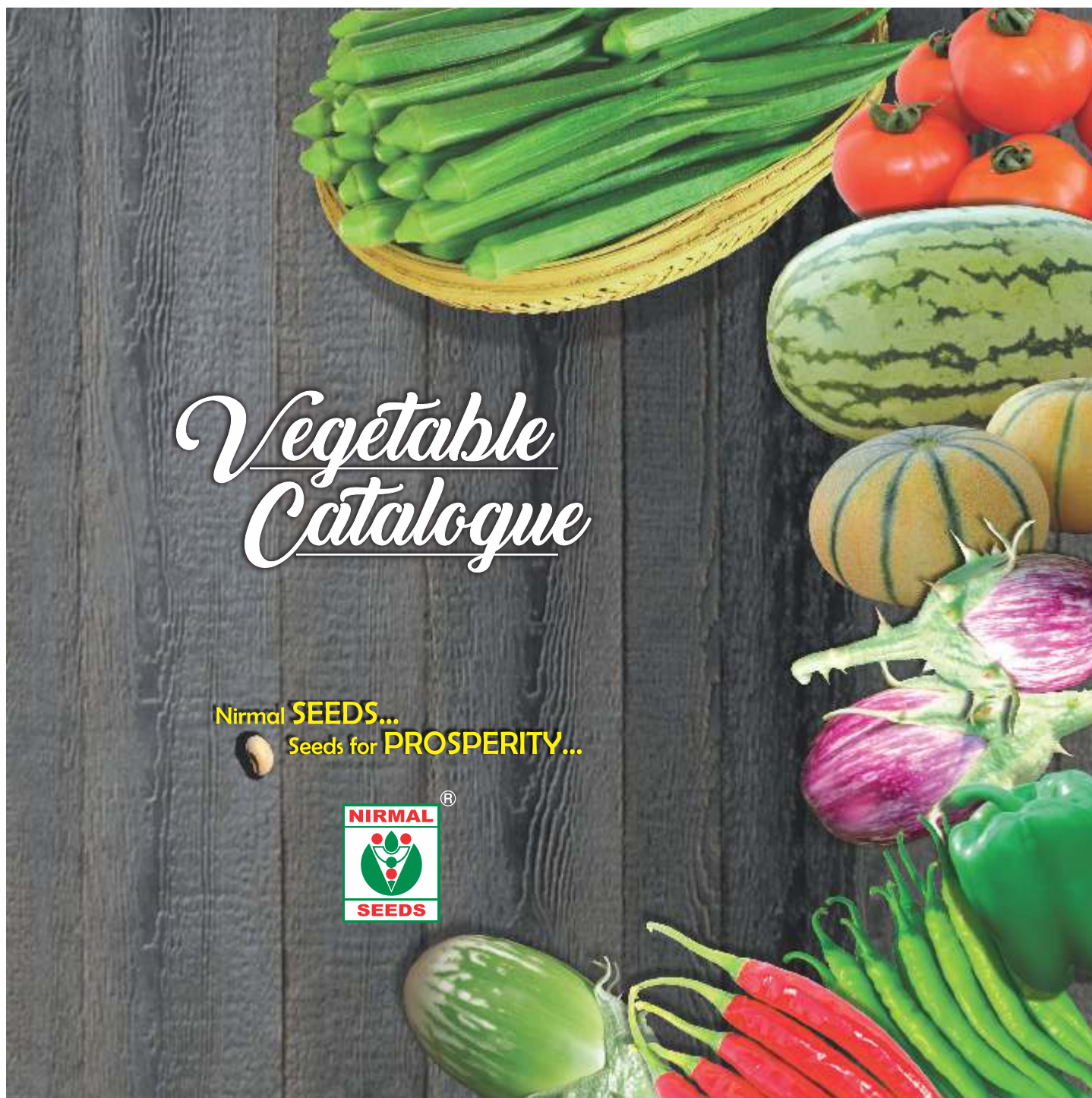


# Front Cover



Size\_8.2 x 8.2"



# Front Inner

Nirmal's new high-tech "class 10000" laboratory for mass multiplication of Mycorrhizae by "ROC" technology established at Pachora



Newly established Bio Manufacturing Unit of Nirmal Seeds Pvt. Ltd. in Gujarat



## Nirmal Seeds.... Seeds for Prosperity....



### Agri Bio-tech for Healthy Nation...

#### About Us

Accredited with ISO 9001:2015 Certification, Nirmal Seeds Pvt. Ltd. (NSPL) was established in 1988 by a group of agropreneurs at Pachora in Jalgaon district of Maharashtra, India. The organization was started with an idea of 'Need based Research' in the field of seed technology for the farming community. The mandate includes crop improvement with respect of development hybrids and varieties suitable for different agro climatic zones having high tolerance to biotic and abiotic stresses coupled with high yield and superior quality. The organization is focused towards maximizing the yield for sustainability of agriculture with special emphasis on nutrition breeding for developing the elite genotypes having high levels of essential nutrients. The research on development of newer generation bio-organic inputs is also another priority area of R & D for organic farming as well as Integrated Crop Production (ICP) for sustainable Agriculture.

Nirmal Seeds is a name that carries an unmatched legacy & reputation in the agricultural sector. It has a presence in about 23 states of the country comprising major agricultural centres across India with marketing offices at Akola, Jalna, Nagpur, Pune, Ahmedabad, Indore, Jabalpur, Raipur, Agra, Lucknow, Jaipur, Jodhpur, Patna,

Chandigarh, Hyderabad, Kurnool, Hubli, Bangalore, Trichy, Bhubaneswar, Guwahati, Ranchi and Siliguri.

#### Our Vision...

To become the market leader in the seed industry by catering the needs of Indian farmers.

#### Our Mission....

- To create an environment that focuses on 'Need based Research' for the development of seeds of various crops and eco-friendly bio organic inputs required by the farming community across India. The emphasis will be to ensure biotic and abiotic stress tolerance, nutrition breeding and research in biotechnology for specific improvement in the desired traits.
- Build 'state-of-the-art' high-tech infrastructural facilities of International standards to support the Research Mandate.
- Continual Human Resource Development to meet the challenges in the agriculture sector and discover the possibility with the concept of "Parallel Wheel, Common Goal".



