim of any crop improvement programme in any agricultural research organization. It takes several years of hard work of a dedicated team of plant breeders, agronomists, plant protection scientists and nutritionists to evolve a new plant variety assisted by a large number of scientists working across the country in different agro-climatic zones. The release of a variety is based on the superior performance over the best existing ones in terms of economic yield and other important traits. A released cultivar carries the best combination of genes. This is one of the most economical technologies delivered to the farmers in the form of quality seed. The new variety saves crores of rupees on account of improved yield, savings on agro-chemicals (thereby saving on human health) and provides more nutritious food for the well being of the population.

Plant breeding work started much earlier at CCS HAU, Hisar with the release of desi Wheat variety C 306 in 1969 which is a landmark variety with better chapatti making qualities and is drought tolerant. WH 147 was a Land mark variety in the history of wheat improvement. Released in 1978 for State and Central Zone, it showed a greater adaptability. Another milestone in wheat breeding was achieved in the release of variety WH 283 in 1985, which is also having good flour recovery and was adapted in North West plain zone to a great extent. WH 1270 is the most recently released variety in this series (2021) that has very high grain productivity. Rice is another important crop in Haryana. Taraori Basmati is a landmark variety released in 1992 which is a widely adapted variety and is known for its aroma.

Since its foundation in 1970, CCSHAU has evolved a total of 265 varieties of field and horticultural (including vegetables) crops. The crop improvement work has resulted in development of 89 varieties of cereals (wheat-22, rice-11, pearl millet-21, maize-27 and barley-8); 29 of nine oilseed crops (rapeseed and mustard group, ground nut, sesame, castor and sunflower), 33 of eight pulses (chickpea, field, lentil, mungbean, pigeonpea and urdbean); 40 of eight forage crops (sorghum, cowpea, clusterbean, berseem, oats, lucerne, senji and methi), 30 of two cash crops (cotton 23 and sugarcane 7); 32 of 16 vegetable crops (brinjal, garlic, onion, okra, fenugreek, coriander, Indian melon, Indian bean, tomato, carrot, long melon, radish, peas), 4 of two horticultural crops (marigold and guava) and 8 of medicinal and aromatic plants (fababean, dhaincha, isabgol, mulhatti, rosha grass, periwinkle and guayule). Out of these 265 released varieties (belonging to 56 crops), 133 have been released at national/zonal level and 132 at state levels.

Besides these released varieties, the university has registered 63 elite genetic strains of different crops with NBPGR, while 146 genetic strains of different crops have been allotted national identity numbers.

It was followed by a landmark variety HKR 47 (2005) with long slender grains and Haryana Basmati 2 (2018) as a scented variety. In Cotton also, the first Desi cotton Hybrid of the country *viz.* AAH 1 was developed and released in 1999. Till date we have released 23 varieties/hybrids at State/National level. Pearl millet hybrid HHB 67 Improved was another landmark in the history of varietal development at CCS HAU, Hisar. This was the first hybrid developed by combining conventional and non-conventional (Marker Assisted Selection) approaches and was released in 2005 for the country. It is also known as "Wonder Hybrid". CCS HAU also holds the credits of developing a series of CMS lines in pearl millet. In Sugarcane, CoH 119 is a landmark variety released in 2005 that combines several domestic traits *viz.* thick rind, juicy cane, medium maturity, non-lodging, good ratooner, tolerant towater stress, good combination of cane yield and juicequality. Maize hybrid HM 4 released in 2004 is the first baby corn single cross hybrid in the country. In mungbean, MH 421 developed in 2012 has covered the highest acreage in the country and same story is being repeated for RH 725 of mustard. These two varieties have revolutionized the crop patterns in the country and are the farmer's first demand presently. HC 5 of chickpea is suitable for mechanized harvesting and is being used as National check for co-ordinated trials. The success story is not complete and there are several elite genotypes in all the crops to meet the future demands.

We thank our worthy Vice-chancellor, CCS HAU, Hisar for giving vision and all support in preparing this book for various sections of the society. We are thankful to all the breeders and contributors of various crops for providing the required information for the book. Special thanks are due to Prof. & Head, Department of Genetics and Plant Breeding and all the Heads of Sections of this department. Thanks are also due to Prof. & Head, Department of Vegetable Science and Horticulture for their contributions in this document. Its only due to the sincere advice and continued efforts of our Director of Research which has resulted in the compilation of this book. We are sure that this book will be very useful to the researchers across the country and to the farmers who are the ultimate users of the latest technology.

Y. Jindal, S.K. Sehrawat, A.K. Chhabra, Neeraj Kumar, Satish Kumar,
Suresh Kumar, S.S. Yadav, Manju Dahiya and Ram Niwas

The existence of the varietal development programme runs
to the existence of life on the earth

Felicitation of Breeders and Developers of Forage crop varieties

Felicitation of Breeders and Developers of Pulse crop varieties

Felicitation of Breeders and Developers of Wheat varieties

Felicitation of Breeders and Developers of Pearlmillet varieties

Contents

* Variety released for cultivation in Haryana state.

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Wheat : WH 1270

North-West Plain Zone

Yield 75.8 q/ha

Hectolitre Weight 80.5

2021

S.O. 500 (E)
Dated 29.01.2021

- Early sown, high fertility and irrigated conditions of NWPZ
- Resistant to yellow and brown rusts, flag smut, leaf blight and powdery mildew diseases
- Hectolitre Weight : 80.5 kg/hl
- Protein content : 12.4 %
- Chapati making score : 7.66
- Biscuit Quality (Spread factor) : 7.68
- **Average Yield :** 75.85 q/ha
- **Potential Yield :** 91.5 q/ha

Wheat : WH 1184

Rust resistant

Protein content 13.1%

Sedimentation value 60

- Resistant to yellow rust
- Good protein contet (13.0%)
- Hectolitre wt. 79.3 kg/hl
- Haryana State for timely sown irrigated conditions

Average Yield : 61.3 q/ha

Potential Yield : 70.2 q/ha

2019

S.O. 3220(E)
Dated 05.09.2019

Wheat : WH 1142

National

Drought tolerant

Yellow Rust Resistance

2015

S.O. 1228 (E)
Dated 07.05.2015

- Resistant to yellow rust
- Good protein contet (12.1.0%)
- National (NWPZ) for early sown (25 Oct. to 5 Nov.), restricted irrigation and medium input condition

Average Yield : 48.1 q/ha

Potential Yield : 62.5 q/ha

Wheat : WH 1124

Rust resistant

Iron 43.4 ppm

Zinc 41.78 ppm

- High protein content (12.9%)
- Highly resistant to yellow & brown rusts
- Tolerant to terminal heat stress
- Bread quality score (6.88)
- Chapati score(7.46)
- Fe (43.4 ppm), Zn (41.78 ppm)
- National (NWPZ) for late sown, high fertility & irrigated conditions
- **Average Yield :** 42.7 q/ha
- **Potential Yield :** 56.1 q/ha

2014

S.O. 1919 (E)
Dated 30.07.2014

Wheat : WHD 948 (Durum)

Excellent pasta quality

Resistant to major diseases

β-carotene 5.99 ppm

- β-carotene content(5.99 ppm)
- Excellent pasta making quality score (7)
- Resistant to Karnal bunt, rusts, Foot Rot, Flag smut, Loose smut, Leaf blight and powdery mildew diseases
- Peninsular Zone (PZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 46.5 q/ha
- **Potential Yield :** 69.5 q/ha

2014

S.O. 1146 (E)
Dated 24.04.2014

Wheat : WH 1105

Early meaturing

Protein content 12.4%

Lodging tolerant

- Amber bold grains
- Semi-dwarf in stature
- Highly resistant to yellow and brown rust, flag smut, leaf blight and powdery mildew
- Protein content (12.4%)
- Chapatti score (7.6)
- National (NWPZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 60.0 q/ha
- **Potential Yield :** 71.6 q/ha

2013

S.O. 952 (E)
Dated 10.04.2013

Wheat : WH 1080

Drought tolerant

Gluten index 79

Iron 46.2 ppm

- Better in quality
- Gluten index (79), Iron (46.2 ppm), zinc (37.7 ppm) and protein content (12.5%)
- Resistant to lodging, drought stress and all rusts
- National (NWPZ) for rainfed and low input conditions
- **Average Yield :** 32.5 q/ha
- **Potential Yield :** 44.4 q/ha

2011

S.O. 1661 (E)
Dated 27.01.2011

Wheat : WHD 943 (Durum)

β-carotene 6.8 ppm

Resistant to diseases

Good pasta quality

- Higy β-carotene (6.8 ppm)
- Good protein content (12.5%)
- Resistant to Karnal bunt, rusts, flag smut, leaf-blight and powdery mildew
- Excellent quality character for pasta making
- National (NWPZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 52 q/ha
- **Potential Yield :** 63 q/ha

2011

S.O. 632 (E)
Dated 25.03.2011

Wheat : WH 1025

Drought tolerant

Good chapati quality

Resistant to rust

- Semi-dwarf (100 cm)
- Bold shining grains
- Good chapatti making quality
- Resistant to rust
- Haryana State for rainfed and low input conditions
- **Average Yield :** 27.5 q/ha
- **Potential Yield :** 38 q/ha

2010

S.O. 211 (E)
Dated 29.01.2010

Wheat : WH 1021

Heat tolerant

Dwarf

Bread Score 7.5

- Dwarf (95 cm)
- Shining, amber, hard grains
- High protein content
- National (NWPZ) for late sown, high fertility and irrigated conditions
- **Average Yield :** 39 q/ha
- **Potential Yield :** 42 q/ha

2008

S.O. 1108 (E)
Dated 08.05.2008

Wheat : WH 711

Protein content 13.7%

Lodging resistant

Bold Grain

- Dwarf (81 cm), shining, amber hard grains and good for chapati making
- Ideal variety which is high yielding, lodging resistant and good quality grain
- Moderately resistant to rust and Karnal bunt
- Haryana State for timely sown, high fertility and irrigated conditions
- **Average Yield :** 57.15 q/ha
- **Potential Yield :** 59.5 q/ha

2002

S.O. 937 (E)
Dated 04.09.2002

Wheat : WH 912 (Durum)

β-carotene 7.2 ppm

Hectolitre weight 80

Resistant to rust

- Dwarf durum variety
- Bold, shining hard amber grains
- High β-carotene (7.2 ppm)
- Resistant to rusts
- Tolerant to Karnal bunt
- State for timely sown, high fertility and irrigated conditions
- **Average Yield :** 47.6 q/ha
- **Potential Yield :** 58.0 q/ha

2002

S.O. 937 (E)
Dated 04.09.2002

Wheat : Sonak

Heat tolerant

Bold Grain

Chapati score 7.2

- Semi-dwarf plant height
- Bold, shining, hard amber grains
- Resistant to rusts
- 1000 grain weight - 48 g
- State for late to very late sown, high fertility and irrigated conditions
- **Average Yield :** 38 q/ha
- **Potential Yield :** 46 q/ha

1998

S.O. 401 (E)
Dated 15.05.1998

Wheat : WH 896 (Durum)

β-carotene 6.7 ppm

Rust resistant

Good export quality

- Dwarf durum wheat variety
- Bold, amber and shining grains
- High β-carotene (6.7 ppm)
- Meets all requirements of export quality
- Resistant to rusts and Karnal bunt
- National (NWPZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 42.0 q/ha
- **Potential Yield :** 58.0 q/ha

1995

S.O. 408 (E)
Dated 04.05.1995

Wheat : WH 533

Drought tolerant

Strong straw

Dwarf

- Dwarf plant height (86 cm)
- Strong straw
- High tillering
- Amber, medium sized grains
- State for early to timely sown, rainfed conditions
- **Average Yield :** 29.5 q/ha
- **Potential Yield :** 42.5 q/ha

1993

S.O. 615 (E)
Dated 17.08.1993

Wheat : WH 542

Dwarf

High Grain hardness index

Chapati score 8.0

- First semi dwarf (90 cm) variety with 1B/1R translocation
- High tillering
- Medium bold, amber, shining, semi-hard grains
- Highly resistant to all three rusts
- National (NWPZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 58 q/ha
- **Potential Yield :** 61 q/ha

1992

S.O. 814 (E)
Dated 04.11.1992

Wheat : WH 416

Dwarf

Protein content 12.8%

Hectolitre weight 80

- Dwarf (74 cm)
- Medium bold, amber, semi-hard grains
- National (NWPZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 40.2 q/ha
- **Potential Yield :** 58 q/ha

1990
S.O. 386 (E)
Dated 15.05.1990

Wheat : WH 291

Protein conent 13.8%

Dwarf

Chapati score 7.8

- Semi-dwarf (85 cm)
- Medium, shining, amber and hard grains
- High protein content (> 13.83%)
- Rust resistant
- National (NWPZ) for late sown, high fertility and irrigated conditions
- **Average Yield :** 34 q/ha
- **Potential Yield :** 50 q/ha

1985
S.O. 540 (E)
Dated 24.07.1985

Wheat : WH 283

Protein content 12.6%

Chapati score 7.8

High flour recovery

- Dwarf (90 cm)
- Bold shining, amber hard grains
- Excellent chapatti making quality
- High protein content (12.6%)
- Resistant to rusts
- Tolerant to Karnal bunt
- National (NWPZ) for timely sown, high fertility and irrigated conditions
- **Average Yield :** 43.7 q/ha
- **Potential Yield :** 52 q/ha

1985

S.O. 295 (E)
Dated 09.04.1985

Wheat : WH 147

Good adaptability

Good protein content

Pelshenke value 104

- Land mark variety in the history of wheat improvement
- Medium height (100 cm)
- Broad leaves, medium, bold, amber and semi-hard grains
- Good chapatti making quality
- State and Central Zone, for timely sown, medium fertility and restricted irrigation condition
- **Average Yield :** 50 q/ha
- **Potential Yield :** 56 q/ha

1978

S.O. 13
Dated 19.12.1978

Wheat : WH 157

Salinity/ alkalinity tolerant

Pelshenke value 100

Hectolitre weight 78.4

1978

S.O. 13 (E)
Dated 19.12.1978

- Dwarf (95 cm)
- Bold, amber, semi-hard grains
- Good chapatti making quality
- Tolerant to rust
- National (NWPZ) for timely sown, irrigated conditions under salinity/ alkalinity conditions
- **Average Yield :** 43.5 q/ha
- **Potential Yield :** 57.0 q/ha

Wheat : C 306

Excellent Chapati score

Drought tolerant

Pelshenke Value 100

- Desi tall variety (125 cm)
- Bold and shining grain
- High chapatti score (8.4)
- National (NWPZ and NEPZ) for rainfed and low fertility areas for early sowing
- **Average Yield :** 26.0 q/ha
- **Potential Yield :** 36.0 q/ha

1969

S.O. 4045
Dated 24.9.1969

Barley : BH 959

National (CZ)

Yield 49.9 q/ha

Resistant to yellow rust & leaf blight

- Good grain character
- Resistant to yellow rust and leaf blight
- National (CZ) for timely sown irrigated conditions
- **Average Yield :** 49.9 q/ha
- **Potential Yield :** 67.5 q/ha

2015

S.O. 1228 (E)
Dated 7.5.2015

Barley : BH 946

National (NWPZ)

Yield 51.9 q/ha

Highly resistant to diseases

- Semi-dwarf, profused tillering, compact ears, bold grains
- Highly resistant to yellow rust and leaf blight
- Tolerant to lodging
- National (NWPZ) for timely sown irrigated conditions
- **Average Yield :** 51.9 q/ha
- **Potential Yield :** 66.3 q/ha

2014

S.O. 1919 (E)
Dated 30.07.2014

Barley : BH 885

Haryana

Yield 44.1 q/ha

Suitable for Malt industries

2012

S.O.2125 (E)
Dated 10.09.2012

- Two rowed
- Erect spike, thin husk, bold grains
- High yielding, High malt content
- Suitable for malt industries due to high malt
- Tolerant to lodging
- Resistance to rusts and stripe disease
- Haryana State for timely sown irrigated conditions
- **Average Yield :** 44.1 q/ha
- **Potential Yield :** 54.2 q/ha

Barley : BH 902

National (NWPZ)

Yield 49.75 q/ha

Tolerant to lodging & shattering

- Tall, profuse tillering, compact ears
- Bold and round seeds
- Tolerant to lodging and shattering
- Resistant to yellow rust and leaf blight
- National (NWPZ) for timely sown irrigated conditions
- **Average Yield :** 49.75 q/ha
- **Potential Yield :** 61.60 q/ha

2010

S.O. 733 (E)
Dated 01.04.2010

Barley : BH 393

Haryana | Yield 44.60 q/ha | Bold Seeded, Thin husk

2002
S.O. 937 (E)
Dated 04.09.2002

- Suitable for malt industries due to high malt
- Dwarf plant type with long ears
- Bold seeded, thin husk
- Early in maturity
- Tolerant to lodging
- Resistant to yellow rust and molya disease
- Haryana State for timely sown irrigated conditions, North India
- **Average Yield :** 44.60 q/ha
- **Potential Yield :** 55.00 q/ha

Barley : BH 75

Haryana | Yield 32.39 q/ha | Resistant to yellow rust & Molya

- Semi-dwarf, profuse tillering and lax ears
- Light yellow grains
- Resistant to yellow rust and molya disease
- State for timely sown irrigated conditions
- **Average Yield :** 32.39 q /ha
- **Potential Yield :** 48.05 q/ha

1985
S.O. 295 (E)
Dated 9.4.1985

Barley : BG 25

Haryana

Yield 36.4 q/ha

Tolerant to yellow rust

1976

S.O. 786 (E)
Dated 02.02.1976

- Tall, long lax ears
- Round and light yellow grains
- Tolerant to yellow rust
- State for timely sown, irrigated and saline alkaline conditions
- **Average Yield :** 36.4 q/ha
- **Potential Yield :** 43.1 q/ha