# VEGETABLE CROPS





*Okra*



## Hybrid Okra NOH-1684 (Kajri)

### Characteristics

Days to first harvest.....48-52  
Fruit colour.....Dark green  
Fruit length (cm).....8-10

### Special features

- Excellent plant vigour with 2-3 side branches
- Very dark green, straight, tender quality fruits
- Good fruiting from bottom with short internodes
- Highly tolerant to PM and YVMV diseases
- High yielding hybrid with export quality
- Less tolerant to frost (very cold) and high temperature (>40°C)

## Hybrid Okra NOH-1082

### Characteristics

Days to first harvest.....48-50  
Fruit colour.....Dark green  
Fruit length (cm).....10-12

### Special features

- Early fruiting with close internode distance
- Dark green tender, long, straight, pentagonal fruits
- Highly tolerant to YVMV & ELCV diseases
- Recommended for round the year cultivation except frost







## Hybrid Okra NOH-1648 (Nidhi)

### Characteristics

Days to first harvest.....50-55  
Fruit colour.....Dark green  
Fruit length (cm).....10-12

### Special features

- Very good plant vigour & branching
- Green, tender, straight, pentagonal fruits with less mucilage
- Excellent taste and keeping quality
- Highly tolerant to YVMV disease
- High yielding hybrid with export quality
- Less tolerant to frost (very cold) and high temperature (>40°C)

## Hybrid Okra NOH-1336 (Gopi)

### Characteristics

Days to first harvest.....50-55  
Fruit colour.....Dark green  
Fruit length (cm).....10-12

### Special features

- Vigorous plant type with good fruiting side branches
- Very dark green coloured, straight, long quality fruits
- Excellent taste and keeping quality.
- Highly tolerant to YVMV, PM and ELCV diseases
- Less tolerance to frost
- Recommended for Kharif, Rabi & early Summer seasons





## Hybrid Okra NOH-15+

### Characteristics

Days to first harvest.....50-52  
Fruit colour.....Shiny green  
Fruit length (cm).....12-14

### Special features

- Vigorous plant type with relatively early fruiting ability
- Shiny green, straight, tender, long good quality fruits
- Tolerant to YVMV & PM diseases
- High yielding hybrid

## Okra variety (OP) NOL-303+ (Julie)

### Characteristics

Days to first harvest.....48-50  
Fruit colour.....Dark green  
Fruit length (cm).....10-12

### Special features

- Very good plant vigour & side fruiting branches
- Dark green attractive tender fruits
- Tolerant to YVMV disease





# Okra



## Okra variety (OP) NOL-101 (Nisha)

### Characteristics

Days to first harvest (Days).....50-52  
Fruit colour.....Shiny green  
Fruit length (cm).....12-14

### Special features

- Very good plant type and branching ability
- Shiny green attractive tender fruits
- Tolerant to YVMV disease

## Cultivation practices for Okra

**Soil.....**Well drained and fertile soil is desirable. but it can grow on different types of soil

**Seed rate/ha.....**Hybrid- 7-7.5 kg.,      OP variety- 10-12 kg

**Spacing (cm).....**60 x 30

**Manures & Fertilizer.....**At the time of land preparation apply 25-30 ton FYM/ha.  
At the time of sowing, apply 90 kg N, 80 kg P, & 80 kg K.  
After 30 days apply 90 kg N/ha.

**Irrigation.....**In winter and summer irrigation should be provided at 6-7 days interval according to soil condition.  
In rainy season proper water drainage should be given.

### Plant Protection

**Aphids, jassids, thrips, white flies-** Imidacloprid @ 0.33 ml/lit. of water

**Leaf miner-** Dichlorovos @ 1ml/lit.

**Fruit & Shoot borer-** Lambda-cyhalothrin 0.8 ml/lit OR Chloropyriphos @ 2ml/lit or Cartap hydrochloride @ 1gm/lit.

**Powdery mildew-** Dinocap @ 1gm/lit. OR Difenoconazole @ 0.5 ml/lit.

**Yellow vein Mosaic Virus (YVMV)** control vector *i.e.* white fly should be controlled through spraying of Difenthiuron @ 1gm/lit.  
Uproot affected plants in early stage.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha with organic fertilizer
- 3 foliar spray of **Nirmal Bio force** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

# *Brinjal*





# Brinjal



## Hybrid Brinjal NBH-627 (Sanjay)

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Green, purple and  
white variegated streaks  
Fruit shape.....Round to Oblong  
Fruit wt. (g).....80-90

### Special features

- Semi spreading growth habit, spines on stem, leaf and calyx
- Green, purple and white variegated, glossy attractive fruits with green spiny calyx
- Good keeping quality & colour retention.
- Very good organoleptic taste

## Hybrid Brinjal NBH-1230

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Green, purple and  
white variegated streaks  
Fruit shape.....Round to Oblong  
Fruit wt. (g).....90-100

### Special features

- Semi spreading plants with vigorous plant growth habit
- Non spiny stem, leaf and calyx.
- Glossy attractive fruits with good calyx cover
- Round to oblong medium sized fruits with good colour retention
- Prolific fruit bearing ability



# Brinjal



## Hybrid Brinjal NBH-1421

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Green, purple and  
white variegated strips  
Fruit shape.....Oblong  
Fruit wt. (g).....70-80

### Special features

- Semi spreading plant type and spines on stem, leaf and calyx
- Attractive shiny fruits with good organoleptic taste
- Good keeping quality and colour retention
- Cluster bearing habit leads to high yielding ability

## Hybrid Brinjal NBH-1430

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Purple with white streaks  
Fruit shape.....Oval  
Fruit wt. (g).....80-90

### Special features

- Vigorous and thorny natured semi spreading plants
- Attractive oval shape, purple with white variegated shiny fruits
- Glossy, crystal streaked fruits with green spiny calyx
- Good keeping quality and organoleptic taste
- Cluster bearing habit leads to high yield potential







**Hybrid Brinjal**  
**NBH-1300**

## Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Purple with white streaks  
Fruit shape.....Round to oblong  
Fruit wt. (g).....70-80