Barley : BG 105

Haryana

Yield 50 q/ha

Tolerant to lodging

- Medium-tall with compact ears
- Bold yellow grains
- Tolerant to lodging
- Susceptible to yellow rust and molya disease
- Haryana State for late sown irrigated conditions
- **Average Yield :** 50.0 q/ha
- **Potential Yield :** 53.0 q/ha

1976

S.O. 786 (E)
Dated 02.02.1976

Rice : Haryana Basmati 2

Haryana Medium Fertility

Yield 40 q/ha

Tolerant to Bakanae

2018

S.O. 3220 (E)
Dated: 06.09.2019

- Photo-insensitive semi dwarf scented variety
- Compact green plant with resistance to lodging
- Better milling and head rice recovery
- Extra-long slender grains
- Better cooking and grain quality
- Tolerant to bakanae disease
- Moderately resistant to blast and WBPH
- Medium fertility paddy growing areas of Haryana
- **Average Yield :** 40 q/ha
- **Potential Yield :** 60 q/ha

Rice: HKR 128

Haryana Timely Planting

Yield 80 q/ha

Long slender Super fine Grains

- High yielding medium duration (141 days) non-scented, semi dwarf variety
- Long slender grains of super fine quality
- Good cooking and eating quality
- High milling percentage
- Compact plant with long flag leaf
- Tolerant to planthopper and moderately resistant to false smut
- Paddy growing areas of Haryana under timely planting
- **Average Yield :** 80 q/ha
- **Potential Yield :** 100 q/ha

2018

S.O. 3220 (E)
Dated: 06.09.2019

Rice : HKR 48

Haryana Early & Late

Yield 60 q/ha

Moderately resistant to BLB

2016

3540 (E)
Dated 24.11.2016

- Early duration (118 days) non-scented, semi dwarf variety with long slender grains
- Good cooking and eating quality
- High milling percentage
- Moderately resistant to bacterial leaf blight
- Suitable for multiple cropping
- Paddy growing areas of Haryana under early and late planted conditions
- **Average Yield :** 60 q/ha
- **Potential Yield :** 80 q/ha

Rice : HKR 127

Haryana Early Planting

Yield 70 q/ha

Tolerant to False smut

- Suitable for early planting
- Maturity 140 days (medium duration)
- Non-scented semi dwarf variety with long slender grains
- Moderately resistant to false smut
- High fertility paddy growing areas of Haryana
- **Average Yield :** 70 q/ha
- **Potential Yield :** 100 q/ha

2009

211 (E)
Dated 29.01.2010

Rice : Haryana Shankar Dhan 1 (HSD 1)

Haryana High Fertility

Yield 75 q/ha

Tolerant to WBPH & Stem Borer

- Non-scented hybrid suitable for early planting
- maturity 139 days (medium duration)
- Compact plant type with long slender partially awned grains
- Moderately resistant to White Backed Plant Hopper (WBPH), stem borer and leaf folder
- High fertility paddy growing areas of Haryana
- **Average Yield :** 75 q/ha
- **Potential Yield :** 100 q/ha

2006

S.O. 122 (E)
Dated 06.02.2007

Rice : HKR 47

Haryana High Fertility

Yield 65 q/ha

Tolerant to Blast, Smut & WBPH

- Semi dwarf Non-scented variety with long slender grains
- Suitable for early and late planting
- Maturity 135 days (mid-early duration)
- Moderately resistant to false smut, blast and brown spot and tolerant to WBPH
- High fertility paddy growing areas of Haryana
- **Average Yield :** 65 q/ha
- **Potential Yield :** 90.0 q/ha

2005

S.O. 1566 (E)
Dated 05.11.2005

Rice : HKR 46

Haryana High Fertility

Yield 62.5 q/ha

Tolerant to BLB, WBPH

2000

S.O. 340 (E)
Dated 03.04.2000

- Semi dwarf Non-scented variety with long slender grains
- Suitable for early and late planting
- Maturity 135 days (mid-early duration)
- Tolerant to Bacterial Leaf Blight (BLB) and WBPH, resistant to blast and brown spot
- High fertility paddy growing areas of Haryana
- **Average Yield :** 62.5 q/ha
- **Potential Yield :** 90.0 q/ha

Rice : HKR 126

Haryana High Fertility

Yield 67.5 q/ha

Resistant to WBPH, Blast & Stem rot

- Non-scented semi dwarf variety with long slender grains
- Suitable for early planting
- Maturity 140 days (medium duration)
- Tolerant to water stress
- Resistant to WBPH, stem rot, blast and brown spot, tolerant to BLB
- High fertility paddy growing areas of Haryana
- **Average Yield :** 67.5 q/ha
- **Potential Yield :** 100.0 q/ha

1992

S.O. 122 (E)
Dated 02.02.2005

Rice : Taraori Basmati

Haryana Medium Fertility

Yield 25 q/ha

Resistant to WBPH & Stem rot

1992

S.O. 1 (E)
Dated 01.01.1996

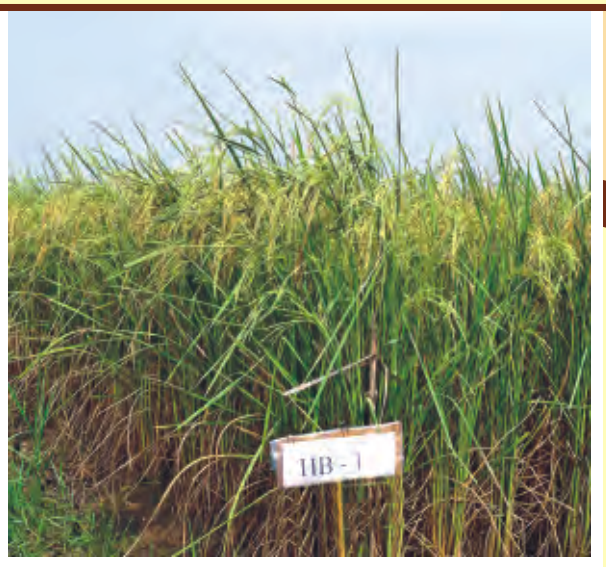
- Tall scented variety suitable for early planting
- Export quality variety long grained (7.1 mm) scented (Basmati) aromatic rice
- Photoperiod sensitive
- Matures in 145-155 days
- Resistant to stem rot and WBPH
- Medium fertility paddy growing areas of Haryana
- **Average Yield :** 25 q/ha
- **Potential Yield :** 35 q/ha

Rice : Haryana Basmati 1

Medium Fertility

Yield 40 q/ha

Resistant to Blast, WBPH



- Photo insensitive semi dwarf scented variety suitable for timely planting
- Long slender grains
- Maturity 140 days (medium duration)
- Resistant ot Blast & WBPH
- Medium fertility paddy growing areas of Haryana, Punjab and Western U.P.
- **Average Yield :** 40 q/ha
- **Potential Yield :** 55 q/ha

1991

S.O. 793 (E)
Dated 22.11.1991

Rice : HKR 120

Haryana

Yield 62.5 q/ha

Resistant to BLB, WBPH

1987

S.O. 471 (E)
Dated 05.05.1988

- Non-scented semi-dwarf variety with long slender grains
- Suitable for early planting
- Medium duration (146 days)
- Resistant to BLB and WBPH
- High fertility paddy growing areas of Haryana
- **Average Yield :** 62.5 q/ha
- **Potential Yield :** 90.0 q/ha

Pearl Millet : HHB 311

National A&B Zone

Yield 37.5 q/ha

Iron 83 ppm
Zinc 41 ppm

2020

S.O. 99 (E)
Dated 06.01.2020

- Medium-long conical, compact panicles
- Greyish hexagonal grains
- Maturity 75-80 days
- Average Grain Iron content - 83 ppm
- Average grain Zinc content - 41 ppm
- Resistant to downy mildew and insects
- National A&B Zone irrigated (Rajasthan, Gujarat, Haryana, Punjab, Delhi, Maharashtra and Tamil Nadu)
- **Average Yield :** 37.5 q/ha
- **Potential Yield :** 45.0 q/ha

Pearl Millet : HHB 299

National A&B Zone

Yield 39.5 q/ha

Iron 73 ppm
Zinc 41 ppm

2018

S.O. 1379 (E)
Dated 27.03.2018

- Thick, compact, lanceolate panicles with hexagonal greyish grains
- Thick strong sturdy stem
- One of the first biofortified (high grain iron content 73 ppm) hybrid
- Maturity 75-81 days
- High grain iron content 73 ppm
- Zinc content of 41 ppm
- Resistant to downy mildew and blast
- National A&B Zone irrigated (Rajasthan, Gujarat, Haryana, Punjab, Delhi, Maharashtra and Tamil Nadu)
- **Average Yield :** 39.5 q/ha
- **Potential Yield :** 49.0 q/ha

Pearl Millet : HHB 272

National

Yield 37.3 q/ha

Resistant Downy Mildew & Blast

2016

S.O. 2238 (E)
Dated 30.06.2016

- Conicle shaped medium long compact panicles with greyish grains
- Maturity 65-68 days
- Early maturing, high grain and fodder yield
- Resistant to downy mildew and blast.
- National Rainfed (Rajasthan, Gujarat and Haryana)
- **Average Yield :** 37.3 q/ha
- **Potential Yield :** 44.8 q/ha

Pearl Millet : HHB 234

National Zone A_1

Yield 31 q/ha

Resistant Downy Mildew & Blast

- Maturity 70-72 days
- Small bristles
- Candle shaped medium long panicles
- Resistant to downy mildew and blast
- National Zone A_1 (Drier parts of Rajasthan, Gujarat and Haryana)
- **Average Yield :** 31 q/ha
- **Potential Yield :** 45 q/ha

2013

S.O. 952 (E)
Dated 12.04.2013

Pearl Millet : HHB 226

National Zone A_1

Yield 34 q/ha

Resistant Downy Mildew

- Maturity 70-72 days
- Brownish long bristles
- Stay green at maturity
- Resistant to downy mildew
- National Zone A_1 (Drier parts of Rajasthan, Gujarat and Haryana)
- **Average Yield :** 34 q/ha
- **Potential Yield :** 44 q/ha

2011

S.O. 632 (E)
Dated 25.03.2011

Pearl Millet : HHB 223

National Zone A

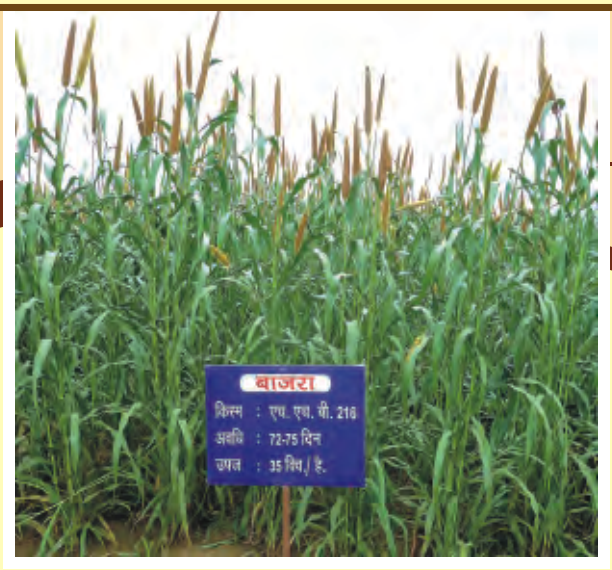
Yield 36 q/ha

Tolerant to drought

- Maturity 70-75 days
- Long purple colored brown bristle
- Resistant to downy mildew
- Tolerant to drought
- National Zone A (Rajasthan, Gujarat, Haryana, Punjab, Delhi, UP & MP) for irrigated and semi-irrigated areas
- **Average Yield :** 36 q/ha
- **Potential Yield :** 55 q/ha

2010

S.O. 211 (E)
Dated 29.01.2010



Pearl Millet : HHB 216

National Zone A_1 | Yield 35 q/ha | Resistant Downy Mildew Drought tolerant

2010
S.O. 211 (E)
Dated 29.01.2010

- Maturity 69-73 days
- Long brownish bristle
- Resistant to downy mildew
- Highly tolerant to drought
- National (A_1 zone) for rainfed and restricted irrigated areas of Haryana, Rajasthan and Gujarat
- **Average Yield :** 35 q/ha
- **Potential Yield :** 50 q/ha

Pearl Millet : HHB 197

National | Yield 35 q/ha | Resistant Downy Mildew Drought tolerant

- Maturity 68-72 days
- Highly resistant to downy mildew
- Tolerant to drought and long bristle on panicles
- National Zone (Rajasthan, Gujarat, Haryana, Punjab, Delhi, UP & MP) for rainfed as well as irrigated conditions
- **Average Yield :** 35 q/ha
- **Potential Yield :** 50 q/ha

2008
S.O. 72 (E)
Dated 10.01.2008

Pearl Millet : HHB 67 Improved

National

Yield 31 q/ha

Resitant Downy Mildew Drought tolerant

2005

S.O. 1565 (E)
Dated 05.11.2005

- Maturity 62-65 days
- Good grain and fodder quality
- First hybrid involving male parent developed by Marker Assisted Selection and female improved by conventional backcrossing
- Highly resistant to downy mildew
- Tolerant to drought
- National for early to late sowing
- **Average Yield :** 31.0 q/ha
- **Potential Yield :** 37.5 q/ha

Pearl Millet : HHB 117

Haryana

Yield 34 q/ha

Resistant Downy Mildew Stay green

- Matures in 70-73 days
- Remains stay green at maturity
- Resistant to downy mildew, fairly tolerant to drought
- Best suited for rainfed and irrigated conditions of Haryana
- **Average Yield :** 34 q/ha
- **Potential Yield :** 39 q/ha

2004

S.O. 642 (E)
Dated 31.05.2004

Pearl Millet : HHB 146

National

Yield 37.5 q/ha

Resitant Downy Mildew

2003

S.O. 283 (E)
Dated 12.03.2003

- Maturity 75-80 days
- High grain and fodder productivity
- Responsive to fertilizer
- Resistant to downy mildew and fairly tolerant to drought and salt stress
- National for early planting
- **Average Yield :** 37.5 q/ha
- **Potential Yield :** 55.0 q/ha

Pearl Millet : HC 20

Haryana

Yield 31 q/ha

Resistant Downy Mildew Drought tolerant

- Maturity 80-83 days
- High biomass
- Highly resistant to downy mildew
- Tolerant to drought
- For irrigated and rain fed conditions of Haryana
- **Average Yield :** 31.0 q/ha
- **Potential Yield :** 35.0 q/ha

2002

S.O. 937 (E)
Dated 04.09.2002

Pearl Millet : HC 10

Haryana

Yield 29 q/ha

Resitant Downy Mildew & insects

- Maturity 75-80 days
- Resistant to downy mildew
- Multiple insect resistance and tolerant to diseases
- For irrigated and rain fed conditions of Haryana
- **Average Yield :** 29 q/ha
- **Potential Yield :** 33 q/ha

2000

S.O. 340 (E)
Dated 03.04.2000

Pearl Millet : HHB 94

Haryana

Yield 35 q/ha

Resistant Downy Mildew Drought tolerant

- Matures in 70-75 days
- Synchronous and very high tillering
- Resistant to downy mildew, tolerant to drought
- For high input conditions of Haryana
- **Average Yield :** 35 q/ha
- **Potential Yield :** 40 q/ha

2000

S.O. 340 (E)
Dated 03.04.2000

Pearl Millet : HHB 68

Haryana

Yield 30 q/ha

Resitant Downy Mildew Drought tolerant

1993

S.O. 615 (E)
Dated 17.08.1993

- Matures in 62-65 days
- Resistant to downy mildew and tolerant to drought
- For early to late sowing in Haryana
- **Average Yield :** 30 q/ha
- **Potential Yield :** 35 q/ha

Pearl Millet : HHB 67

National

Yield 31 q/ha

Extra Early maturing Hybrid

- Matures in 60-62 days
- Extra early maturing wonder hybrid of world
- Fits well in inter and multiple cropping
- National for early to late sowing
- **Average Yield :** 31 q/ha
- **Potential Yield :** 36 q/ha

1990

S.O. 386 (E)
Dated 15.05.1990

Pearl Millet : HHB 60

Haryana

Yield 32.5 q/ha

Resitant Downy Mildew Drought & Salt stress

- Matures in 74-76 days
- Highly productive and gives good quality fodder
- Resistant to downy mildew, drought and Salt stress
- For high input conditions of Haryana
- **Average Yield :** 32.5 q/ha
- **Potential Yield :** 37.5 q/ha

1988

S.O. 1135 (E)
Dated 01.12.1988

Pearl Millet : HHB 50

National

Yield 32.5 q/ha

Resistant Downy Mildew Drought tolerant

- Matures in 76-80 days
- Highly productive and responsive to inputs
- Resistant to downy mildew, tolerant to drought
- National for high input conditions
- **Average Yield :** 32.5 q/ha
- **Potential Yield :** 40 q/ha

1987

S.O. 165 (E)
Dated 06.03.1987

Pearl Millet : HC 4

National

Yield 28 q/ha

Resitant Downy Mildew

1987

S.O. 295 (E)
Dated 09.04.1985

- Composite variety
- Matures in 85 days
- High biomass yield
- Resistant to downy mildew
- National for high input conditions
- **Average Yield :** 28 q/ha
- **Potential Yield :** 33 q/ha

Pearl Millet : HHB 45

Haryana

Yield 31 q/ha

Rainfed contitions

- Matures in 82-85 days
- High yield potential
- For rainfed conditions of Haryana
- **Average Yield :** 31 q/ha
- **Potential Yield :** 36 q/ha