## Special features

- Semi spreading plant growth, non spiny stem, leaf and calyx
- Attractive round to oblong purple and white variegated glossy fruits
- Cluster bearing ability
- Very good keeping quality & taste
- Relatively early fruiting with good yielding ability

**Hybrid Brinjal**  
**NBH-1210**

## Characteristics

Growth habit.....	Mid tall, semi-erect
Fruit colour.....	Purple with white variegated streaks
Fruit shape.....	Medium long
Fruit wt. (g).....	110-120

## Special features

- Mid-tall semi erect vigorous plant type
- Attractive oblong to medium long shaped, purple and white variegated, glossy fruits
- Very good keeping quality and good organoleptic taste
- Prolific fruit bearing and more fruiting period



# Brinjal



## Hybrid Brinjal NBH-1214

### Characteristics

Growth habit.....Mid tall & semi spreading  
Fruit colour.....Green with white streaks  
Fruit shape.....Oblong  
Fruit wt.(g).....70-80

### Special features

- Mid tall & semi spreading plants and spines on stem, leaf and calyx
- Crystal Green with white variegated glossy fruits
- Very attractive oblong shaped, uniform fruits
- Good shipping and keeping quality.
- Cluster bearing habit and long pedicel with excellent calyx covering
- Widely accepted due to shape and organoleptic taste

## Hybrid Brinjal NBH-743

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Green + white strip  
Fruit shape.....Round to Oblong  
Fruit wt (gm).....120-130

### Special features

- Mid tall vigorous & semi spreading plants and spines on stem, leaf and calyx
- Light green with white variegated attractive fruits
- Big round to oblong, glossy thorny less seeded fruits
- Excellent organolyptic taste & keeping quality
- Long pedicel with excellent calyx covering



# Brinjal



## Hybrid Brinjal NBH-1518

### Characteristics

Growth habit.....Semi erect  
Fruit colour.....Green with white strips  
Fruit shape.....Oblong big  
Fruit wt. (g).....120-130

### Special features

- Vigorous growth, semi erect and spines on stem, leaf & calyx
- Big oblong, glossy, green with white verigated attractive fruits
- Excellent taste & keeping quality
- Thorny Bharta type fruits with relatively less seed content
- Moderate fruit weight with good yield

## Hybrid Brinjal NBH-1325

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Greenish white  
Fruit shape.....Round to Oblong  
Fruit wt. (g).....60-70

### Special features

- Semi spreading, non spiny plant, leaves and fruit calyx
- Uniform sized fruits with good keeping quality & taste
- Cluster bearing ability and high yield potential





# Brinjal



## Hybrid Brinjal NBH-1698

### Characteristics

Growth habit.....Erect strong plant  
Fruit colour.....Green with white streaks  
Fruit shape.....Round to oblong  
Fruit wt. (g).....110-120

### Special features

- Very strong, semi erect plants with vigorous growth habit
- Medium big round fruit with non spiny plant, leaves and fruit calyx
- Green with white shaded fruits having long pedicel
- Uniform attractive fruits with good calyx cover & less seed content
- Continued fruiting over long period
- Good organolyptic taste with good shelf life

## Hybrid Brinjal NBH-1305

### Characteristics

Growth habit.....Mid-tall & semi spreading  
Fruit colour.....Green + White streaks  
Fruit shape.....Medium long  
Fruit wt. (g).....110-120

### Special features

- Mid-tall & semi spreading growth habit
- Green with white shaded fruits
- Uniform, cylindrical, attractive medium long fruits
- Prolific bearing and continued fruiting over a long period
- Highly tolerant to bacterial wilt disease



# Brinjal



## Hybrid Brinjal NBH-1322

### Characteristics

Growth habit.....Strong, semi erect, vigorous  
Fruit colour.....Green + White streaks  
Fruit shape.....Big oblong  
Fruit wt. (g).....250-300

### Special features

- Very strong, vigorous and semi-erect plants
- Big oblong fruit shape with non spiny plant, leaves and fruit calyx
- Green bharta type fruits with white shades on fruits
- Uniform attractive fruits with less seed content
- Good organoleptic taste and good shelf life
- Highly tolerant to bacterial wilt disease

## Hybrid Brinjal NBH-1156

### Characteristics

Growth habit.....Mid-tall & semi spreading  
Fruit colour.....Pinkish violet  
Fruit shape.....Round to oblong  
Fruit wt. (g).....70-80

### Special features

- Mid tall and semi spreading non spiny growth habit
- Small, round to oblong shaped attractive glossy fruits
- Pinkish violet with green calyx fruits
- Uniform attractive fruits with good keeping quality & taste
- Continue fruiting over a long period with good reflushing ability



# Brinjal



## Hybrid Brinjal NBH-1641

### Characteristics

Growth habit.....Mid-tall & semi-spreading  
Fruit colour.....Pinkish violet  
Fruit shape.....Round to oblong  
Fruit wt. (g).....120-130

### Special features

- Semi spreading, non spiny plants
- Attractive glossy, medium big, round to oblong fruits
- Pinkish violet coloured fruits with green calyx
- Uniform fruits with long pedicel and good calyx cover
- Good colour retention and keeping quality

## Hybrid Brinjal NBH-972

### Characteristics

Growth habit....Mid-tall & semi spreading  
Fruit colour.....Shiny purple  
Fruit shape.....Round to oblong  
Fruit wt. (g)....150-180

### Special features

- Mid tall, semi spreading plant growth habit
- Attractive shiny purple fruits with green calyx
- Round to oblong medium big shape fruits
- Very good colour retention with excellent shelf life
- High yielding potential due to good reflushing ability
- Tolerant to little leaf and phomopsis blight diseases





# Brinjal



## Hybrid Brinjal NBH-542

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Blackish purple  
Fruit shape.....Pear shape, oblong  
Fruit wt. (g).....100-110

### Special features

- Semi spreading plant growth habit with non spiny nature
- Attractive pear shaped medium big black purple glossy fruits
- Excellent colour retention and keeping quality
- High yielding hybrid

## Hybrid Brinjal NBH-1001

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Shiny purple  
Fruit shape.....Oblong  
Fruit wt. (g).....300-350

### Special features

- Semi spreading growth habit with high vigour and non prickled nature
- Big oblong shaped attractive shiny purple fruits
- Attractive glossy uniform fruits with green calyx
- Excellent colour retention with good keeping quality and taste



# Brinjal



## Hybrid Brinjal NBH-1465

### Characteristics

Growth habit.....Mid-tall, semi erect  
Fruit colour.....Shiny black  
Fruit shape.....Oval round  
Fruit wt. (g).....300-350

### Special features

- Mid-tall, sturdy, vigorous, semi erect plant habit
- Very big oval round shaped fruits, with very thick flesh
- Attractive shiny black coloured glossy fruits
- Very good colour retention and keeping quality

## Hybrid Brinjal NBH-1167

### Characteristics

Growth habit.....Mid-tall, Semi erect  
Fruit colour.....Black  
Fruit shape.....Long  
Fruit wt. (g).....70-80  
Fruit length (cm).....14-16

### Special features

- Mid tall, semi erect plant habit
- Attractive medium long black coloured with green calyx, glossy fruits
- Cluster bearing and high yield potential



# Brinjal



## Hybrid Brinjal NBH-1772

### Characteristics

Growth habit.....Mid-tall, erect  
Fruit colour.....Black  
Fruit shape.....Long  
Fruit wt. (g).....90-100  
Fruit length (cm).....22-25

### Special features

- Mid tall, erect plant growth habit
- Attractive black coloured long fruits with purple calyx
- Cluster bearing and good yield potential
- Very good keeping quality, taste and shelf life

## Hybrid Brinjal NBH-1113

### Characteristics

Growth habit.....Semi spreading  
Fruit colour.....Pinkish  
Fruit shape.....Long  
Fruit wt. (g).....60-75  
Fruit length (cm).....12-15

### Special features

- Semi spreading plant growth habit
- Attractive pinkish medium long cylindrical fruits with purple calyx
- Good colour retention
- Excellent keeping quality & taste
- High yielding potential due to cluster bearing ability





# Brinjal



## Hybrid Brinjal NBH-961

### Characteristics

Growth habit.....	Tall, semi erect
Fruit colour.....	Shiny green
Fruit shape.....	Long
Fruit wt. (g).....	100-110
Fruit length (cm).....	25-30

### Special features

- Tall, semi erect plant growth habit
- Attractive shiny green long cylindrical fruits with green calyx
- Good keeping quality and excellent shelf life
- High yielding potential due to cluster bearing ability

## Hybrid Brinjal NBH-1404

### Characteristics

Growth habit.....	Semi spreading
Fruit colour.....	White
Fruit shape.....	Round to oblong
Fruit wt. (g).....	60-70

### Special features

- Semi spreading, non spiny plant, leaves and fruit calyx
- White fruits with round to oblong in shape
- Cluster bearing ability and prolific yielding ability



# Brinjal

## Cultivation practices for Brinjal

**Soil.....**Well drained and fertile soil is desirable. but it can grow in different types of soil.

**Seed rate/ha.....**200-250 gm

**Spacing (cm).....**90 x 90 or 75 x 60 or 90 x 60

**Manures & Fertilizer.....**Apply 20-25 ton/ha FYM at the time of land preparation. Before transplanting, apply 100 kg N, 80 kg P & 80 kg K, then after 30-35 days apply 100 kg N/ha.

### **Irrigation**

Regular irrigation should be given to get high fruit yield. Frequency of irrigation may be varied according to soil type and season.

### **Plant Protection**

**Shoot & Fruit borer :** Prune infected shoots & spray - Cypermethrin @ 1 ml/lit. of water or Cartap hydrochloride @1.0 gm/lit. of water.

**Aphids & sucking pests :** Imidacloprid @ 0.5 ml/lit. of water. **Mites :** Sulphur @2 gm/lit.

**Root knot nematode :** Soil application of Phorate @ 4 - 5 kg/acre before transplanting. **Damping off :** Drench nursery bed with Copper oxychloride @ 2 gm/lit. of water. **Fruit rot :** Mancozeb @ 1-2 gm/lit. of water.

**Little leaf of brinjal :** Thiamethoxam @ 7 gm/ 15 lit.

### **Special Recommendation**

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha after transplanting near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bio force** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



## *Chilli*





## Hybrid Chilli NCH-12 (Maina)

### Characteristics

Plant type.....Semi spreading  
Fruit colour.....Light green  
Fruit length (cm).....10-12

### Special features

- Semi spreading plant type with profuse branching ability
- Attractive parrot green, highly pungent fruits
- Semi wrinkled fruit surface with excellent aroma
- Suitable for green chilli purpose
- Suitable for the rainy and spring season cultivation
- Outstanding hybrid with excellent yield

## Hybrid Chilli NCH-931

### Characteristics

Plant type.....Semi Spreading  
Fruit colour.....Shiny green  
Fruit length (cm).....14-16

### Special features

- Very sturdy, semi spreading plant type with strong leaf canopy
- Shiny green, semi wrinkled fruit surface with mild pungency
- Good tolerant to chilli mosaic virus and phytophthora blight diseases
- Suitable for green chilli market purpose







## Hybrid Chilli NCH - 913

### Characteristics

Plant type.....Semi spreading  
Fruit colour.....Parrot green  
Fruit length (cm).....12-14

### Special features

- Semi spreading plant habit
- Semi wrinkled, parrot green fruits with excellent aroma and high pungency
- Suitable for fresh green chilli purpose
- Recommended for rainy and spring season cultivation

## Hybrid Chilli NCH-1124

### Characteristics

Plant type.....Tall, Erect  
Fruit colour.....Light green  
Fruit length (cm).....13-15

### Special features

- Very strong vigorous plant type and excellent reflushing ability
- Light green thin long attractive pungent fruits
- Highly tolerant to chilli leaf curl virus and powdery mildew diseases
- Suitable for rainy and spring season cultivation
- Suitable for fresh green chilli market





## Hybrid Chilli NCH-1773

### Characteristics

Plant type.....Semi Spreading  
Fruit colour.....Parrot green  
Fruit length (cm).....14-16

### Special features

- Mid-tall semi spreading growth habit
- Attractive parrot green, medium long, semi wrinkled fruits with good pungency
- Hybrid is suitable for fresh green produce
- Recommended for rainy and spring season cultivation