1985

S.O. 540 (E)
Dated 24.07.1985

Pearl Millet : HS 1

Haryana

Yield 27 q/ha

Resitant Downy Mildew Drought tolerant

1978

S.O. 13 (E)
Dated 19.12.1978

- Synthetic/composite variety
- Matures in 75-80 days
- Resistant to downy mildew
- Tolerant to drought
- For rainfed conditions
- **Average Yield :** 27 q/ha
- **Potential Yield :** 30 q/ha

Felicitation of Breeders and Developers of Pearlmillet variety HHB 311

Maize : HM 13

National Release

Green Cob Yield 66.3 q/ha

High starch content (75%)

2015

S.O. 268 (E)
Dated 28.01.2015

- Early maturing single cross hybrid
- High starch content (75%)
- Resistant to MLB and common rust
- Tolerant to stem borer
- National (J&K, H.P., Uttrakhand and NE hills) for *kharif* season
- **Average Grain Yield :** 66.3 q/ha in *Kharif*
- **Potential Grain Yield :** 90.0 q/ha

Maize : HM 12

National Release

Average Grain Yield 55 q/ha

White Grain

- First public sector white grain single cross hybrid for Zone- III
- Medium maturity, Semi-dent and bold grain
- Resistant to MLB and tolerant to stem borer in *kharif*
- National (Eastern UP, Bihar, Jharkhand, W.B. & Orissa) for *kharif* season
- **Average Grain Yield :** 55 q/ha in *kharif*
- **Potential Grain Yield :** 95 q/ha

2012

S.O. 2125 (E)
Dated 10.09.2012

Maize : HSC 1

National Release

Average Grain Yield 120 q/ha

Sweet corn hybrid

- Medium maturing sweet corn single cross hybrid
- Resistant to MLB and common rust
- National (H.P. and Uttarakhand) for *kharif* season
- **Average Yield :** 120 q/ha (green cob yield)
- **Potential Yield :** 145 q/ha (green cob yield)

2011

S.O. 2137(E)
Dated 31.08.2010

Maize : HM 11

National Release

Average Grain Yield 60-65 q/ha

Suitable for *kharif* season

- Semi dent, yellow grain single cross hybrid
- High level of field resistance against major diseases and insect-pest (stem borer)
- National : Across the country for *kharif* season
- **Average Grain Yield :** 60-65 q/ha
- **Potential Grain Yield :** 105 q/ha

2009

S.O. 2187 (E)
Dated 27.08.2009

Maize : HM 10

National Release

Average Grain Yield 72-75 q/ha

Suitable for Rabi season

2008

S.O. 2458 (E)
Dated 16.10.2008

- Yellow grain single cross hybrid
- Resistant to rust and MLB
- Tolerant to pink stem borer and cold/frost
- National (Delhi, Punjab, Haryana, Western U.P., Rajasthan, M.P., Gujarat, Chattisgarh, Telangana, A.P., T.N., Maharashtra and Karnataka) for *rabi* season
- **Average Grain Yield :** 72-75 q/ha in *rabi*
- **Potential Grain Yield :** 110 q/ha

Maize : HM 9

National Release

Average Grain Yield 55-60 q/ha

Suitable for *kharif* season

- Medium maturing single cross hybrid
- Bold, attractive orange and flint grains
- Resistant to MLB and common rust
- Tolerant to frost/cold
- National (Eastern U.P., Bihar, W.B., Orissa, Jharkhand) for *kharif* season
- **Average Grain Yield :** 55-60 q/ha in *kharif*
- **Potential Grain Yield :** 90 q/ha

2007

S.O. 1703 (E)
Dated 05.11.2007

Maize : HM 8

National Release

Average Grain Yield 60-65 q/ha

Attractive orange grains

- Medium maturing single cross hybrid
- Attractive orange and flint grains
- Tolerant to frost/cold
- Tolerant to MLB & stem borer
- National- A.P., Karnataka, T.N., Maharashtra, Telangana
- **Average Grain Yield :** 60-65 in *kharif* and 67-72 q/ha in *rabi*
- **Potential Grain Yield :** 90 q/ha

2007

S.O. 1703 (E)
Dated 05.11.2007

Maize : HM 5

State Release

Average Grain Yield 60-65 q/ha

Suitable for intercropping

- Late maturing very productive white dent maize hybrid
- Resistance to MLB and rust
- Tolerant to frost/cold
- Suitable for intercropping
- Haryana State for *kharif* and *rabi* season
- **Average Grain Yield :** 60-65 q/ha in *kharif* and 70-75 q/ha in *rabi*
- **Potential Grain Yield :** 115 q/ha

2004

S.O. 1177 (E)
Dated 25.08.2005

Maize : HM 4

National Release

Average Grain Yield 55-60 q/ha

Suitable for babycorn as well as grain cultivation

- **First baby corn single cross hybrid in the country**
- Suitable for babycorn as well as grain
- Haryana State (for grain) and National (Punjab, Haryana, Delhi, Western Uttar Pradesh, Plains of Uttarakhand) (for baby corn cultivation) for *kharif* and *rabi* season
- **Average Grain Yield :** 55-60 q/ha in *kharif* and 67.5-72.5 q/ha in *rabi*
- **Average Baby Corn Yield :** 20 q/ha
- **Potential Grain Yield :** 90 q/ha

2004

S.O. 1177 (E)
Dated 25.08.2005

Maize : HHM 2

State Release

Average Grain Yield 52-57 q/ha

White flint attractive grain

- First white shining flint grain single cross hybrid in the country
- Medium maturity
- Haryana State for *kharif* and *rabi* season
- **Average Grain Yield :** 52-57 q/ha in *kharif* and 65-67.5 q/ha in *rabi*
- **Potential Grain Yield :** 73 q/ha

2001

S.O. 340 (E)
Dated 03.04.2000

Maize : HHM 1

State Release

Average Grain Yield 52.5-55 q/ha

Drought tolerant hybrid

2001

S.O. 340 (E)
Dated 03.04.2000

- Medium maturing single cross hybrid with yellow dent grain
- Drought tolerant
- Haryana State for *kharif* and *rabi* season
- **Average Grain Yield :** 52.5-55.0 q/ha in *kharif* and 60-65 q/ha in *rabi*
- **Potential Grain Yield :** 75.0 q/ha

High Quality Protein Maize Hybrids

Maize : HQPM 4

National Release

Average Grain Yield 55-60 q/ha

QPM hybrid suitable for silage also

- Late maturing QPM single cross hybrid with light orange grain
- Resistant to MLB and stem borer
- National: Across the country for *kharif* season
- **Average Grain Yield :** 55-60 q/ha
- **Potential Grain Yield :** 100 q/ha

2010

S.O. 2137 (E)
Dated 31.08.2010

High Quality Protein Maize Hybrids

Maize : HQPM 7

National Release

Average Grain Yield 76 q/ha

QPM hybrid

- Late maturing QPM single cross hybrid
- Resistant to MLB and stem borer
- National (A.P., Karnataka, T.N., Maharashtra & Telangana) for *kharif* season
- **Average Grain Yield :** 76 q/ha
- **Potential Grain Yield :** 90 q/ha

2008

S.O. 2458 (E)
Dated 16.10.2008

High Quality Protein Maize Hybrids

Maize : HQPM 5

National Release

Average Grain Yield 60-65 q/ha

QPM hybrid with orange grain

- Medium late maturing single cross QPM hybrid
- Round and orange attractive grains
- Resistant to MLB, common rust and PFSR
- Tolerant to frost/cold
- National: Across the country for *kharif* and *rabi* season
- **Average Grain Yield :** 60-65 in *kharif* and 67.5-72.5 q/ha in *rabi*
- **Potential Grain Yield :** 95 q/ha

2007

S.O. 1703 (E)
Dated 5.11.2007

Maize : HQPM 1

National Release

Average Grain Yield 57-62 q/ha

QPM hybrid with yellow grain

2005

S.O. 1177 (E)
Dated 25.08.2005

- Medium late maturing first yellow grain QPM hybrid
- Resistant to major diseases (MLB & Common rust)
- National across the country for *kharif* and *rabi* season
- **Average Grain Yield :** 57-62 in *kharif* and 65-70 q/ha in *rabi*
- **Potential Grain Yield :** 105 q/ha

Inter-institutional maize hybrid

Maize: IM HQPM 1530

National

Average Grain Yield 85 q/ha

Early maturing QPM hybrid

- Early maturing QPM hybrid developed by ICAR-IIMR, Ludhiana in collaboration with CCSHAU, Hisar
- Out of two parental lines (IML 343×HKI 163) one (HKI 163) belong to CCSHAU Hisar
- Possesses high tryptophan (0.75–0.80 %) and lysine (3.0–3.50%) in endosperm protein.
- Moderately resistant to diseases (TLB, MLB,BLSB) and insect Chilo partellus under artificial epiphytotics conditions at hot-spot locations
- National (Jammu & Kashmir, Himachal Pradesh, Uttarakhand (Hill region), Meghalaya, Sikkim, Assam, Tripura, Nagaland, Manipur and Arunachal Pradesh) for *Kharif* season
- **Average Grain Yield:** 85 q/ha
  Potential Grain Yield: 90 q/ha

2020

S.O. 3482(E)
Dated 07.10.2020

Inter-institutional maize hybrid

Maize: Pusa HQPM-7 Improved

National | Average Grain Yield 74.5 q/ha | QPM hybrid Provitamin A & EDV

- Hybrid developed by ICAR-IARI, New Delhi in collaboration with CCSHAU, Hisar
- It is a QPM hybrid fortified with Provitamin A and EDV (Essentially Derived Variety), version of hybrid HQPM 7 (QPM hybrid)
- Possesses high provitamin A (7.10 ppm) as compared to 1.16 ppm after four months under traditional storage conditions
- Resistance against disease and insect pest at par with the original hybrid HQPM 7
- National (Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, Telangana) for *Kharif* season
- **Average Grain Yield:** 74.5 q/ha
  Potential Grain Yield: 93 q/ha

2020
S.O. 99 (E)
Dated 06.01.2020

Inter-institutional maize hybrid

Maize: Pusa HQPM-5 Improved

National | Average Grain Yield 62-65 q/ha | QPM hybrid Provitamin A & EDV

- Hybrid developed by ICAR-IARI, New Delhi in collaboration with CCSHAU, Hisar
- It is a QPM hybrid fortified with Provitamin A and EDV (Essentially Derived Variety), version of hybrid HQPM 5 (QPM hybrid)
- Possesses high provitamin A (6.77 ppm) as compared to 1.02 ppm after four months under traditional storage conditions
- Resistance against disease and insect pest at par with the original hybrid HQPM 5
- Across the country for *Kharif* season
- **Average Grain Yield:** 62-65 q/ha
  Potential Grain Yield: 87 q/ha

2020
S.O. 99 (E)
Dated 06.01.2020

Inter-institutional maize hybrid

Maize: DMRH 1305

National

Average Grain Yield 65 q/ha

Resistant to curvularia leaf spot to TLB, MLB

2018

S.O. 6318 (E)
Dated 26.12.2018

- Normal and light orange colored grain early maturing maize hybrid developed by ICAR-IIMR, Ludhiana in collaboration with CCSHAU, Hisar
- Out of two parental lines (V373×HKI 1105) one (HKI 1105) belong to CCSHAU Hisar
- Resistant to Curvularia leaf spot, moderately resistant to TLB, MLB, and to insect Chilo partellus under artificial epiphytotics conditions at hot-spot locations
- National (Jammu & Kashmir, Himachal Pradesh, Uttarakhand (Hill region), Meghalaya, Sikkim, Assam, Tripura, Nagaland, Manipur and Arunachal Pradesh) for *Kharif* season
- **Average Grain Yield:** 65 q/ha
  Potential Grain Yield: 75 q/ha

Inter-institutional maize hybrid

Maize: IMHB 1539

National

Average Babycorn Yield 15 q/ha

Moderately resistant to multiple diseases

- Baby corn hybrid developed by ICAR-IIMR, Ludhiana in collaboration with CCSHAU, Hisar
- Out of two parental lines (HKI 1105×IML 127-1) one (HKI 1105) belong to CCSHAU Hisar
- Moderately resistant (MR) to multiple diseases (TLB, MLB, BLSB and charcoal rot) and insect (Chilo partellus) under artificial epiphytotic conditions at hot-spots locations
- National (Jammu and Kashmir, Himachal Pradesh, Uttarakhand (Hill region), Meghalaya, Sikkim, Assam, Tripura, Nagaland, Manipur and Arunachal Pradesh) for Kharif season
- **Average Baby corn Yield:** 15 q/ha
  Potential Baby corn Yield: 18 q/ha

2018

S.O. 6318 (E)
Dated 26.12.2018

Inter-institutional maize hybrid

Maize: DMRH 1308

National

Average Grain Yield 90 q/ha

Resistant to TLB & Charcoal rot diseases

- Yellow maize hybrid developed by ICAR-IIMR, Ludhiana in collaboration with CCSHAU, Hisar
- Out of two parental lines (BML 6 × HKI 163) one (HKI 163) belong to CCSHAU Hisar
- Moderately resistant to TLB and Charcoal rot diseases under artificial epiphytotic conditions at hot-spot locations
- National (Rajasthan, Gujarat, Chhattisgarh and Madhya Pradesh) for Rabi season
- **Average Grain Yield:** 90 q/ha
  Potential Grain Yield: 100 q/ha

2018

S.O. 399 (E)
Dated 24.01.2018

Inter-institutional maize hybrid

Maize: Pusa HM 9 Improved

National

Average Grain Yield 52.01 q/ha

Possesses high tryptophan (0.68%)

- Hybrid developed by ICAR-IARI, New Delhi in collaboration with CCSHAU, Hisar
- It is a QPM hybrid and EDV (Essentially Derived Variety), version of hybrid HM9 (normal single cross hybrid)
- Possesses high tryptophan (0.68%) and lysine (2.97%) in endosperm protein.
- Resistance against disease and insect pest at par with the original hybrid HM 9
- National (Bihar, Jharkhand, Odisha, Uttar Pradesh and West Bengal) for Kharif season
- **Average Grain Yield:** 52.01 q/ha
  Potential Grain Yield: 88 q/ha

2017

S.O. 2805 (E)
Dated 25.08.2017

Inter-institutional maize hybrid

Maize: Pusa HM 8 Improved

National

Average Grain Yield 62.58 q/ha

Possesses high tryptophan (1.06%)

- Hybrid developed by ICAR-IARI, New Delhi in collaboration with CCSHAU, Hisar
- It is a QPM hybrid and EDV (Essentially Derived Variety), version of hybrid HM8 (normal single cross hybrid)
- Possesses high tryptophan (1.06%) and lysine (4.18%) in endosperm protein
- Resistance against disease and insect pest at par with the original hybrid HM 8
- National (Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra, Telangana) for Kharif season
- **Average Grain Yield:** 62.58 q/ha
  Potential Grain Yield: 90 q/ha

2017

S.O. 2805 (E)
Dated 25.08.2017

Inter-institutional maize hybrid

Maize: Pusa HM 4 Improved

National

Average Grain Yield 64.19 q/ha

Possesses high tryptophan (0.91%)

- Hybrid developed by ICAR-IARI, New Delhi in collaboration with CCSHAU, Hisar
- It is a QPM hybrid and EDV (Essentially Derived Variety), version of normal single cross hybrid HM4
- Possesses high tryptophan (0.91%) and lysine (3.62%) in endosperm protein
- Resistance against disease and insect pest at par with the original hybrid HM 4
- National (Punjab, Haryana, Delhi, Western Uttar Pradesh and Plains of Uttarakhand) for Kharif season
- **Average Grain Yield:** 64.19 q/ha
  Potential Grain Yield: 90 q/ha

2017

S.O. 2805 (E)
Dated 25.08.2017

Inter-institutional maize hybrid

Maize: Palam Sankar Makka I

National

Average Grain Yield 60 q/ha

Moderately resistant to MLB & Chilo partellus

2015

S.O. 2680 (E)
Dated 01.10.2015

- Yellow maize hybrid developed by CSKHPKV, HAREC, Bajaura in collaboration with CCSHAU, Hisar
- Out of two parental lines (HKI 1040-7 × BAJ 169-09-64), one (HKI 1040-7) belong to CCSHAU Hisar
- Moderately Resistant to MLB and Chilo partellus
- National (Jammu and Kashmir, Himachal Pradesh, Uttarakhand (Hill region), Meghalaya, Sikkim, Assam, Tripura, Nagaland, Manipur and Arunachal Pradesh) for Kharif season
- **Average Grain Yield :** 60 q/ha
  Potential Grain Yield : 85 q/ha

Inter-institutional maize hybrid

Maize: Partap QPM Hybrid

National

Average Grain Yield 54 q/ha

Moderately resistant to MLB

2013

S.O. 2817 (E)
Dated 19.09.2013

- Yellow QPM hybrid developed by Maha Rana Partap University of Agriculture and Technology, Udaipur, in collaboration with CCSHAU, Hisar
- Out of two parental lines (HKI 193-1 × DMR QPM 106) one (HKI 193-1) belong to CCSHAU Hisar
- Moderately Resistant to MLB under artificial epiphyotics conditions at hot-spot locations
- National (Rajasthan, Gujarat, Chhattisgarh and Madhya Pradesh) for Kharif season
- **Average Grain Yield :** 54 q/ha
  Potential Grain Yield : 70 q/ha