## Hybrid Chilli NCH-250+

### Characteristics

Plant type.....Semi Spreading  
Fruit colour.....Parrot green  
Fruit length (cm).....18-20

### Special features

- Mid-tall, semi spreading, strong vigorous plant type
- Light green big size fruits with mild pungency
- Semi wrinkled attractive shiny fruits
- Suitable for fresh green chilli market
- Relatively early and good fruit setting
- Recommended for rainy and spring season cultivation





## Hybrid Chilli NCH-158

### Characteristics

Plant type.....Dwarf  
Fruit colour.....Parrot green  
Fruit length (cm).....5-6

### Special features

- Dwarf, sturdy growth habit with high percent fruit setting
- Attractive light green smooth fruits
- Very short, compact and highly pungent fruits
- Suitable for green chilli purpose

## Hybrid Chilli NCH-1012

### Characteristics

Plant type.....Semi Erect  
Fruit colour.....Shiny dark green  
Fruit length (cm).....6-8

### Special features

- Semi erect plant type with profuse branching ability and cluster bearing habit
- Shiny dark green fruits with good seed content
- Short, very compact, semi wrinkled fruit surface and highly pungent fruits
- Tolerant to chilli mosaic virus and anthracnose diseases
- Useful for both green as well as dry chilli purpose





## Hybrid Chilli NCH-1041

### Characteristics

Plant type.....Mid-tall Sturdy  
Fruit colour.....Medium green  
Fruit length (cm).....5-6

### Special features

- Mid-tall sturdy plant type with good canopy cover
- Short, very compact, medium green highly pungent fruits
- Suitable for fresh as well as dry chilli produce
- Highly tolerant to CMV and Powdery mildew diseases
- High yield ability due to good reflushing ability

## Hybrid Chilli NCH-3590

### Characteristics

Plant type..... Semi spreading  
Fruit colour.....Shiny green  
Fruit length (cm).....6-8

### Special Features

- Semi spreading, sturdy plant type
- Profuse branching and cluster bearing ability
- Shiny green, semi wrinkled fruit surface with high pungency
- Deep red coloured fruits with good red colour retention
- Suitable for both green and dry chilli purpose
- Highly tolerance to CMV & anthracnose diseases







## Hybrid Chilli NCH-1901

### Characteristics

Plant type.....Tall, erect  
Fruit colour.....Medium shiny green  
Fruit length (cm).....5-6

### Special features

- Tall, erect sturdy plant type
- Attractive shiny green fruit colour
- Very compact, deep red coloured fruits with good red colour retention and high pungency
- Suitable for both green and dry red chilli purpose
- Highly tolerance to CMV & anthracnose diseases

## Hybrid Chilli NCH-648 (Angarika)

### Characteristics

Plant type.....Semi spreading  
Fruit colour.....Dark green  
Fruit length (cm).....16-18

### Special features

- Semi spreading, vigorous plant growth habit with more leaf canopy
- Dark green fruits which turns in deep red colour after drying
- Very long, highly wrinkled, straight and pungent fruits
- Highly tolerant to powdery mildew and anthracnose diseases
- Suitable for red dry chilli purpose due to its very good red colour retention





## Hybrid Chilli NCH-1593

### Characteristics

Plant type.....Semi spreading  
Fruit colour.....Parrot green  
Fruit length (cm).....7-8

### Special Features

- Midtall, semi spreading plant growth habit
- Parrot green, medium long, medium thick fruits
- Medium pungent fruits
- Cluster bearing and high yielding hybrid
- Suitable for green and red chilli purpose
- Highly tolerance to anthracnose disease

## Hybrid Chilli NCH-1635 (Indira)

### Characteristics

Plant type.....Mid-tall, Semi spreading  
Fruit colour.....Shiny green  
Fruit length (cm).....10-12

### Special features

- Mid-tall and semi spreading plant type with good leaf cover
- Attractive shiny green fruit colour turns to deep red on maturity
- Medium thick, smooth fruit surface and good pungency
- Highly tolerant to leaf curl and anthracnose diseases
- Suitable for green as well as dry chilli purpose





## Hybrid Chilli NCH-1544 (Nirmal Deluxe)

### Characteristics

Plant type.....Semi spreading  
Fruit colour.....Dark green  
Fruit length (cm).....16-18

### Special features

- Mid-tall, semi spreading plants with concentrated fruit bearing ability
- Attractive dark green fruit colour turning deep red on maturity
- Extra long, thick, wrinkled, straight and pungent fruits
- Highly tolerant to anthracnose and phytophthora blight diseases
- Suitable for dry chilli purpose due to good colour retention

## Hybrid Chilli NCH-587

### Characteristics

Plant type.....Tall, Erect  
Fruit colour.....Medium shiny green  
Fruit length (cm).....12-14

### Special features

- Tall, erect sturdy plant type with prolific yielding ability
- Shiny green fruits with semi wrinkled fruit surface
- Deep red coloured fruits with good colour retention
- Highly tolerant to Chilli leaf curl virus disease
- Suitable for both green and dry chilli purpose
- Govt. Notified hybrid through AICRP (VC)





## Hybrid Chilli NCH-1648

### Characteristics

Plant type.....Mid-tall & Semi spreading  
Fruit colour.....Shiny green  
Fruit length (cm).....12-14

### Special features

- Mid-tall, semi-spreading plant type and produces uniform fruits
- Attractive, medium shiny green smooth fruit with very thick wall
- High quality fruits with desirable glossy appearance and medium pungency
- Suitable for green chilli purpose

## Cultivation practices for Chilli

**Soil .....**Well drained light to medium heavy fertile soil.

**Seed rate/ha.....**250-300 gm

**Spacing (cm).....**90 x 60 or 75 x 60

### Manures & Fertilizer

Apply 20-25 ton/ha FYM at the time of land preparation. Before transplanting, apply 100 kg N, 100 kg P & 100 kg K, then after 30-35 days apply 100 kg N/ha.

### Irrigation

Don't allow crop to water stress condition as it leads to flower drop so irrigation should be provided regularly according to crop need.