Inter-institutional maize hybrid

Maize: Malviya Hybrid Makka-2

National

Average Grain Yield 54 q/ha

Moderately resistant to MLB

2007

S.O. 1703 (E)
Dated 05.10.2007

- Yellow maize hybrid developed by BHU, Varanasi in collaboration with CCSHAU, Hisar
- Out of two parental lines (HUZM 185 × HKI 1105) one (HKI 1105) belong to CCSHAU Hisar
- Moderately Resistant to MLB under artificial epiphytotic conditions at hot-spot locations
- National (Eastern Uttar Pradesh, Bihar, Jharkhand, Chattisgarh, Orissa and West Bengal) for Kharif season
- **Average Grain Yield :** 54 q/ha
  Potential Grain Yield : 75 q/ha

Agriculture Minister and Vice Chancellor Visit at RRS Karnal

Oilseed Crop

Indian Mustard : RH 761

National Release

Average Yield 26-27 q/ha

Bold Seeded long siliqua

2019

S.O. 3220 (E)
Dated 06.09.2019

- Long raceme having long siliqua
- Bold seed size
- 137-143 days maturity
- Oil content 40%
- National (Haryana, Punjab, Delhi, Jammu & Northern Rajasthan) for timely sown and rainfed conditions
- **Average Yield :** 26-27 q/ha
- **Potential Yield :** 35 q/ha

Oilseed Crop

Indian Mustard : RH 725

National Release

Average Yield 25-26 q/ha

Bold Seeded long siliqua

- Bold seeded
- Long and semi-appressed siliqua
- Oil content 40%
- National (Haryana, Punjab, Delhi, Jammu & Northern Rajasthan) for timely sown and rainfed conditions
- **Average Yield :** 25-26 q/ha
- **Potential Yield :** 36 q/ha

2018

S.O. 1379 (E)
Dated 27.03.2018

2013
S.O. 952 (E)
Dated 10.04.2013

Oilseed Crop

Indian Mustard : RH 0749

National Release | Average Yield 26-28 q/ha | Bold Seeded thick siliqua

- Bold seeded
- Long and thick siliqua
- Oil content 39-40%
- National (Haryana, Punjab, Delhi, Jammu & parts of Rajasthan) for timely sown and irrigated conditions
- **Average Yield :** 26-28 q/ha
- **Potential Yield :** 34 q/ha

Oilseed Crop

Indian Mustard : RH 0406

National Release | Average Yield 22-24 q/ha | Lodging resistant

- Bold seeded
- Oil content 39-40%
- Lodging resistant
- National (Haryana, Punjab, Delhi, Jammu and parts of Rajasthan) for timely sown rainfed conditions
- **Average Yield :** 22-24 q/ha
- **Potential Yield :** 28 q/ha

2013
S.O. 2815 (E)
Dated 19.09.2013

Oilseed Crop

Indian Mustard : RH 0119

Haryana | Average Yield 18-20 q/ha | Thermo tolerant

- Thick and long siliqua
- Bold seeded
- Thermo-tolerant
- State for rainfed conditions
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 25 q/ha

2010

S.O. 2137(E)
Dated 31.08.2010

Oilseed Crop

Indian Mustard : RB 50

National Release | Average Yield 18-20 q/ha | Long main receme

- Long and bold siliqua with long main raceme
- Bold seeds
- Oil content 39%
- National for rainfed conditions
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 25 q/ha

2009

S.O. 2187 (E)
Dated 27.08.2009

Oilseed Crop

Indian Mustard : RB 24 (RB 9901)

National Release

Average Yield 17-20 q/ha

First Tetralocular variety

- First tetralocular variety
- Long main raceme
- Oil content 40%
- National for rainfed conditions
- **Average Yield :** 17.5-20 q/ha
- **Potential Yield :** 24 q/ha

2003

S.O. 283 (E)
Dated 12.03.2003

Oilseed Crop

Indian Mustard : Swarn Jyoti (RH 9801)

National Release

Average Yield 18-20 q/ha

Suitable for late sown

- Maturity 125-130 days
- Medium size seed
- Oil content 40%
- National for late sown irrigated condition
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 25 q/ha

2002

S.O. 283 (E)
Dated 12.03.2003

Oilseed Crop

Indian Mustard : Vasundhra (RH 9304)

National Release

Average Yield 24-26 q/ha

Moderately thermo tolerant

- Bold seeded
- Maturity 135-140 days
- Oil content 40%
- National for timely sown irrigated condition
- **Average Yield :** 24-26 q/ha
- **Potential Yield :** 30 q/ha

2002

S.O. 283 (E)
Dated 12.03.2003

Oilseed Crop

Indian Mustard : Laxmi (RH 8812)

Haryana

Average Yield 22-25 q/ha

Thick Siliquae

- Thick siliquae and bold seeded
- Oil content 40%
- Maturity 142 -145 days
- State for timely sown irrigated condition
- **Average Yield :** 22.5-25 q/ha
- **Potential Yield :** 30 q/ha

1996

S.O. 360 (E)
Dated 01.05.1997

Oilseed Crop

Indian Mustard : RH 781

National Release

Average Yield 18-20 q/ha

Frost tolerant

1990

S.O. 527 (E)
Dated 16.08.1991

- Maturity 140 days
- Oil content 40%
- Tolerant to frost
- National for frost affected areas
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 26 q/ha

Oilseed Crop

Indian Mustard : RH 819

National Release

Average Yield 14 q/ha

Oil content 40%

- Maturity 148 days
- Medium size seeds
- Oil content 40%
- National for rainfed areas
- **Average Yield :** 14 q/ha
- **Potential Yield :** 24 q/ha

1990

S.O. 527 (E)
Dated 16.08.1991

Oilseed Crop

Indian Mustard : Saurabh (RH 8113)

National Release

Average Yield 22-25 q/ha

Disease resistant

- Maturity 148-150 days
- Oil content 40%
- Tolerant to diseases
- National for timely sown irrigated condition
- **Average Yield :** 22.5-25 q/ha
- **Potential Yield :** 30 q/ha

1985

S.O. 165 (E)
Dated 06.12.1987

Oilseed Crop

Indian Mustard : RH 30

Haryana

Average Yield 20-22 q/ha

Wider adaptability

- A milestone variety with wide adaptability
- Matures in 135-140 days
- Oil content 40%
- Suitable for intercropping
- State for rainfed and irrigated conditions; suitable for timely and late sown
- **Average Yield :** 20-22 q/ha
- **Potential Yield :** 28 q/ha

1983

S.O. 295 (E)
Dated 09.04.1985

Oilseed Crop

Indian Mustard : Parkash

Haryana | Average Yield 20 q/ha | First Raya variety

- Tall growing
- Medium size seeds
- Oil content 38%
- Maturity 150-155 days
- Haryana State for timely sown conditions
- **Average Yield :** 20 q/ha
- **Potential Yield :** 24 q/ha

1974
S.O. 786
Dated 21.02.1976

Oilseed Crop

Rapeseed (Toria) : TH 68

Haryana | Average Yield 14-15 q/ha | Early maturing & High oil

- Early maturing (95 days)
- Oil content 44%
- Suitable for toria-wheat rotation
- State for timely sown
- **Average Yield :** 14-15 q/ha
- **Potential Yield :** 18 q/ha

1990
S.O. 527 (E)
Dated 16.07.1991

Oilseed Crop

Rapeseed (Toria) : Sangam

Haryana | Average Yield 15-17.5q/ha | High Oil content

- Late maturing (112 days)
- Medium size seed
- Oil content 44%
- State for timely sown
- **Average Yield :** 15-17.5 q/ha
- **Potential Yield :** 20 q/ha

1974
S.O. 786
Dated 21.02.1976

Oilseed Crop

Taramira : T 27

Haryana | Average Yield 6 q/ha | Drought Diseases & Insect pest resistant

- Maturity 150 days
- Oil content 32%
- Drought, diseases and insect pest tolerant
- State for rainfed areas
- **Average Yield :** 6 q/ha
- **Potential Yield :** 8 q/ha

1974
S.O. 786
Dated 21.02.1976

Oilseed Crop

Sesame : HT 2

National Zone-1

Average Yield 7-8 q/ha

Phyllody & Leaf curl virus resistant

- Moderately resistant to phyllody and leaf curl virus
- Maturity 90 days
- White seeded
- National, Zone 1 (Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana and Delhi)
- **Average Yield :** 7-8 q/ha
- **Potential Yield :** 11 q/ha

2013

S.O. 952 (E)
Dated 10.04.2013

Oilseed Crop

Sesame : HT 1

Haryana

Average Yield 7 q/ha

White Seed Oil content 49%

- White seeded
- Maturity 87 days
- Oil content 49%
- State for rainfed conditions
- **Average Yield :** 7 q/ha
- **Potential Yield :** 10 q/ha

1978

S.O. 13
Dated 19.12.1978

Oilseed Crop

Castor : CH 1

Haryana

Average Yield 18 q/ha

Suitable for all soil type

- Dwarf
- Maturity 110 days
- Oil content 49%
- State for all soil types
- **Average Yield :** 18 q/ha
- **Potential Yield :** 24 q/ha

1978

S.O. 13
Dated 19.12.1978

Oilseed Crop

Sunflower : HSFH 848

Haryana

Average Yield 22-25 q/ha

Early maturing & Disease tolerant

- Early maturing hybrid (95-100 days)
- Oil content 40%
- Tolerant to diseases
- State for timely and late sowing in spring season
- **Average Yield :** 22-25 q/ha
- **Potential Yield :** 28 q/ha

2005

S.O. 1566 (E)
Dated 05.11.2005

Oilseed Crop

Sunflower : Haryana Surajmukhi 1

Haryana | Average Yield 20 q/ha | Composite variety

- Composite variety
- Uniform and early maturing (90 days)
- 40% oil content
- State for timely and late sowing
- **Average Yield :** 20 q/ha
- **Potential Yield :** 25 q/ha

1994

Oilseed Crop

Yellow Sarson : YSH 0401

National Release | Average Yield 18-20 q/ha | High Oil content

- Wider adaptation
- Maturity 115-120 days
- Oil content 45%
- National for timely sown irrigated areas
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 20 q/ha

2008

S.O. 2187 (E)
Dated 27.08.2009

Oilseed Crop

Yellow Sarson : YSPb 24

Haryana | Average Yield 9 q/ha | High Oil content

1966
S.O. 13
Dated 19.12.1978

- Medium bold seeds
- Oil content 46%
- Maturity 150 days
- State for irrigated areas
- **Average Yield :** 9 q/ha
- **Potential Yield :** 13 q/ha

Oilseed Crop

Brown Sarson : BSH 1

Haryana | Average Yield 12.5 q/ha | High Oil content

- Medium plant height
- Bold seeded
- Oil content 45%
- Maturity 136 days
- State for rainfed areas
- **Average Yield :** 12.5 q/ha
- **Potential Yield :** 14.0 q/ha

1966
S.O. 786
Dated 21.02.1976

Oilseed Crop

Groundnut : MH 4

Haryana | Average Yield 32 q/ha | High Oil content

- Dwarf and bunch type
- Maturity 115 days
- Oil content 50%
- State for irrigated conditions
- **Average Yield :** 32 q/ha
- **Potential Yield :** 40 q/ha

1988

S.O. 386 (E)
15.05.1990

Oilseed Crop

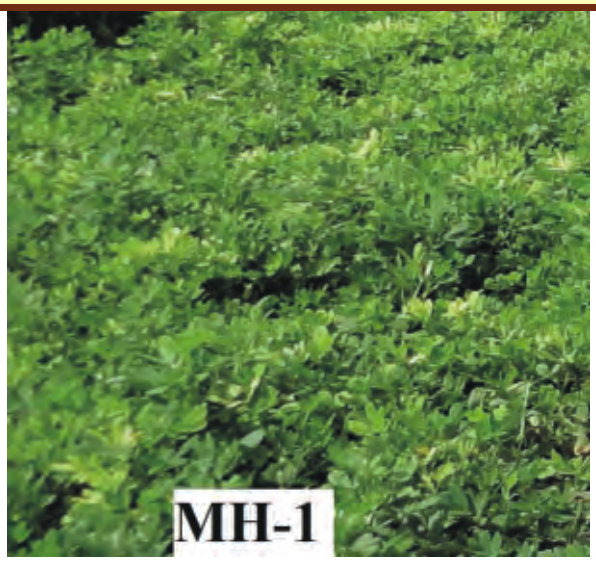
Groundnut : MH 2

Haryana | Average Yield 30 q/ha | Dwarf & Bunch type

- Dwarf bunch type
- Maturity 110 days
- State for irrigated conditions
- **Average Yield :** 30 q/ha
- **Potential Yield :** 40 q/ha

1974

S.O. 136
Dated 19.12.1978



Oilseed Crop

Groundnut : MH 1

Haryana

Average Yield 20 q/ha

Bunch type

1974

- Tall bunch type
- Maturity 120 days
- State for sandy loam, loam soils with irrigation facilities
- **Average Yield :** 20 q/ha
- **Potential Yield :** 25 q/ha

Visit of Vice Chancellor to the oilseed farm

Pulse Crop

Kabuli Chickpea : HK 4

NEPZ | Bold Seeded | Wilt resistant

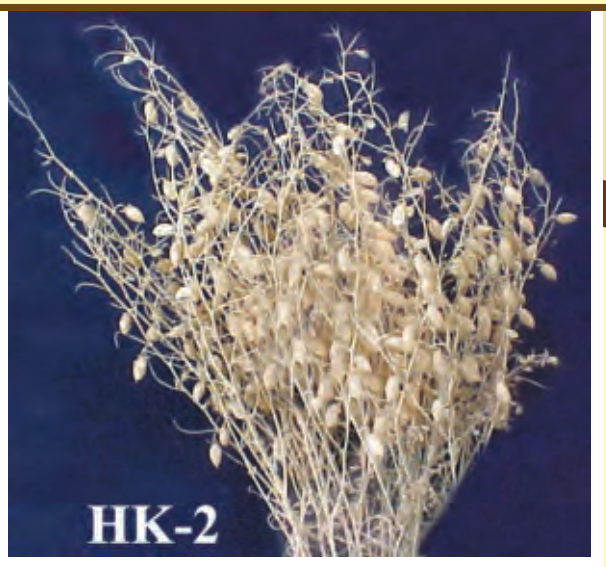
- Semi-erect with dark foliage
- Bold seeded
- Resistant to wilt
- Released for cultivation at National level (Eastern UP, Bihar, Jharkhand, W. Bengal, Orissa)
- **Average Yield :** 15.0 q/ha
- **Potential Yield :** 20.6 q/ha

2012
S.O.1708 (E)
Dated 26/07/2012

Pulse Crop

Kabuli Chickpea : HK 2

National | Bold Seeded | Tolerant to Wilt & Root diseases



- Bold seeded, light green foliage
- Tolerant to wilt and root diseases
- Released for cultivation at National level (Eastern UP, Bihar, Jharkhand, W. Bengal, Orissa and Haryana) for irrigated areas
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 25.0 q/ha

2005
S.O. 122 (E)
Dated 02/02/2005

Pulse Crop

Kabuli Chickpea : HK 1

Medium Seed

Semi spreading

Resistant to Fusaium Wilt

2002

S.O. 937 (E)
Dated 04.09.2002

- Medium size grain
- Resistant to wilt and root rot
- Release for cultivation in Haryana state for irrigated areas
- Resistant to Fusarium wilt
- **Average Yield :** 20-25 q/ha
- **Potential Yield :** 40.9 q/ha

Pulse Crop

Desi (Brown) Chickpea : HC 7

National

Yield 20-25 q/ha

Suitable for late sown

- Notified for cultivation in Punjab, Haryana, Western Uttar Pradesh, Delhi, North Rajasthan, Jammu and Kashmir, plains of Himachal Pradesh and Uttarakhand
- Suitable for late sown (last week of November to 2nd week of Dec)
- Plant height varies between 54-70 cm
- Mature in 127 days
- **Average Yield :** 20-25 q/ha
  Potential Yield : 40 q/ha

2019

S.O. 99(E)
Dated 06.01.2020

Pulse Crop

Desi (Brown) Chickpea : HC 5

Erect Compact Plants

Most suitable for mechanical harvesting

Suitable for intercropping

- Erect, compact and tall plants
- Early vigour, stable
- Resistant to wilt and root diseases
- Suitable specific adaptation to sugarcane-chickpea intercropping
- Release for cultivation in Haryana state for irrigated areas under normal/late sown conditions
- Resistant to Fusarium wilt and root rot
- **Average Yield :** 21-25 q/ha
- **Potential Yield :** 48.9 q/ha

2005

S.O. 1566 (E)
Dated 05/11/2005

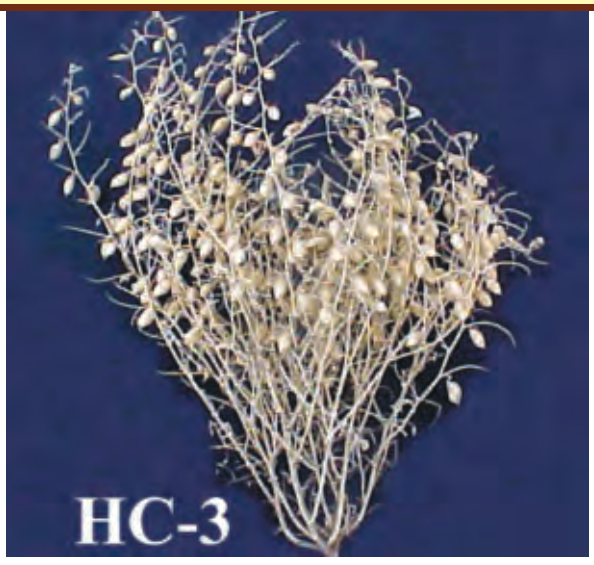
Pulse Crop

Desi (Brown) Chickpea : HC 3

Bold Seeded

Wilt resistant

Salinity tolerant



- Semi –erect, bold seeded, light brown color.
- Resistant to wilt, Aschochyter blight stunt, & root rot
- Suitable for cultivation in irrigated areas of Haryana
- Tolerant to Salinity
- **Average Yield :** 13-14 q/ha
- **Potential Yield :** 16-17 q/ha