### Plant Protection

**Leaf miner :** Dichlorovos @ 1ml/lit. or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit.

**Aphids, jassids :-**Thiamethoxam 0.66 gm/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Damping off :-** Drench nursery bed with Copper oxychloride @ 2 gm/lit. of water. **Anthracnose :-** Mancozeb @ 2 gm/lit or Copper oxychloride @ 2 gm/lit or Azoxystrobin @ 2 gm/lit. **Phytophthora blight :-** Blitox @ 3 gm/lit.

**Chili masaic :-** Control vector by spraying Imidacloprid @ 6 ml/15 lit or Thiamethoxam @ 7gm/ 15 lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha after transplanting near root zone.
- Apply Nirmal **Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bio force** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



# Sweet pepper



Hybrid Sweet pepper  
**NCCH-399**

## Characteristics

Plant type.....Tall, Medium Spreading  
Fruit colour.....Shiny green  
Fruit length (cm).....20-22

## Special features

- Tall, medium spreading vigorous plant type with profuse branching habit
- Attractive shiny green, medium wrinkled, thick long fruits
- Highly tolerant to leaf curl and powdery mildew diseases
- Excellent shelf life and suitable for long distance transport
- Medium pungent fruits & satiable for fresh green fruits purpose

Hybrid Sweet pepper  
**NCCH-31**

## Characteristics

Plant type.....Mid tall, Sturdy,  
Semi erect  
Fruit colour.....Parrot green  
Fruit length (cm).....18-20

## Special features

- Strong , semi erect plant type with very high yield potential
- Parrot green coloured, thick long fruits.
- Attractive fruits with low pungency and good shelf life
- Highly suitable for fresh green fruit purpose



# Capsicum



## Hybrid Capsicum NCCH-7 (Shabnam)

### Characteristics

Plant type.....Mid-tall, Semi spreading  
Fruit colour.....Shiny green  
Fruit shape.....Square blocky  
Fruit wt. (g).....120-150

### Special Features

- Mid-tall, semi spreading plant type with profuse branching ability
- Dark shiny green uniform square blocky, medium sized attractive fruits
- High yielding hybrid due to more number of fruits per plant
- Excellent keeping quality of self life and suitable for long distant shipping

## Hybrid Capsicum NCCH-705

### Characteristics

Plant type.....Tall, Semi erect  
Fruit colour.....Shiny green  
Fruit shape.....Square blocky  
Fruit wt. (g).....150-200

### Special Features

- Tall, vigorous and semi erect plant type
- Big and attractive shiny green, uniform square blocky fruits with very thick wall
- Very close internode distance and more number of fruits per plant
- Suitable for both polyhouse and open field cultivation
- Excellent selflife & suitable for long distant marketing
- Govt identified hybrid for notification through AICRP (VC)



# Capsicum

## Cultivation practices for Sweetpepper & Capsicum

**Soil.....**Well drained light to medium heavy fertile soil.

**Seed rate/ha.....**250-300 gm

**Spacing (cm).....**90 x 60 or 75 x 60

### Manures & Fertilizer

Apply 20-25 ton/ha FYM at the time of land preparation. Before transplanting, apply 100 kg N, 100 kg P & 100 kg K, then after 30-35 days apply 100 kg N/ha.

### Irrigation

Irrigation should be provided according to soil type. Generally capsicum should be irrigated 8-10 days interval or according to necessity.

### Plant Protection

**Leaf miner :** Dichlorovos @ 1 ml/lit or Chloropyrifos @ 2 ml/lit or Quinolphos 2 ml/lit.

**Aphids, jassids :-**Trident @ 5-7 gm/lit or Thiamethoxam 0.66 gm/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-**Trident @ 5-7 gm/lit or Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Damping off :-** Drench nursery bed with Copper oxychloride @ 2 gm/lit. of water. **Anthrachnose :-** Mancozeb @ 2 gm/lit or Copper oxychloride @ 2 gm/lit or Azoxystrobin @ 2 gm/lit. **Leaf spot:-** Carosendrim @ 1 gm /lit.

**Phytophthora blight:-** Blitox @ 3 gm/lit **Chili masaic :-** Control vector by spraying Imidacloprid @ 6 ml/15 lit or Thiamethoxam @ 7 gm/ 15 lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha after after transplanting near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of Nirmal Bio force @ 2ml/lit at pre-flowering, flowering & fruiting stage.



## *Tomato*





# Tomato



## Hybrid Tomato NTH - 2530

### Characteristics

Growth habit.....Determinate  
Fruit shape.....Flat round  
Fruit weight (g).....80-85  
Fruit firmness.....Medium

### Special features

- Determinate growth habit with strong branching ability
- Flat round fruit shape and deep red colour at maturity with sour taste
- Good firmness and suitable for storage and long distance transport
- Highly tolerant to TyLCV, leaf blight & bacterial wilt diseases
- Recommended for rainy, winter and spring season cultivation

## Hybrid Tomato NTH-3622

### Characteristics

Growth habit .....Semi determinate  
Fruit shape.....Flat round  
Fruit weight (g).....90-100  
Fruit firmness.....Firm

### Special features

- Semi determinate plant growth habit with good foliage coverage
- Medium sized ,flat round shaped fruits and excellent sour taste
- Very good fruit hardness and shelf life so suitable for long transport
- Highly tolerant to TyLCV, early and late blight diseases
- This hybrid performs well in all climatic conditions



# Tomato



## Hybrid Tomato NTH-4520

### Characteristics

Growth habit.....Semi Determinate  
Fruit shape.....Flat Round  
Fruit weight (g).....90-100  
Fruit firmness.....Firm

### Special features

- Semi determinate vigorous growth habit with excellent reflushing ability
- Attractive round shape, deep red coloured sour fruits
- Uniform sized fruits over the harvests
- Very firm fruits with excellent shelf life and good transport ability
- Highly tolerant to TLCV, early & late blight diseases
- Recommended for Rainy & Winter season cultivation

## Hybrid Tomato NTH-3072

### Characteristics

Growth habit.....Determinate  
Fruit shape.....Flat Round  
Fruit weight (g).....75-80  
Fruit firmness.....Firm

### Special features

- Determinate plant growth habit with earliness
- Cluster fruits bearing habit and continuous fruit setting ability
- Flat round shaped attractive uniform sized fruits with green shoulder
- Excellent sour taste with good firmness and suitable for storage and transport
- Recommended for rainy, winter and spring season cultivation
- **Govt. identified hybrid for notification through AICRP(VC)**



# Tomato



## Hybrid Tomato NTH-3104

### Characteristics

Growth habit.....Semi indeterminate  
Fruit shape.....Oval  
Fruit weight (g).....80-90  
Fruit firmness.....Very firm

### Special features

- Semi-indeterminate growth habit with continuous fruit setting ability
- Deep red colour and very good fruit firmness due to thick peel
- Excellent keeping quality and suitable for long distance transportation
- Good tolerance to TyLCV, early and late blight diseases
- Recommended for rainy and winter season cultivation

## Hybrid Tomato NTH-2383

### Characteristics

Growth habit.....Semi indeterminate  
Fruit shape.....Oval  
Fruit weight (g).....100-110  
Fruit firmness.....Very firm

### Special features

- Semi-indeterminate vigorous growth habit with excellent reflushing ability
- Attractive deep red colour fruits with profuse fruit bearing ability
- Very good uniform fruits over the harvests
- Very firm fruits with excellent shelf life and good transport ability
- Highly tolerant to TyLCV, early and late blight diseases
- Recommended for Rainy and Winter season cultivation



# Tomato

## Hybrid Tomato NTH-4574



### Characteristics

Growth habit.....Semi indeterminate  
Fruit Shape.....Oval  
Fruit wt (g).....90-100  
Fruit firmness.....Very firm

### Special Features

- Semi indeterminate growth habit with good reflushing ability
- Attractive deep red coloured, oval firm fruits with profuse fruit bearing ability
- Very good uniform fruit over the harvest
- Highly tolerant to TyLCV diseases
- Recommended for Winter & Summer season cultivation

## Hybrid Tomato NTH-3494

### Characteristics

Growth habit.....Semi indeterminate  
Fruit shape.....Oblong  
Fruit weight (g).....100-110  
Fruit firmness.....Very firm

### Special features

- Semi-indeterminate plant growth habit with good leaf cover
- Big oblong, uniform sized fruits, very good firmness
- Very good shelf life and suitable for long distance transport
- Strong tolerance to TyLCV with wider adaptability
- Recommended for winter and summer cultivation





# Tomato



## Hybrid Tomato NTH-2257

### Characteristics

Growth Habit.....Indeterminate  
Fruit shape.....Round to oblong  
Fruit wt. (g).....80 - 90  
Fruit firmness.....Firm

### Special Features

- Indeterminate growth habit, medium foliage with profuse bearing
- Firm and uniform fruit size
- Excellent shelf life
- Highly tolerance to TyLCV and bacterial wilt diseases.

## Cultivation practices for Tomato

**Soil.....**Well drained and fertile soil is desirable.

**Seed rate/ha.....**150-200 gm

**Spacing (cm).....**90 x 60 or 75 x 60

### Manures & Fertilizer

Apply 25-30 ton/ha FYM at the time of land preparation.

Apply 100 kg N, 100 kg P & 100 kg K before transplanting & after 30-35 days apply 100 kg N/ha.

### Irrigation

Irrigate the crop at an interval of 3-4 days during summer and 10-15 days during winter to maintain the soil moderately wet. During winter, the plants are not irrigated at the time of ripening of fruit.

### Plant Protection

**Leaf miner :** Dichlorvos @ 1 ml/lit or Chlorpyrifos @ 2 ml/lit or Quinalphos 2 ml/lit. **Aphids, jassids :** Thiamethoxam 0.66 gm/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Damping off and root rot:-** Drench nursery bed with Copper oxychloride @ 2 gm/lit. of water.

**Late blight :-** Mancozeb @ 2 gm/lit or Copper oxychloride @ 2 gm/lit.

**Early blight :-** Difenoconazole @ 0.5 ml/lit or Mancozeb and Metalaxyl-M @ 2 gm/lit or Clorothalonil

@ 2 gm/lit or Azoxystrobin @ 2gm/lit. **Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin

@ 2 ml/lit. **TyLCV :-** control the vector white fly:- Difenthiuron @ 1gm/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha after transplanting near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

## *Ridge gourd*



# Ridge gourd



## Hybrid Ridge gourd NRGH - 22 (Rajani)

### Characteristics

Fruit length (cm).....35-40  
Fruit weight (g).....130-150  
Fruit shape.....Straight

### Special features

- Strong & vigorous vine growth with high fruit setting
- Long shiny green coloured fruits
- Uniform sized straight attractive fruits
- Hybrid ready for first harvest from 50-55 days after sowing
- Excellent keeping quality and taste
- Tolerant to DM, PM and Mosaic virus diseases

## Hybrid Ridge gourd NRGH - 744

### Characteristics

Fruit length (cm).....30-35  
Fruit weight (g).....120-130  
Fruit shape.....Straight

### Special features

- Dark green coloured medium long fruits
- Very tender, straight and uniform sized quality fruits
- Fruits ready to first harvest from 45-50 days after sowing
- Tolerant to PM , DM and CMV diseases
- Wider adaptability, Suitable for storage and transport



# Ridge gourd



## Hybrid Ridge gourd NRGH - 370

### Characteristics

Fruit length (cm).....25-30  
Fruit weight (g).....110-120  
Fruit shape.....Straight

### Special features

- Shiny green, medium long, uniform straight, attractive tender fruits
- Hybrid ready for first harvest from 45-50 days after sowing
- Wider adaptability and good fruit setting in high temperature
- Tolerant to PM, DM and highly tolerant to CMV disease

## Hybrid Ridge gourd NRGH - 726

### Characteristics

Fruit length (cm).....30-35  
Fruit weight (g).....110-120  
Fruit shape.....Straight

### Special features

- Dark green, straight, long attractive tender fruits
- Hybrid ready for first harvest from 45-50 days after sowing
- Excellent keeping quality and taste
- Tolerant to PM, DM and CMV diseases
- Wider adaptability & good fruit setting in high temperature





# Ridge gourd



## Ridge gourd NRG - 9

### Characteristics

Fruit length (cm).....30-35  
Fruit weight (g).....130-140  
Fruit shape.....Straight long

### Special features

- Straight, long, shiny green, tender fruits
- Prolific fruit bearing and fruits ready for first harvest from 45-50 days after sowing
- Firm fruit surface with good keeping quality
- Tolerant to DM, PM and CMV diseases

## Cultivation practices for Ridge gourd

**Soil.....**Medium heavy well drained fertile soil.

**Seed rate/ha.....**1.5-2.0 kg

**Spacing (cm).....**150 x 60 or 120 x 60

### Manures & Fertilizer

- Apply 15-20 ton/ha. FYM at the time of land preparation
- After 10 days of sowing, apply 100 kg N, 80 kg P & 80 kg K, then after 35 days apply 100 kg N/ha.