2000

S.O. 340 (E)
Dated 03.04.2000

Pulse Crop

Desi (Brown) Chickpea : HC 1

Wilt resistant

Suitable for timely & Late sowing

Suitable for rainfed & irrigated

1990

S.O. 386 (E)
Dated 15.05.1990

- Early maturing (145 days)
- Very attractive seeds of medium size with a long beak
- Resistant to wilt
- Released for cultivation at National level (NWPZ) for rainfed and irrigated, normal as well as late sown conditions
- **Average Yield :** 20-25 q/ha
- **Potential Yield :** 29.9 q/hab

Pulse Crop

Desi (Brown) Chickpea : Gora Hisari

Medium Seed

Good for culinary purpose

Wilt resistant

- Medium seed size
- Good for culinary purposes
- Maturity 155 days
- Release for cultivation in Haryana state for irrigated conditions
- **Average Yield :** 20 q/ha

1988

Pulse Crop

Desi (Brown) Chickpea : Gaurav

Bold Seeded | Large pods | Ascochyta blight resistant

1985

S.O. 295 (E)
Dated 09.04.1985

- Bold seeded desi variety
- Large pods
- Resistant to Ascochyta blight and wilt
- Released for cultivation at National level for irrigated conditions
- **Average Yield :** 22 q/ha

Pulse Crop

Desi (Brown) Chickpea : H 208

National (CZ) | Small Seed | Drought & Wilt tolerant

- Brownish yellow small seeds
- Tolerant to drought and wilt
- Released for cultivation at National level (CZ) for rainfed areas
- Resistant to wilt
- **Average Yield :** 20 q/ha

1978

S.O. 13 (E)
Dated 19.12.1978

Pulse Crop

Desi (Brown) Chickpea : H 355

Brownish yellow Seed

Small Seed

Wilt tolerant

- Brownish yellow small seeded
- Suitable for wilt prone irrigated areas
- Release for cultivation in Haryana state for irrigated areas
- **Average Yield :** 20-22 q/ha

1978

S.O. 13 (E)
Dated 19.12.1978

Pulse Crop

Desi (Brown) Chickpea : C 235

Wide Adaptability

Small Seed

Ascochyta Blight tolerant

- Yellowish brown small seeds
- Maturity 150 days
- Tolerant to Ascochyta blight
- Release for cultivation in Haryana state for irrigated areas
- **Average Yield :** 20 q/ha

1976

S.O. 440 (E)
Dated 02.02.1976

Pulse Crop

Fieldpea : HFP 1428

National (NWPZ) | Diseases resistant | Lodging resistant

2021

S.O. 500 (E)
Dated 29.01.2021

- Notified for rabi season in North West Plain zone of India (Punjab, Haryana, Delhi, Rajasthan, Uttrakhand, parts of J&K and western Uttar Pradesh)
- High yielding dwarf variety which matures in about 123 days.
- Resistant to Powdery mildew, Ascochyta blight and Root rot and moderately resistant to Rust.
- Resistant to lodging.
- **Average Yield :** 26-28 q/ha
- **Potential Yield :** 39-40 q/ha

Pulse Crop

Fieldpea : HFP 715

Early Maturing | Dwarf Leafletless | Diseases & lodging resistant

- Dwarf, leafletless
- Medium bold cream coloured seeds
- Tolerant to rust and resistant to powdery mildew Resistant to lodging
- Released for cultivation at National level (Himachal Pradesh, J&K, Hills of UK and NE Hill states)
- **Average Yield :** 15-16 q/ha
- **Potential Yield :** 30-32 q/ha

2014

S.O.1919 (E)
Dated 31.07.2014

Pulse Crop

Fieldpea : HFP 529

Early Maturing | Dwarf | Resistant to diseases

- Dwarf, early maturing, medium bold cream coloured seeds
- Resistant to rust & Ascochyta blight, tolerant to powdery mildew. Moderately resistant to pod borer
- Released for cultivation at National level (Western UP, Northern Rajashan, Punjab, Delhi, Haryana and Plain of UK)
- **Average Yield :** 28-30 q/ha
- **Potential Yield :** 35 q/ha

2012
S.O.1708 (E)
Dated 26.07.2012

Pulse Crop

Fieldpea : HFP 9426

Tall Stature | Sweet Dual purpose | Disease resistant

- Tall stature
- Shining green, bold and round seeded
- Resistant to powdery mildew and tolerant to rust
- Release for cultivation in Haryana state for irrigated conditions
- **Average Yield :** 25 q/ha
- **Potential Yield :** 30 q/ha

2008
S.O.2458 (E)
Dated 16/10/2008

Pulse Crop

Fieldpea : Hariyal (HFP 9907B)

Tall variety | Dual purpose | Long pods

- Dual purpose tall variety
- Long pods with green seeds
- Resistant to powdery mildew and tolerant to rust and nematode
- Release for cultivation in National regions (Western UP, Northern Rajashan, Punjab, Delhi, Haryana and Plain of UK) for normal sown irrigated condition
- **Average Yield :** 25-30 q/ha
- **Potential Yield :** 35 q/ha

2007
S.O.122(E)
Dated 6/2/2007

Pulse Crop

Fieldpea : Jayanti (HFP 8712)

Dwarf leafletless | Dual purpose | Long pods lodging & disease resistant

- First dual purpose variety
- Dwarf, leafletless variety
- Long pods, bold seeded
- Resistant to powdery mildew
- Release for cultivation in Haryana state for irrigated conditions
- **Average Yield :** 27 q/ha
- **Potential Yield :** 32 q/ha

1998
S.O.401(E)
Dated15/5/1998

Pulse Crop

Fieldpea : Uttara (HFP 8909)

Dwarf leafletless

Lodging & diseases resistant

Cream round seeds

- Dwarf, leafletless and erect variety
- Round, medium sized and creamish seed
- Resistant to lodging
- Resistant to powdery mildew
- Released for cultivation at National level (NWPZ): (Western UP, Northern Rajashan, Punjab, Haryana and Plain of UK and Northern Hill Zone: (Himachal Pradesh, J&K, Hills of UK and NE Hill states)) for irrigated conditions
- **Average Yield :** 25-30 q/ha
- **Potential Yield :** 32 q/ha

1997

S.O.360(E)
Dated 1/5/1997

Pulse Crop

Fieldpea : Aparna (HFP 4)

First Dwarf leafletless variety of India

Dwarf & erect

Lodging & disease resistant

- First dwarf and leafletless variety in the country
- Resistant to lodging
- Medium sized cream seeds
- Tolerant to powdery mildew
- Released for cultivation at National level (Western UP, Northern Rajashan, Punjab, Delhi, Haryana and Plain of UK) for irrigated conditions
- **Average Yield :** 25 q/ha
- **Potential Yield :** 32 q/ha

1988

S.O.10 (E)
Dated 1/1/1988

Pulse Crop

Lentil : HM 1

Small seeded

Wide adaptation

Disease resistant

- Small seeded
- Light green leaves
- Widely adapted
- Moderately resistant to diseases and insect pest
- Release for cultivation in Haryana state for normal sown irrigated conditions
- **Average Yield :** 18 q/ha
- **Potential Yield :** 25 q/ha

2006

S.O. 599 (E)
Dated 25.4.2006

Pulse Crop

Lentil : Garima

Bold Seeded

Dark green leaves

Disease resistant

- Bold seeded
- Dark green leaves,
- Fairly resistant to all the insect-pests and diseases prevalent in the Haryana
- Release for cultivation in Haryana state for irrigated and timely sown condition
- **Average Yield :** 16 q/ha
- **Potential Yield :** 20 q/ha

1997

S.O. 360 (E)
Dated 01.05.1997

Pulse Crop

Lentil : Sapna

Bold Seeded

Wide stability

Disease resistant

1991

S.O.793(E)
Dated 22.11.91

- Bold seeded
- Resistant to diseases
- Stable in performance
- Released for cultivation at National level (Western UP, Northern Rajashan, Punjab, Haryana and Plain of UK) for irrigated condition
- **Average Yield :** 15 q/ha
- **Potential Yield :** 20-22 q/ha

Pulse Crop

Mung Bean : MH 1142

National

Wide adaptation

MYMV, PM & Root rot resistant

- Notified for *kharif* season in North West and North East Plain zones of India (Uttar Pradesh, Punjab, Haryana, Delhi, Rajasthan, Uttrakhand, Bihar, Jharkhand, West Bengal and Assam)
- High yielding disease resistant variety semi-erect plants which matures in 63-70 days.
- Pods are black and seeds are medium sized green and shiny.
- Moderately resistant to anthracnose and powdery mildew diseases
- **Average Yield :** 12 q/ha
  Potential Yield : 20 q/ha

2020

S.O. 3482 (E)
Dated 7.10.2020

Pulse Crop

Mung Bean : MH 318

Early maturing

Suitable for spring, summer & *kharif*

Erect

- Erect plant type
- Resistant to shattering and moderately resistant to MYMV
- Matures in < 60 days
- Medium bold, shining green seeds
- Release for cultivation in Haryana state for spring, summer and *kharif* cultivation
- **Average Yield :** 10-12 q/ha in summer and 14-16 q/ha in *kharif*
- **Potential Yield :** 15 q/ha in summer and 20-21 q/ha in *kharif*

2015
S.O. 2680(E)
Dated 1.10.2015

Pulse Crop

Mung Bean : MH 421

Early maturing

Suitable for spring, summer & *kharif*

MYMV resistant

- Medium-dwarf
- Short duration (60 days)
- Non-shattering
- Resistant to Mungbean Yellow Mosaic Virus
- Medium bold shining green seeds
- Released for cultivation at National level (Western UP, N. Rajasthan, Punjab, Haryana and Plains of Uttarakhand) for spring and summer
- Haryana for spring, summer and *kharif* cultivation
- **Average Yield :** 10-12 q/ha in summer and 14-16 q/ha in *kharif*
- **Potential Yield :** 15 q/ha in summer and 20-21 q/ha in *kharif*

2014
S.O. 1146 (E) Dated 25.04.2014 } For NWPZ

2012
S.O. 1708(E) Dated 26.07.2012 } For Haryana

Pulse Crop

Mung Bean : Basanti

Suitable for spring & *kharif*

High protein

MYMV resistant

- Tall growing
- Matures in 65 days
- Possess high protein content
- Resistant to MYMV
- Release for cultivation in Haryana state for *kharif* and spring seasons
- **Average Yield :** 15-17 q/ha
- **Potential Yield :** 18-20 q/ha

2010

S.O.211 (E)
Dated 29.01.2010

Pulse Crop

Mung Bean : Sattya

Tall

Green shiny Seeds

MYMV resistant

- Tall growing
- Bright green seeds
- Matures in 70 days
- Resistant to MYMV
- Released for cultivation at National level (Western UP, N. Rajasthan, Punjab, Haryana and Plains of Uttarakhand) for *kharif* season
- **Average Yield :** 16-17 q/ha
- **Potential Yield :** 20 q/ha

2008

S.O.72 (E)
Dated 10.1.2008

Pulse Crop

Mung Bean : Muskan (MH 96-1)

Medium matuting

Suitable for spring & *kharif*

MYMV resistant

- Medium sized bright green seeds
- Resistant to Yellow Mosaic Virus
- Medium maturity
- Release for cultivation in Haryana state for *kharif* and spring seasons
- **Average Yield :** 14.5 q/ha

2004

S.O. 161 (E)
Dated 4.2.2004

Pulse Crop

Mung Bean : Asha

Tall

Semi Spreading

MYMV resistant

- High yielding
- Widely adaptable
- Resistant to Yellow Mosaic Virus
- Release for cultivation in Haryana state for *Kharif* season disease
- **Average Yield :** 14 q/ha

1993

S.O. 615 (E)
Dated 17.08.1993

Pulse Crop

Pigeonpea : Paras

In-determinate semi-spreading

Wide adaptability

High yield

1998

S.O. 401 (E)
Dated 15.05.1998

- In-determinate in growth and semi-spreading type with wide adaptation
- Matures in 133-140 days, early vigour
- Release for cultivation in Haryana state for Pigeonpea - Wheat rotation
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 23 q/ha

Pulse Crop

Pigeonpea : Manak

In-determinate semi-spreading

Early maturing

High yield

- Early maturing variety
- Medium in height (130-135 days)
- In-determinate, semi-spreading & good yielder
- Release for cultivation in Haryana state for Pigeonpea - Wheat rotation
- **Average Yield :** 18-19 q/ha
- **Potential Yield :** 22 q/ha

1985

S.O. 832 (E)
Dated 19.11.85

Pulse Crop

Urd Bean : UH 1

Semi-spreading

Medium maturity

MYMV resistant

2012

S.O. 1728 (E)
Dated 26.07.2012

- Higher yield, medium plant height
- Matures in 73-75 days
- Semi spreading plant type, attractive seeds
- Highly resistant to Yellow Mosaic Virus (YMV)
- Release for cultivation in Haryana state for *kharif* season

Visit of Vice Chancellor to Pulses area

American Cotton Variety : HS 292

South Zone

Yield 23.2 q/ha

GOT 35.5%

- Plant height 130-150 cm with big boll
- Maturity 160-170 days
- South zone in the states of Andhra Pradesh, Telangana, Tamil Nadu and Karnataka
- Ginning out turn 35.5%
- Fibre length 27.0 mm
- Moderately resistant to insect pest.
- **Average Yield :** 23.2 q/ha
- **Potential Yield :** 31.00 q/ha

2018

S.O. 6318 (E)
Dated 26.12.2018

American Cotton Variety : H 1353

Central Zone

Yield 13.7 q/ha

GOT 35.3%

- Plant height 130-150 cm
- Maturity 165-170 days
- Central zone (Maharashtra, M.P. and Gujarat) rainfed conditions
- Ginning out turn 35.2%
- Fibre length 24.3mm
- Tolerant to insect-pests and CLCuV
- **Average Yield :** 13.7 q/ha
- **Potential Yield :** 28.3 q/ha

2015

S.O. 2680 (E)
Dated 01.10.2015

American Cotton Variety : H 1300

North Zone

Yield 22.9 q/ha

GOT 36.3%

2012

S.O. 1708 (E)
Dated 26.07.2012

- Plant height 120-150cm
- Maturity 165-170 days
- North Zone (Haryana, Punjab, Rajasthan and U.P.) irrigated conditions
- Ginning out turn 36.3%
- Fibre length 26.1 mm
- Tolerant to CLCuV
- **Average Yield :** 22.9 q/ha
- **Potential Yield :** 34.8 q/ha

American Cotton Variety : H 1098-i

Haryana

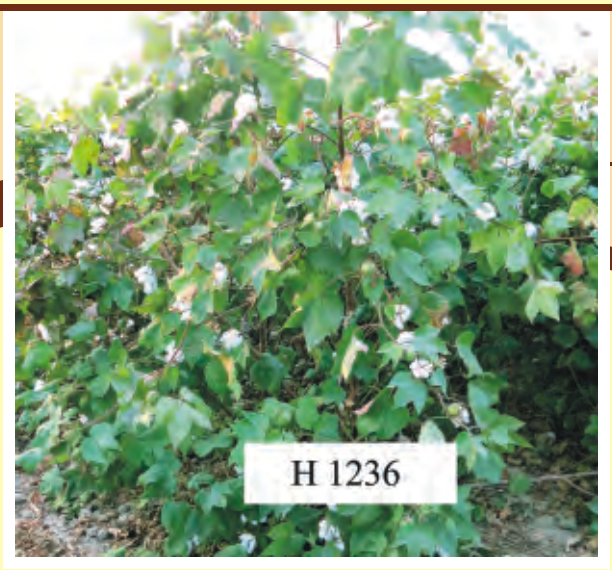
Yield 20.6 q/ha

GOT 39.9%

- Plant height 130-140 cm
- Maturity 165-170 days
- Irrigated conditions of Haryana
- Ginning out turn 39.9%
- Fibre length 24.8 mm
- Resistant to CLCuV
- **Average Yield :** 20.6 q/ha
- **Potential Yield :** 37.5 q/ha

2010

S.O. 2136 (E)
Dated 31.08.2010



American Cotton Variety : H 1236

Haryana

Yield 19.8 q/ha

GOT 37.2%

2010

S.O. 2136 (E)
Dated 31.08.2010

- Plant height 130-150cm
- Maturity 165-170 days
- Recommended for Haryana State
- Ginning out turn 37.2%
- Fibre length 27.2 cm
- Tolerant to CLCuV
- **Average Yield :** 19.8 q/ha
- **Potential Yield :** 28.5 q/ha

American Cotton Variety : H 1226

Haryana

Yield 23.8 q/ha

GOT 33.7%

- Plant height 155-160cm
- Maturity 170-175 days
- Recommended for Haryana state
- Ginning out turn 33.7%
- Fibre length 24.5 mm
- Moderately resistant to insect pest
- **Average Yield :** 23.8 q/ha
- **Potential Yield :** 42.9 q/ha

2006

S.O. 1178 (E)
Dated 20.07.2006

American Cotton Variety : H 1117

Haryana

Yield 19.2 q/ha

GOT 35.5%

2002

S.O. 937 (E)
Dated 04.09.2002

- Plant height 150-160 cm
- Maturity 175-185 days
- Early sowing, irrigated conditions of Haryana
- Ginning out turn 35.5%
- Fibre length 24.1 mm
- Moderately resistant to CLCuv
- **Average Yield :** 19.2 q/ha
- **Potential Yield :** 37.0 q/ha

American Cotton Variety : H 1098

Haryana

Yield 19.5 q/ha

GOT 35.2%

1997

S.O. 360 (E)
Dated 01.05.1997

- Plant height 125-130 cm
- Maturity 160-165 days
- late sown, irrigated conditions of Haryana
- Ginning out turn 35.2%
- Fibre length 22.7mm
- Less infestation of bollworms and leaf hopper
- **Average Yield :** 19.5 q/ha
- **Potential Yield :** 37.0 q/ha

American Cotton Variety : HS 6

Haryana

Yield 23.5 q/ha

GOT 36.5%

1993

S.O. 615 (E)
Dated 17.08.1993

- Plant height 150-160 cm
- Maturity 180-185 days
- Early sown, irrigated conditions of Haryana
- Ginning out turn 36.5%
- Fibre length 23.6 mm
- Resistant to Jassid and suceptible to CLCuV
- **Average Yield :** 23.5 q/ha
- **Potential Yield :** 41.0 q/ha

American Cotton Variety : H 974

Haryana

Yield 22.4 q/ha

GOT 36.0%

- Plant height 130-140 cm
- Maturity 155-165 days
- Late sown conditions of Haryana
- Ginning out turn 36.0%
- Fibre length 24.2 mm
- Moderately resistant to insect pests
- **Average Yield :** 22.4 q/ha
- **Potential Yield :** 36.6 q/ha

1993

S.O. 615 (E)
Dated 17.08.1993

American Cotton Variety : HS 45

Haryana

Yield 20.0 q/ha

GOT 34.0%

1988

S.O. 1135 (E)
Dated 01.12.1988

- Plant height 120-160 cm
- Maturity 180-190 days
- Recommended for Haryana state.
- Ginning out turn 34.0%
- Fibre length 24.0 mm
- Resistant to jassids
- **Average Yield :** 20.0 q/ha
- **Potential Yield :** 28.1 q/ha

American Cotton Variety : H 655C

Haryana

Yield 16.0 q/ha

GOT 33.2%

1978

S.O. 13 (E)
Dated 19.12.1978`

- Plant height 150-155 cm
- Maturity 210-215 days
- Recommended for Haryana state
- Ginning out turn 33.2%
- Fibre length 27.4 mm
- Resistant to jassids
- **Average Yield :** 16.0 q/ha
- **Potential Yield :** 23.5 q/ha

American Cotton Variety : H 777

Haryana

Yield 23.0 q/ha

GOT 34.6%

1978

S.O. 13 (E)
Dated 19.12.1978

- Plant height 120-150 cm
- Maturity 180-190 days
- Recommended for Haryana state
- Ginning out turn 34.6%
- Fibre length 23.4mm
- Resistant to jassids
- **Average Yield :** 23.0 q/ha
- **Potential Yield :** 32.0 q/ha

American Cotton Hybrids : HHH 287

Haryana

Yield 20.5 q/ha

GOT 34.8%

- Plant height 150-160 cm
- Maturity 160-170 days
- Recommended for Haryana state
- Ginning out turn 34.8%
- Fibre length 27.1 mm
- Resistant to CLCuV
- **Average Yield :** 20.5 q/ha
- **Potential Yield :** 32.8 q/ha

2005

S.O. 1566 (E)
Dated 05.11.2005

American Cotton Hybrids : HHH 223

Haryana

Yield 21.5 q/ha

GOT 35.2%

2002

S.O. 937 (E)
Dated 04.09.2002

- Plant height 150-160 cm
- Maturity 175-180 days
- Recommended fro Haryana
- Ginning out turn 35.2%
- Fibre length 22.5 mm
- Resistant to Jassid and CLCuV
- **Average Yield :** 21.5 q/ha
- **Potential Yield :** 40.0 q/ha

American Cotton Hybrids : HHH 81

Haryana

Yield 24.7 q/ha

GOT 35.0%

1996

S.O. 1 (E)
Dated 1.1.1996

- Plant height 180-200 cm
- Maturity 175-185 days
- Recommended for Haryana state
- Ginning out turn 35.0%
- Fibre length 26.8 mm
- Moderately resistant to diseases
- **Average Yield :** 24.7 q/ha
- **Potential Yield :** 40.9 q/ha

Desi Cotton Variety : HD 432

Haryana

Yield 21.5 q/ha

GOT 39.3%

- Plant height 170-180 cm
- Maturity 160-170 days
- Recommended for Haryana State
- Ginning out turn 39.3%
- Fibre length 21.2 mm
- Lodging resistant, shedding of Kapas is very less
- Tolerant to bollworm and Fusarium wilt
- **Average Yield :** 21.5 q/ha
- **Potential Yield :** 38.6 q/ha

2010

S.O. 2137 (E)
Dated 31.08.2010

Desi Cotton Variety : HD 324

Haryana

Yield 20.0 q/ha

GOT 41.6%

- Plant height 160-170 cm
- Maturity 170-175 days
- Recommended for Haryana
- Ginning out turn 41.6%
- Fibre length 17.8 mm
- Moderately tolerant to insect pest and disease
- **Average Yield :** 20.0 q/ha
- **Potential Yield :** 32.9 q/ha

2005

S.O. 1566 (E)
Dated 05.11.2005

Desi Cotton Variety : HD 123

Haryana

Yield 22.9 q/ha

GOT 39.2%

2000

S.O. 340 (E)
Dated 05.04.2000

- Plant height 150-160 cm
- Maturity 165-175 days
- Recommended for Haryana
- Ginning out turn 39.2%
- Fibre length 14.7 mm
- Resistant to CLCuV moderately resistant to pink bollworm and heliothis
- **Average Yield :** 22.9 q/ha
- **Potential Yield :** 32.4 q/ha

Desi Cotton Variety : HD 107

Haryana

Yield 26.0 q/ha

GOT 38.0%

1996

S.O. 1 (E)
Dated 01.01.1996

- Plant height 150-160 cm
- Maturity 180 days
- Recommended for Haryana
- Ginning out turn 38.0%
- Fibre length 18.6 mm
- Resistant to jassids
- **Average Yield :** 26.0 q/ha
- **Potential Yield :** 35.0 q/ha

Desi Cotton Variety : DS 5

Haryana

Yield 22.8 q/ha

GOT 40.0%

1988

S.O. 471 (E)
Dated 05.05.1988

- Plant height 150-170 cm
- Maturity 165-175 days
- Recommended for Haryana state
- Ginning out turn 40.0%
- Fibre length 17.5 mm
- Highly resistant to jassids and modrately pink bollworm
- **Average Yield :** 22.8 q/ha
- **Potential Yield :** 32.1 q/ha

Desi Cotton Variety : DS 1

Haryana

Yield 20.0 q/ha

GOT 39.0%

1985

S.O. 832 (E)
Dated 18.11.1985

- Plant height 150-190 cm
- Maturity 170-185 days
- Recommended for Haryana state
- Ginning out turn 39.0%
- Fibre length 17.9 mm
- Highly resistant to jassids and moderately resistant to pink bollworm
- **Average Yield :** 20.0 q/ha
- **Potential Yield :** 31.6 q/ha

Desi Cotton Hybrid : AAH-1

Haryana

Yield 23.9 q/ha

GOT 38.0%

1999

S.O. 425 (E)
Dated 08.06.1999

- Plant height 150-160 cm
- maturity 180-185 days
- Recommended for Haryana
- Ginning out turn 38.0%
- Fibre length 18.4 mm
- Resistant to Jassids and CLCuV
- **Average Yield :** 23.9 q/ha
- **Potential Yield :** 48.0 q/ha

Visit of Vice Chancellor to Cotton area

Sugarcane : CoH 128

National

Yield 762 q/ha

CCS 12.19%

- National (North West Peninsular Zone)
- Mid late maturing, prone to lodging under high fertility, good ratooner, tolerant to water stress, suitable for late planting
- Commercial cane sugar (CCS)- 12.19 %, Sucrose- 17.77 %
- Moderately resistant to red rot disease
- **Average Yield :** 762 q/ha
- **Potential Yield :** 980 q/ha

2012

S.O. 45(E)
Dated 16.03.2012

Sugarcane : CoH 110

Haryana

Yield 800 q/ha

CCS 14.21%

- Haryana State
- Round bud, Bud groove present, waxy green sheath colour
- Late maturity, excellent ratooner, suitable for spring and late planting, low input-require half of the recommended dose of nitrogen
- Commercial cane sugar (CCS)- 14.21 %, Sucrose-17.60 %
- Resistant to red rot, smut and grassy shoot disease
- **Average Yield :** 800 q/ha
- **Potential Yield :** 1000 q/ha

2005

S.O. 1566(E)
Dated 05.11.2005

Sugarcane : CoH 119

National (NWPZ) | Yield 800 q/ha | CCS 13.40%

2005
S.O. 1566(E)
Dated 05.11.2005

- National (North West Peninsular Zone)
- Small bud, bud groove absent, easy trashing, thick rind and solid juicy cane
- Medium maturity, non-Lodging, good ratooner, tolerant to water stress, good combination of cane yield and juice quality
- Commercial cane sugar (CCS)-13.40 %, Sucrose-17.51%
- Resistant to red rot Disease, tolerant to top borer and shoot borer
- **Average Yield :** 800 q/ha
- **Potential Yield :** 950 q/ha

Sugarcane : CoH 92

National (NWPZ) / Haryana | Yield 625 q/ha | CCS 14.70%

- Haryana State-1999
- National (North West Peninsular Zone)-2001
- Medium thick and soft cane, medium bud size, fast growing
- Early maturity, low tillering, average ratooner, tolerant to drought and frost
- Commercial cane sugar (CCS)-14.70 %, Sucrose-18.57 %
- Moderately resistant to red rot disease, susceptible to root borer and wilt complexes
- **Average Yield :** 625 q/ha
- **Potential Yield :** 900 q/ha

2001
S.O. 92 (E)
Dated 02.02.2001

Sugarcane : CoH 56

Haryana | Yield 700 q/ha | CCS 13.20%

1995

- Haryana State
- Semi erect leaves, small bud, bud groove absent
- Early maturity, non-Lodging, good ratooner, tolerant to water stress
- Commercial cane sugar (CCS) -13.20 %, Sucrose-17.21 %
- Susceptible to red rot and grassy shoot disease
- **Average Yield :** 700 q/ha
- **Potential Yield :** 800 q/ha

Sugarcane : CoH 99

Haryana | Yield 750 q/ha | CCS 14.0%

1995

- Haryana State
- Medium bud, bud groove absent, waxy green sheath colour, dark green foliage
- Medium maturity, synchronous tillering, prone to lodging due to heavy top, good ratooner, tolerant to water stress and water logging, suitable for normal and late planting
- Commercial cane sugar (CCS)-14.0 %, Sucrose-17.60 %
- Resistant to red rot and grassy shoot disease
- **Average Yield :** 750 q/ha
- **Potential Yield :** 870 q/ha

Sugarcane : CoH 35

Haryana

Yield 695 q/ha

CCS 13.40%

1992

- Haryana State
- Medium bud size, lenciolate auricle, very fast growing, soft cane
- Tall, late maturity, shy tillering, lodging susceptible, low input variety, tolerant to drought
- Commercial cane sugar (CCS)-13.40 %
- Resistant to smut disease, moderately resistant to red rot
- **Average Yield :** 695 q/ha
- **Potential Yield :** 889 q/ha

Agriculture Minister and Vice Chancellor Visit at RRS Karnal

Felicitation of Breeders and Developers of Forage Sorghum variety

Felicitation of Breeders and Developers of Oats varieties

Forage Crop

Berseem : HB 2

Haryana | Green Fodder 785 q/ha | Resistant to stem rot disease

- Longer duration
- Better regeneration and gives 1-2 additional cuts
- Resistant to stem rot disease
- State for timely sown irrigated condition
- **Average Yield :** 785 q/ha (green fodder)
  101.4 q/ha (dry fodder)

2014
S.O. 1146 (E)
Dated 24.04.2014

Forage Crop

Berseem : HB 1

Haryana | Green Fodder 700 q/ha | Resistant to stem root

- Better in nutritional quality
- Multiple resistant against stem rot and root rot diseases
- State for timely sown irrigated condition
- **Average Yield :** 700 q/ha (green fodder)
  84.6 q/ha (dry fodder)

2006
S.O. 599 (E)
Dated 25.04.2006

Forage Crop

Berseem : MESCAVI

National

Green Fodder 650 q/ha

Introduction from Egypt

1975

S.O. 440 (E)
Dated 21.08.1975

- Released for assured irrigation and high soil fertility areas especially Punjab, Haryana, Himachal Pradesh and Uttar Pradesh
- An introduction from Egypt
- Leaf small, oblong, rounded at tip, bright green, slightly hairy
- Seed oval, yellow in colour and small
- **Average Yield :** 650 q/ha (green fodder)
  82.0 q/ha (dry fodder)
  3.20 q/ha (seed)

Forage Crop

Oats : HFO 607

North-West Zone

Green fodder 615.7 q/ha

Seed yield 27.6 q/ha

- Notified for North West Zone of India (Haryana, Punjab, Rajasthan,Terai region of Uttarakhand and Western UP)
- Suitable for timely sown, normal fertility and irrigated conditions for single cut system
- Crude protein – 9.3%
- Moderately resistant to *Helminthosporium* leaf blight disease.
- **Average Yield :** 615.7 q/ha (green fodder)
  131.2q/ha (dry fodder)
  27.6 q/ha (seed yield)

2021

S.O. 500 (E)
Dated 29.01.2021

Forage Crop

Oats : HFO 427

South Zone

Green fodder 320.2 q/ha

Crude Protein 8.4%

- Notified for South zone of India (Telangana, Andhra Pradesh, Tamil Nadu, Karnataka and Kerala).
- Suitable for timely sown, normal fertility and irrigated conditions for single cut system
- Crude protein- 8.4%
- **Average Yield:** 320.2 q/ha (green fodder)
  282.2 q/ha (dry fodder)
  10.4 q/ha (seed yield)

2021

S.O. 500 (E)
Dated 29.01.2021

Forage Crop

Oats : OS 424

Hill Zone

Green fodder 296.5 q/ha

Crude Protein 9 %

- Notified for Hill Zone of India (Himachal Pradesh, J&K and Uttrakhand)
- Suitable for timely sown, single cut system under normal fertility and irrigated conditions
- Crude protein – 9.0%
- **Average Yield :** 296.5 q/ha (green fodder)
  65.1 q/ha (dry fodder)
  13.5 q/ha (seed yield)

2020

S.O. 3482 (E)
Dated 07.10.2020

Forage Crop

Oats : OS 405

Central Zone | Green fodder 513 q/ha | Moderately resistant leaf blight

- Notified for Central Zone of India (Maharashtra, Gujarat, Chhatisgarh, Madhya Pradesh and Central Uttar Pradesh)
- Suitable for timely sown, single cut system under normal fertility and irrigated conditions
- Crude protein – 8.3%
- Resistant to Moderately resistant to *Helminthosporium* leaf blight
- **Average Yield :** 513.0 q/ha (green fodder)
  114.7 q/ha (dry fodder)
  16.7 q/ha (seed yield)

2020
S.O. 3482 (E)
Dated 07.10.2020

Forage Crop

Oats : OS 403

National | Green fodder 533.8 q/ha | Moderately resistant leaf blight

- Release for timely sown, irrigated and single cut system
- Better nutritional qualities
- Moderately resistant to Leaf Blight disease
- Bold seeded
- National suitable for timely sown irrigated conditions
- **Average Yield :** 533.8 q/ha (dry fodder)

2018
S.O. 1379 (E)
Dated 27.03.2018

Forage Crop

Oats : OS 377

Central Zone of India

Green fodder 537 q/ha

Moderately resistant to BLB

- Bold seeded, single cut
- Better nutritional qualities
- Moderately resistant to leaf blight disease
- National (CZ) for timely sown, irrigated conditions
- **Average Yield :** 537 q/ha (green fodder)
  121 q/ha (dry fodder)

2015

S.O. 268 (E)
Dated 28.01.2015

Forage Crop

Oats : OS 346

Central Zone of India

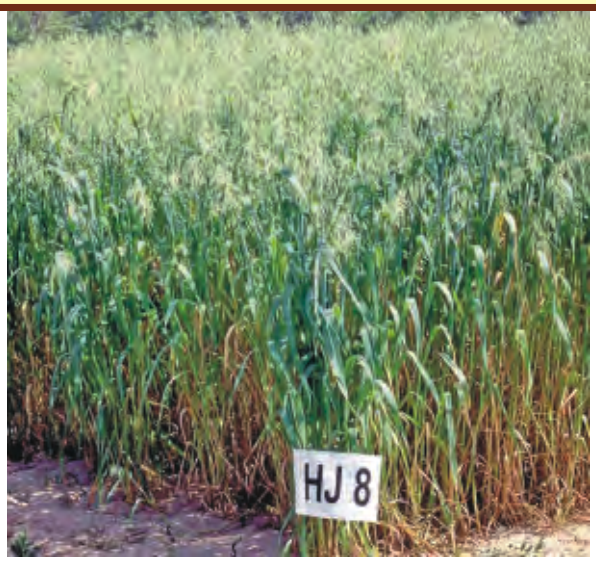
Green fodder 535 q/ha

Resistant to leaf blight

- Bold seeded, single cut
- High productivity/per day
- Better nutritional quality
- Highly resistant to leaf blight
- National (CZ) for timely sown irrigated conditions
- **Average Yield :** 535 q/ha (green fodder)

2010

S.O. 733 (E)
Dated 01.04.2010



Forage Crop

Oats : HJ 8

Haryana | Green fodder 590 q/ha | Tolerant to disease

1998
S.O. 401 (E)
Dated 15.05.1998

- Fast growth, two cuts
- Broad and light green leaves
- Medium bold seeds
- Tolerant to diseases
- State for timely sown irrigation condition
- **Average Yield :** 590 q/ha (green fodder)
  124.3 q/ha (dry fodder)

Forage Crop

Oats : OS 7

Haryana | Green fodder 530 q/ha | Tolerant to disease

- Early vigour, single cut
- Tall, broad leaves with light green colour
- Medium bold seeds
- Tolerant to diseases
- State for timely sown
- **Average Yield :** 530 q/ha (green fodder)
  116 q/ha (dry fodder)

1984
S.O. 596 (E)
Dated 13.05.1984

Forage Crop

Oats : HFO 114

Haryana | Green fodder 547.3 q/ha | Resistant to lodging

1984
S.O. 596 (E)
Dated 13.08.1984

- Suitable for early sowing with two cuts
- Tall growing with good tillering
- Synchronous flowering
- Bold seeded
- Resistant to lodging, tolerant to diseases
- State for timely sown
- **Average Yield :** 547.3 q/ha (green fodder)
  102.4 q/ha (dry fodder)

Forage Crop

Oats : OS 6

National | Green fodder 500 q/ha | Tolerant to disease

1982
S.O. 19 (E)
Dated 14.01.1982

- Early vigour
- Suitable for early sowing
- Tall, broad leaves with light green colour
- Medium bold seeds
- Erect flag leaf at panicle emergence
- Tolerant to diseases
- National for timely sown
- **Average Yield :** 500 q/ha (green fodder)
  105 q/ha (dry fodder)

Forage Crop

Sorhum : CSV 44F

Zone-II of India

Green fodder Yield 407 q/ha

Tolerant to Foliar Diseases

- Released for Zone II of India (*i.e.*, Maharashtra, Tamil Nadu and Karnataka)
- High green and dry fodder yield
- High total soluble solids (TSS%) *i.e.* 10.96%
- Tall and sweet
- Resistant to lodging
- Low HCN and good quality
- Tolerant to stem borer
- Tolerant to midge and major foliar diseases
- **Average Yield :** 407.0 q/ha (green fodder)

2020

S.O. 3482 (E)
Dated 06.10.2020

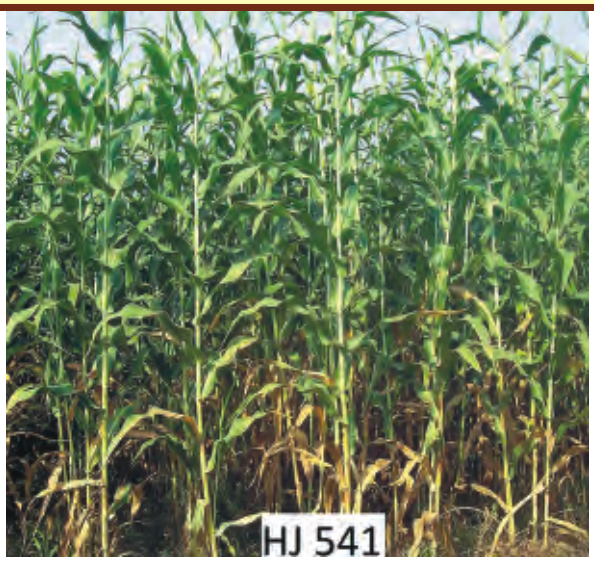
Forage Crop

Sorghum : HJ 541

Haryana

Green fodder 525-550 q/ha

Resistant to stem borer



- Single cut variety for Haryana state
- Resistant to stem borer
- Better in nutritional quality
- Sweet & Juicy
- Stay green upto maturity
- **Average Yield :** 525-550 q/ha (green fodder)
  160-180 q/ha (dry fodder)

2014

S.O. 1146 (E)
Dated 24.04.2014

Forage Crop

Sorghum : HJ 513

Haryana | Green fodder 550 q/ha | Resistant to foliar diseases

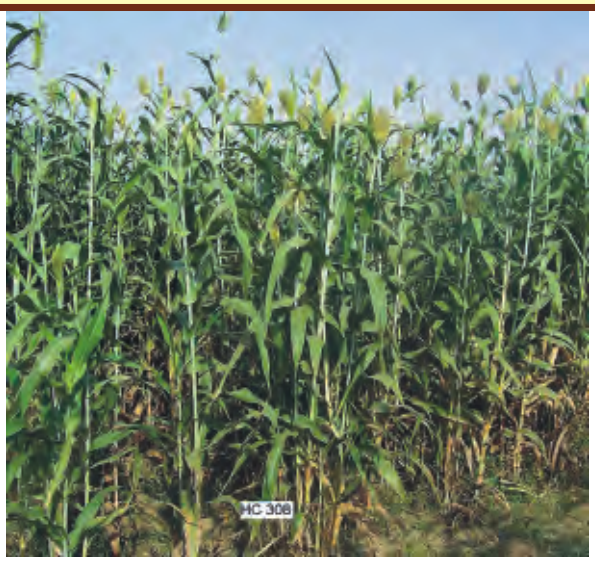
- Very tall, semi-compact long and bold panicles
- Resistant to foliar diseases
- Single cut variety for Haryana state
- Non-sweet & Juicy
- Suitable for early and late sown conditions in kharif season
- Stay green upto maturity
- **Average Yield :** 550 q/ha (green fodder)
  180 q/ha (dry fodder)

2007
S.O. 1178 (E)
Dated 20.07.2007

Forage Crop

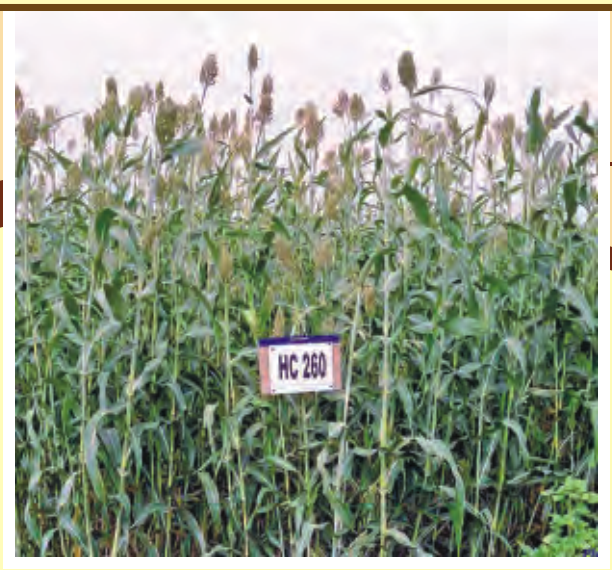
Sorghum : HC 308

National | Green fodder 530 q/ha | Resistant to foliar diseases



- Tall, sweet & juicy, long and broad leaves
- Resistant to foliar diseases
- High seed yield
- Matures in 115 days
- Good protein yield and low HCN
- National for kharif season
- Stay green upto maturity
- **Average Yield :** 530 q/ha (green fodder)
  175 q/ha (dry fodder)

1996
S.O. 1 (E)
Dated 01.01.1996



Forage Crop

Sorghum : HC 260

National | Green fodder 480 q/ha | Resistant to foliar diseases

1987
S.O. 834 (E)
Dated 18.09.1987

- Non-sweet & Juicy
- Matures in 100-120 days
- Tall, juicy and suitable for karvi making
- Resistant to foliar diseases
- National for kharif season
- Stay green upto maturity
- **Average Yield :** 480 q/ha (green fodder)
  155 q/ha (dry fodder)

Forage Crop

Sorghum : HC 171

National | Green fodder 450 q/ha | Resistant to foliar diseases

1987
S.O. 834 (E)
Dated 18.09.1987

- Matures in 110 days, creamy seeds
- Sweet & juicy, tall with broad leaves
- Resistant to foliar diseases
- Mite immune
- National for summer and kharif season
- Stay green upto maturity
- **Average Yield :** 450 q/ha (green fodder)
  170 q/ha (dry fodder)

Forage Crop

Sorghum : HC 136 (2 cuts)

National | Green fodder 550 q/ha | Resistant to foliar diseases

1982
S.O. 19 (E)
Dated 14.01.1982

- Maturity 140 days, two cuts
- Tall, long and broad leaves
- Creamy bold seeds
- Sweet & juicy, good palatability
- Tolerant to foliar diseases
- National for irrigated conditions
- Stay green upto maturity
- **Average Yield :** 550 q/ha (green fodder in two cuts)
  175 (dry fodder)

Forage Crop

Sorghum : SSG 59-3 (Multi-cut)

National | Green fodder 750 q/ha | Multiert variety

- Tall, sweet, profused tillering, quick growth
- Suitable for summer and *kharif* seasons
- Capable of giving 3-4 cuttings
- National for irrigated conditions
- Stay green upto maturity
- **Average Yield :** 750 q/ha (green fodder)
  200 q/ha (dry fodder)

1978
S.O. 1004 (E)
Dated 23.03.1978

Forage Crop

Sorghum : JS 73/53

National

Green fodder 300 q/ha

Sweet

1975

- Matures in 100 days
- Medium tall
- Medium bold creamy grains
- Suitable for single cut
- National
- **Average Yield :** 300 q/ha (green fodder)

Forage Crop

Cowpea : HC 46

Haryana

Grain Yield 10-12 q/ha

Tolerant against drought

- Early maturing (70 days)
- Medium bold seeds with very attractive colour, high protein and low tannin
- Tolerant against drought, moderately resistant against yellow mosaic virus
- State for summer and rainy season
- **Average Grain Yield :** 10-12 q/ha

2009

S.O. 733 (E)
Dated 01.04.2010

Forage Crop

Cowpea : CS 88

Haryana

Green fodder 350-375 q/ha

Tolerant against drought

1995

S.O. 360 (E)
Dated 01.05.1997

- Erect growth and early vigour
- Long and broad leaves
- Good for mixed cropping
- Resistant to yellow mosaic virus, tolerant to aphids and jassids, resistant to drought
- State for summer and rainy season
- **Average Yield :** 375 q/ha (green fodder)
  175 q/ha (dry fodder)

Forage Crop

Clusterbean : HG 884

Haryana

Grain Yield 20-22 q/ha

Tolerant to bacterial leaf blight

- Medium in maturity (100-110 days)
- Moderately resistant against Alternaria blights
- Tolerant against bacterial leaf blight & root rot
- National for timely sown
- **Average Grain Yield :** 20-22 q/ha

2010

S.O. 733 (E)
Dated 01.04.2010

Forage Crop

Clusterbean : HG 2-20

Haryana | Grain Yield 21-23 q/ha | Tolerant to BLB

2010

S.O. 733 (E)
Dated 01.04.2010

- Early maturing (90-100 days)
- Bold seeded
- Resistant to lodging, moderately resistant to major diseases
- Tolerant against Bacterial leaf Blight (BLB), Alternaria Blight (AB) and Root rot
- National & suitable for early and late sowing
- **Average Grain Yield :** 21-23 q/ha

Forage Crop

Clusterbean : HG 870

Haryana | Grain Yield 20-22 q/ha | Tolerant against BLB

- Early maturing (85-95 days)
- Profuse branching
- High viscosity of gum
- Tolerant to bacterial blight and root rot
- Moderately resistant against AB
- State for timely seen alternaria blight
- **Average Grain Yield :** 20-22 q/ha

2010

S.O. 733 (E)
Dated 01.04.2010

Forage Crop

Clusterbean : HG 563

Haryana

Grain Yield 18-20 q/ha

Tolerant against BLB

2004

S.O. 642 (E)
Dated 31.05.2004

- Maturity 85-100 days
- High viscosity of gum
- Tolerant against BLB
- State & Suitable for early and late sowing
- **Average Grain Yield :** 18-20 q/ha

Forage Crop

Clusterbean : HG 365

Haryana

Grain Yield 17-19 q/ha

Tolerant to BLB

- Early maturing (85-100 days)
- Having serrated leaves
- Suitable for intensive cropping
- Tolerant against BLB
- Suitable for early and late sowing
- State suitable for early & late sown
- **Average Grain Yield :** 17-19 q/ha

1998

S.O. 401 (E)
Dated 15.05.1998

Forage Crop

Clusterbean : HG 258

Haryana

Grain Yield 6-6 q/ha

Moderately resistant to BLB

1986

S.O. 10 (E)
Dated 01.01.1988

- Maturity (110-125 days)
- Moderately resistant against alternaria leaf spot and bacterial leaf blight
- National for timely sown
- **Average Grain Yield :** 5-6 q/ha

Forage Crop

Clusterbean : HG 182

National

Grain Yield 13-18 q/ha

Moderately resistant to alternaria leaf spot

- Maturity (110-125 days)
- Moderately resistant against alternaria leaf spot and bacterial leaf blight
- National suitable for timely sown
- **Average Grain Yield :** 15-18 q/ha

1981

S.O. 596 (E)
Dated 13.08.1984

Forage Crop

Clusterbean (Guar) : HFG 156

Haryana | Green fodder 350 q/ha | Tolerant

- Tall growing
- Branched type
- Tolerant to diseases
- National for timely sowing
- **Average Yield :** 350 q/ha (green fodder)

1987
S.O. 10 (E)
Dated 01.01.1988

Forage Crop

Clusterbean (Guar) : HG 75

National | Grain Yield 18-20 q/ha | Tolerant to BLB

- Branched
- High yielding
- Bushy type
- National for timely sowing
- **Average Grain Yield :** 18-20 q/ha

1981
S.O. 19 (E)
Dated 14.01.1982

Forage Crop

Clusterbean (Guar) : HFG 119

National

Green fodder 223 q/ha

Tolerant against drought

1981

S.O. 19 (E)
Dated 14.01.1982

- Maturity 130-135 days
- Broad, dark green leaves
- Moderately resistant to diseases
- National for timely sowing
- **Average Yield :** 223 q/ha (green fodder)

Forage Crop

Clusterbean (Guar) : FS 277

Haryana

Green fodder 280 q/ha

Used for fodder

- Maturity 125-130 days
- Erect
- Unbranched
- National for timely sowing
- **Average Yield :** 280 q/ha (green fodder)

1974

S.O. 786 (E)
02.02.1976

Forage Crop

Senji : HFWS 55

Haryana

Green fodder 300 q/ha

Resistant to frost lodging & shattering

1997

S.O. 401 (E)
Dated 15.05.1998

- Leafy
- Palatable
- White flowered
- Disease free variety
- State for mid to late sowing
- **Average Yield :** 300 q/ha (green fodder)

Forage Crop

Senji : FOS 1

Haryana

Green fodder 190 q/ha

Disease resistance

- Yellow flowered
- Disease free variety
- State for timely sown
- **Average Yield :** 190 q/ha (green fodder)

1976

S.O. 786 (E)
Dated 02.02.1976

Forage Crop

Methi : T 8

Haryana

Grain Yield 12-15 q/ha

Slightly tolerant to powdery mildew

1997

- Matures in 135 days
- Bold seeded yellow grains
- Leaves with green margins
- Slightly tolerant to powdery mildew
- State for timely sown, restricted irrigation conditions
- **Average Grain Yield :** 12-15 q/ha

Forage Crop

Lucerne : T 9

National

Green fodder 800 q/ha

Resistant to drought

- Vigorous
- Quick growing
- Deep green foliage
- Resistant to drought
- State for perennial cultivation
- **Average Yield :** 800 q/ha (green fodder yield)

1978

S.O. 13 (E)
Dated 19.12.1978

Medicinal and Aromatic Crop

Fababean : HFB-1

National

Yield 20-25 q/ha

Reristant to diseases and insect pests

2017

S.O. 1007 (E)
Dated 30.03.2017

- Tolerant to water stress has been observed, tolerant to salinity
- Maturity: 145-150 days
- Resistant to diseases and insect- pests.
- Irrigated for both high and low fertility conditions of country.
- **Average Yield :** 20-25 q/ha

Medicinal and Aromatic Crop

Fababean : Vikrant

National

Yield 25-35 q/ha

Protein content 20-25%

- Medium height (100 cm)
- Small seeded
- Matures in 140-145 days
- Protein content 20-25%
- National for restricted irrigated conditions under medium soils
- **Average Yield :** 25-35 q/ha

1999

S.O. 425 (E)
Dated 08.06.1999

Medicinal and Aromatic Crop

Dhaincha : DH 1

National | Yield 26 q/ha | Green manuring 45 days

- High nodulation
- High nitrogen fixation
- Succulent and fast decomposition
- Maturity 195 days (seed to seed) and 45 days (green manuring)
- National for *kharif* planting
- **Average Yield :** 26 q/ha (seed)
  250-300 q/ha (Green manure)

2003

Medicinal and Aromatic Crop

Isabgol : HI 5

Haryana | Yield 10-12 q/ha | Husk 30%

- Compact plant type
- long and dense spikes
- Maturity 140-145 days
- Husk 30%
- State for rabi season
- **Average Yield :** 10-12 q/ha

1989

1989

Medicinal and Aromatic Crop

Mulhatti/Liquorice : HM 1

Haryana

Yield 60-75 q/ha

Glycyrrhizic Acid 6-7%

- Matures in 2½ – 3 years
- Tall growing
- Dark green leaves
- Glycyrrhizic acid : 6-7%
- Haryana State
- **Average Yield :** 60-75 q/ha (Dry root)

Medicinal and Aromatic Crop

Roshagrass/Palmarosa : RH-49

Haryana

Oil Yield 75-100 ltr/ha

Geraniol content >80%

- Perennial crop (3-4 years), two cuts/annum
- Tall growing (more than 2 m)
- Thick stem, broad leaves
- Long and condensed inflorescence
- Oil content 0.4-0.5%
- Geraniol content > 80%
- Haryana State
- **Average Yield :** 75-100 litre/ ha (Essential oil)

1989

Medicinal and Aromatic Crop

Periwinkle/Sadabahar : Prabhat Selection 1

Haryana Maharashtra

Dry Root 15-18 q/ha

Alkaloid 2% Root

- Dark purple stem
- Shining leaves
- Pink flowers
- Matures in 8-10 months
- Alkaloid 2% in dry roots and 1% in leaves
- Wide adaption
- Haryana and Maharashtra for light to medium soils
- **Average Yield :** 15-18 q/ha (dry root) and 20-25 q/ha (dry leaves)

2003

Medicinal and Aromatic Crop

Guayule : HG 8

National

Yield 15-20 q/ha

Rubber content 6-7%

- Matures in 1½ years
- Highly vigorous
- Broad leaf and thick stem
- Rubber content 6-7%
- National for semi arid conditions
- **Average Yield :** 15-20 q/ha

1991

Vegetable : HK 127

Haryana | Average Yield 120-125 q/ha | Best suited for stuffed culinary preparation

2019
S.O. 4272 (E)
Dated 26.11.2019

- Fruits oblong, green best suited for stuffed culinary preparation.
- Seed rate 4-5 kg/ha
- High TSS, ascorbic acid content and better storage.
- Incidence of Fruit fly, downy mildew and cercospora leaf spot
- Both for spring-summer and rainy seasons under irrigated conditions of Haryana state.
- **Average Yield :** 120.0-125.0 q/ha
- **Potential Yield :** 140.0 q/ha

Onion : Hisar Onion 4

Haryana | Average Yield 310-315 q/ha | Red rose colour

- Higher yield
- Rose red colour
- Less bolting
- Good storage quality
- Released for cultivation in Haryana state
- **Average Yield :** 310-315 q/ha
- **Potential Yield :** 325 q/ha

2016
S.O.3666 (E)
Dated 6/12/2016

Onion : Hisar Onion 3

National

Average Yield 320-350 q/ha

Bronze colour bulb

- Globular shaped bulbs with tight skin and thin neck
- High yield
- Less bolting
- Good storage life
- National
- **Average Yield :** 320-350 q/ha

2010

S.O. 1979 (E)
Dated 12/08/2010

Onion : Hisar 2

Haryana

Average Yield 280-320 q/ha

Better storage life

- Bronze-red color, flattish globular shaped and more pungent bulbs
- Better shelf life
- Released for cultivation in Haryana state
- **Average Yield :** 280-320 q/ha
- **Potential Yield :** 335 q/ha

1976

S.O. 786 (E)
Dated 02/02/1976

Bottle Gourd : GH 22

Haryana | Average Yield 240-260 q/ha | Fruit green & bottle shaped

- High yielder
- Medium long, green colour fruits
- Easy to cook
- Released for cultivation in Haryana state
- **Average Yield :** 240-260 q/ha
- **Potential Yield :** 300 q/ha

2016

S.O.3666 (E)
Dated 06/12/2016

Bottle Gourd : HBGH 35 (Hybrid)

Haryana | Average Yield 280-320 q/ha | Fruits clyndrical in shape

- Medium long, soft-skinned light green fruits
- High yielding
- Better consumer preference
- Easy to cook
- Released for cultivation in Haryana state
- **Average Yield :** 280-320 q/ha
- **Potential Yield :** 350 q/ha

2016

S.O. 3666 (E)
Dated 06/12/2016

Brinjal : HLB 12 (Hisar Bahar)

Haryana | Average Yield 420-440 q/ha | Tolerant to Shoot & fruit borer

- Tolerant to shoot & fruit borer and high temperature
- Released for cultivation in Haryana state
- **Average Yield :** 420-440 q/ha
- **Potential Yield :** 469 q/ha

2014

Brinjal : HLB 25 (Hisar Jamuni)

Haryana | Average Yield 240-260 q/ha | Tolerant to high temp.

- Suitable for summer season
- Medium long, slender and bright purple fruits
- Tolerance to high temperature
- Released for cultivation in Haryana state
- **Average Yield :** 240-260 q/ha
- **Potential Yield :** 300 q/ha

2012

S.O. 2363 (E)
Dated 04/10/2012

Brinjal : Hisar Pragati

Haryana

Average Yield 325-350 q/ha

Fruit dark purple coloured

- Suitable for summer season
- Fruits long bright dark purple colored
- Released for cultivation in Haryana state
- **Average Yield :** 325-350 q/ha
- **Average Yield :** 400 q/ha

1991

Brinjal : Hisar Shyamal

National

Average Yield 300-325 q/ha

Early round & dark purple fruits

- Early and high yielding
- Round, dark purple bright fruits
- Tolerant to little leaf and bacterial wilt diseases
- Released for cultivation at National level
- **Average Yield :** 300-325 q/ha

1991

S.O. 617 (E)
Dated 17/08/1993

Brinjal : BR 112

Haryana

Average Yield 240-260 q/ha

Early & round fruited variety

- Early
- Bushy plants
- Round, bright purple colour and fleshy fruits
- Released for cultivation in Haryana state
- **Average Yield :** 240-260 q/ha

1976

S.O. 617 (E)
Dated 17/08/1993

Cauliflower : Hisar 1

Haryana

Average Yield 220-230 q/ha

Suitable for Salt prone area

- Tall plant, medium to large size head, white colour
- Compact head
- Tolerant to salt
- Released for cultivation in Haryana state
- **Average Yield :** 220-230 q/ha
- **Potential Yield :** 275 q/ha

1976

S.O. 786 (E)
Dated 02.02.1976

Garlic : HG 17

Haryana | Average Yield 120-130 q/ha | Good storage & tolerant to purple blotch

- High yielding
- Good storage life
- Bulb weight is better than other varieties
- Least incidence of purple blotch disease
- Released for cultivation in Haryana state
- **Average Yield :** 120-130 q/ha
- **Potential Yield :** 132 q/ha

2012

S.O. 2363 (E)
Dated 04/10/2012

Okra : Hisar Naveen

Haryana | Average Yield 120-140 q/ha | Tolerant to YVMV

- Suitable for spring summer and rainy seasons
- Fruit tender green and smooth
- Tolerant to Yellow Vein Mosaic Virus (YVMV) disease
- National (Haryana, Rajasthan, Delhi, Gujarat, Tamilnadu, Kerala and Karnataka)
- **Average Yield :** 120-140 q/ha
- **Potential Yield :** 185 q/ha

2006

Okra : HBH 142

National

Average Yield 120-140 q/ha

Tolerant to YVMV

2006

S.O. 597 (E)
Dated 25/04/2006

- Suitable for spring summer and rainy seasons
- High yielding hybrid
- Fruiting starts on third/fourth node
- Tolerant to YVMV disease
- National (Punjab, Uttar Pradesh, Uttrakhand, Karnataka and Haryana)
- **Average Yield :** 120-140 q/ha
- **Potential Yield :** 180.6 q/ha

Okra : Hisar Unnat

National

Average Yield 110-130 q/ha

Resistance to YVMV

- Suitable for spring summer and rainy seasons
- Fruiting starts on third/fourth node
- Resistance to YVMV disease
- National (Haryana, Rajasthan, Delhi and Gujarat)
- **Average Yield :** 110-130 q/ha
- **Potential Yield :** 140 q/ha

1997

S.O. 98 (E)
Dated 08/02/1997

Okra : Varsha Uphar

National

Average Yield 100-120 q/ha

Resistance to YVMV

- Suitable for rainy season
- Medium tall plant
- Fruiting starts on third/fourth node
- Resistance to (YVMV) disease
- National (Haryana, Rajasthan, Delhi and Gujarat)
- **Average Yield :** 100-120 q/ha
- **Potential Yield :** 130 q/ha

1996

S.O. 115 (E)
Dated 10/02/1996

Fenugreek : Hisar Mukta

National

Average Yield 18-20 q/ha

Resistance to downy mildew

- Early, light green foliage
- Bold brown green seed
- Resistant to downy mildew
- National (Haryana, Rajasthan and Gujarat)
- **Average Yield :** 18-20 q/ha
- **Potential Yield :** 23 q/ha

2006

S.O. 597 (E)
Dated 25/04/2006

Fenugreek : Hisar Sonali

National

Average Yield 16-18 q/ha

Suitable for leaf & Seed purpose

1996

S.O. 115 (E)
Dated 10/02/1996

- Quick growing
- Dual purpose
- High yielding
- National (Haryana, Rajasthan and Gujarat)
- **Average Yield :** 16-18 q/ha
- **Potential Yield :** 20 q/ha

Coriander : Hisar Sugandh

National

Average Yield 16-18 q/ha

High oil content

- Suitable for mid-season planting
- High yielding
- High oil content
- National (Haryana, Rajasthan and Bihar)
- **Average Yield :** 16-18 q/ha
- **Potential Yield :** 20 q/ha

2006

S.O. 597 (E)
Dated 25/04/2006

Coriander : Hisar Anand

National

Average Yield 16-18 q/ha

Bold seeded dual purpose

1993

- Mid-late variety
- Dual purpose
- Bold seeded
- High yielding
- Released for cultivation at National level
- **Average Yield :** 16-18 q/ha
- **Potential Yield :** 20 q/ha

Indian Melon : Hisar Tinda (HT 10)

Haryana

Average Yield 80-90 q/ha

Early & high yielding

- Early and high yielding
- Round, medium sized tender fruits
- Tolerant to downy mildew and root rot
- Released for cultivation in Haryana state
- **Average Yield :** 80-90 q/ha
- **Potential Yield :** 91 q/ha

2006

S.O. 597 (E)
Dated 25/04/2006

Indian Bean : Hisar Kirti

Haryana | Average Yield 200-220 q/ha | Early & dark green pods

1995

- Early variety
- Flat, dark green pods with better shelf life
- Released for cultivation in Haryana state
- **Average Yield :** 200-220 q/ha

Tomato : Hisar Lalit

National | Average Yield 250-300 q/ha | Resistant to root knot nematodes

- Determinate plant habit
- Fruit maturity 65-70 days after planting
- Average fruit weight 50g
- Resistant to root knot nematodes
- Released for cultivation at National level
- **Average Yield :** 250-300 q/ha

1993

S.O. 617 (E)
Dated 17/08/1993

Tomato : Hisar Arun

National

Average Yield 275-300 q/ha

Red colour medium size fruits

1990

S.O. 1004 (E)
Dated 08/04/1978

- Determinate plant habit
- Heavy bearer
- Early and high yielding
- Released for cultivation at National level
- **Average Yield :** 275-300 q/ha

Tomato : HS 101

National

Average Yield 240-260 q/ha

Tolerant to Leaf curl virus

- Suitable for winter season, determinate plant habit, sturdy, multi-branched
- Fruit round, small to medium in size, red on ripening
- Tolerant to tomato leaf curl virus
- National (Haryana, Uttar Pradesh, Karnataka, Gujarat and Tamil Nadu)
- **Average Yield :** 240-260 q/ha
- **Average Yield :** 300 q/ha

1978

S.O. 1004 (E)
Dated 23.3.1978

Tomato : HS 102

Natioanl

Average Yield 240-260 q/ha

Sets fruits at high temp.

1976

S.O. 786 (E)
Dated 02.02.1976

- Suitable for winter season, determinate plant habit, sturdy, multi-branched
- Fruit round, small to medium in size, red colour
- Sets fruits at high temperature
- National (winter season for northern plains under irrigated conditions)
- **Average Yield :** 240-260 q/ha
- **Potential Yield :** 300 q/ha

Carrot : Hisar Gairic

Haryana

Average Yield 290-310 q/ha

Early & Self core

- Early, high yielder, tender roots, red colour
- Coreless and rich in carotene (96.2mg/100g of fresh weight)
- Released for cultivation in Haryana state
- **Average Yield :** 290-310 q/ha

1993

Long Melon : Karnal Selection

National

Average Yield 90-100 q/ha

Fruits crispy & Light green

1981

- A prolific bearer
- Fruits tender light green, long thin, flesh crisp with good flavor
- Released for cultivation at National level
- **Average Yield :** 90-100 q/ha

Radish : Hisar Sweti

Haryana

Average Yield 390-410 q/ha

Roots mild in pungency & white shoulder

- Root white with white shoulder
- High root: shoot ratio (1.7: 1)
- Root remain edible /non-pithy for longer period
- Root long, cylindrical with obtuse tail, mild pungency
- Crispy flesh texture
- Released for cultivation in Haryana state
- **Average Yield :** 390-410 q/ha

2006

Radish : Hisar Selection 1

Haryana | Average Yield 380-420 q/ha | Long slender & white roots

- Released for cultivation in Haryana state
- **Average Yield :** 380-420 q/ha
- **Potential Yield :** 423 q/ha

2004

Vegetable Peas : Hisar Harit

National | Average Yield 80-100 q/ha | Long green pods

- Medium duration
- High yielded
- Long green well filled pods
- Released for cultivation at National level
- **Average Yield :** 80-100 q/ha

1993

Marigold : Hisar Jaffri-2

Haryana | Yield 175-200 q/ha | Flower diameter 4-5 cm

2008
13216-26
Dated 10-12-2008

- Suitable for landscape and flower production
- Dwarf and compact plant
- Orange flower
- Flowering starts in 60-64 days with 60-70 days flowering duration
- Flower diameter 4-5 cm
- State
- **Average Yield :** 175-200 q/ha, 70-80 flowers/plant

Marigold : Hisar Beauty

Haryana | Yield 40-50 F/plant | Flower diameter 5-6 cm

- Suitable for landscaping
- Dwarf and compact plant
- Flower dark red, petals with yellow margin
- Flowering starts in 40-45 days with 45-55 days flowering duration
- Flower diameter 5-6 cm
- State
- **Average Yield :** 40-50 flowers/plant

2008
13216-26
Dated 10-12-2008

Guava : Hisar Safeda

Widely Adapted N-India

Yield 114 kg/plant

High TSS

1995

- Widely adapted in North India
- Tall and vigorous trees
- Round fruits with smooth shinning and yellowish white skin, flesh white and firm
- Seeds are soft and less in number
- High TSS (12.5-13.0 Brix)
- **Average Yield :** 31.25 t/ha

Guava : Hisar Surkha

Haryana

Yield 94 kg/plant

High TSS

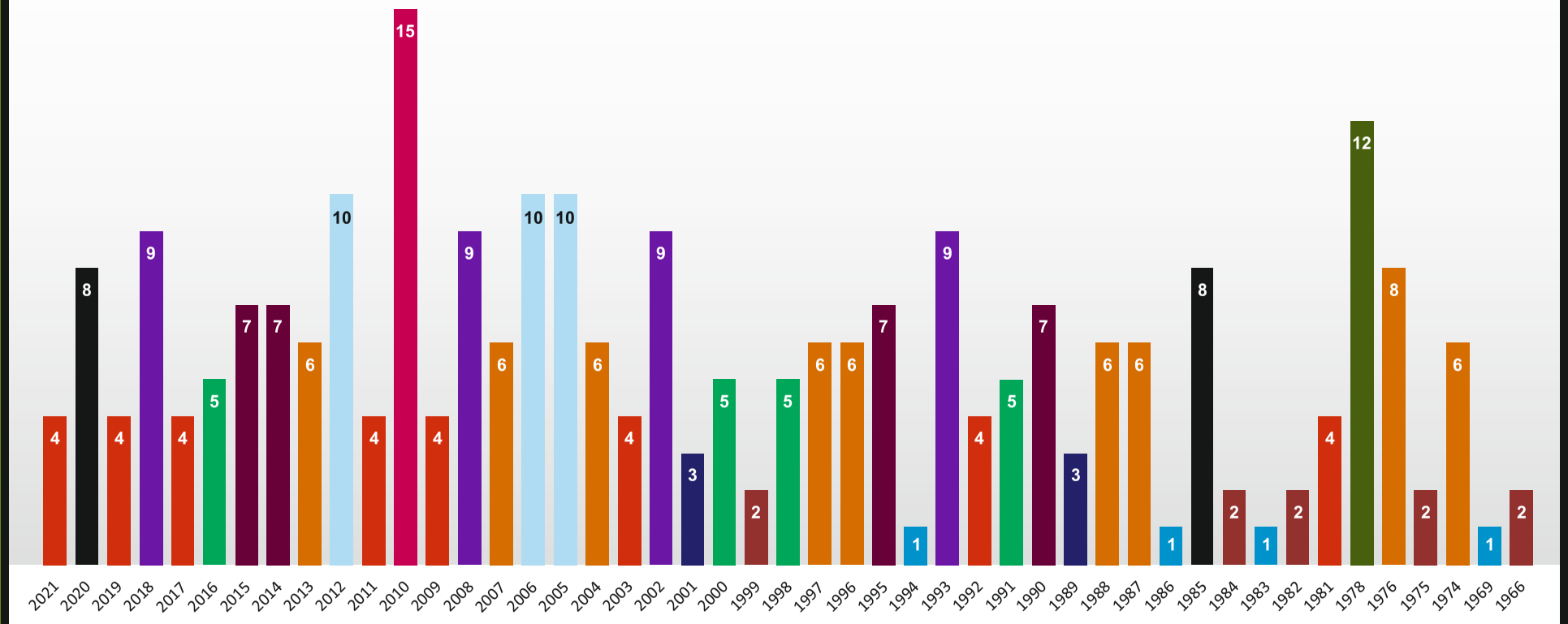
- Widely adapted in whole of Haryana
- Trees spreading and medium in size
- Fruit round in shape, skin light yellow in colour, flesh pink
- High TSS (13.0-13.5 Brix)
- **Average Yield :** 25.0 t/ha

1995

Felicitation of Breeders and Developers of different crop varities

Visit of Vice-Chancellor to the Vegetable area

Varieties/hybrids released by CCS HAU, Hisar



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