### Irrigation

During rainy season irrigation may be required during initial growth period. In summer irrigation should be given regularly at 5-7 days interval or according to crop need.

### Plant Protection

**Leaf miner :** Dichlorovos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit.

**Aphids, jassids :** Thiamethoxam 0.66 gm/lit.

**White fly :** Difenthiuron @ 12.5 gm/15 lit. **Thrips :** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb 2 gm/lit or Tebuconazole @ 1 gm/lit.

**Fusarium wilt :** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit.

**Powdery mildew :** Tebuconazole @ 1 gm/lit or Difenconazole @ 0.5 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method.
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

## *Bottle gourd*



# Bottle gourd



## Hybrid Bottle gourd NBBH-48 (Vikram)

### Characteristics

Fruit length (cm).....25-30  
Fruit weight (g).....800-900  
Fruit colour.....Shiny light green  
Fruit shape.....Cylindrical

### Special features

- Vigorous and strong vine growth with good branching habit
- Shiny light green, cylindrical uniform export quality fruits
- Hybrid ready for first harvest from 55-60 days after sowing
- Uniform straight, very tender, attractive fruits
- Excellent keeping quality and suitable for shipping
- Highly tolerant to fusarium wilt, powdery mildew and CMV diseases

## Hybrid Bottle gourd NBBH-168 (Virat)

### Characteristics

Fruit length (cm).....30-40  
Fruit weight (g).....700-800  
Fruit colour.....Shiny parrot green  
Fruit shape.....Cylindrical

### Special features

- Shiny Parrot green, uniform straight attractive fruits
- Good branching habit and prolific fruit bearing ability
- Thin tender attractive long fruits
- Fruits ready for first harvest from 55-60 days after sowing
- Good keeping quality and suitable for long distance shipping
- Tolerant to fusarium wilt, PM and CMV diseases



# Bottle gourd



## Hybrid Bottle gourd NBBH-200 (Ramdev)

### Characteristics

Fruit length (cm).....25-30  
Fruit weight (g).....800-900  
Fruit colour .....Shiny parrot green  
Fruit shape.....Cylindrical

### Special features

- Shiny parrot green, straight, cylindrical, attractive quality fruits
- Excellent continuous fruiting ability
- Hybrid ready for first harvest from 55-60 days after sowing
- Good keeping and shipping quality
- Tolerant to fusarium wilt, PM, DM and CMV diseases

## Bottle gourd Variety (OP) NBBL-12 (Raja)

### Characteristics

Fruit length (cm).....20-25  
Fruit weight (g).....600-700  
Fruit colour.....Shiny light green  
Fruit shape.....Cylindrical

### Special features

- Shiny light green tender fruits
- Cylindrical uniform attractive fruits
- Fruits are ready for first harvest from 54-58 days after sowing
- Tolerant to fusarium wilt and CMV diseases





# Bottle gourd

## Cultivation practices for Bottle gourd

**Soil.....**Medium to heavy fertile soil having good drainage.

**Seed rate/ha.....**1.50-2.00 kg

**Spacing (cm).....**180 x 90 or 180 x 60

**Manures & Fertilizer.....**Apply 15-20 ton/ha. FYM at the time of land preparation.  
After 10 days of sowing, apply 100 kg N, 80 kg P & 80 kg K, then after 45 days apply 100 kg N/ha.

### Irrigation

Crop should be irrigated at 8 days interval or according to soil type and necessity.

### Plant Protection

**Leaf miner:** Dichlorvos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit. **Aphids, jassids :-** Thiamethoxam 0.66 gm/lit

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb @ 2 gm/lit or Tebuconazole @ 1 gm/lit.

**Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit.

**Powdery mildew :-** Tebuconazole @ 1 gm/lit or Difenconazole @ 0.5 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



## *Bitter gourd*



# Bitter gourd



## Hybrid Bitter gourd NBGH-167 (Savitri)

### Characteristics

Fruit length (cm).....	15-20
Fruit weight (g).....	80-100
Fruit colour.....	Dark green
Fruit shape.....	Spindle

### Special features

- Dark shiny green, spindle shaped, sharp prickled medium long fruits
- Hybrid ready for first picking from 55-60 days after sowing
- Uniform sized attractive fruits and excellent keeping quality
- Very high yielding hybrid due to profuse fruit bearing
- Tolerant to PM, DM and CMV diseases
- **Notified hybrid (Govt. of India).**

## Hybrid Bitter gourd NBGH - 815

### Characteristics

Fruit length (cm).....	8-10
Fruit weight (g).....	50-60
Fruit colour.....	Dark green
Fruit shape.....	Short Spindle (Chuva type)

### Special features

- Dark green, very short, spindle shape, chuva type and sharp prickled fruits
- Profuse fruit bearing habit and wider acceptance
- This hybrid ready for first harvest from 55-60 days after sowing
- Excellent shelf life and suitable for long distance market
- Highly tolerant to PM, DM and CMV diseases



# Bitter gourd

## Hybrid Bitter gourd NBGH - 951



### Characteristics

Fruit length (cm).....15-20  
Fruit weight (g).....100-110  
Fruit colour.....Very dark green  
Fruit shape.....Straight Long

### Special features

- Strong and vigorous plant growth with prolific fruit bearing
- Very dark green, straight long, very sharp prickled attractive fruits
- Hybrid ready for first harvest within 55-60 days after sowing
- Tolerant to PM , DM and CMV diseases
- High yielding hybrid with wider adaptability

## Hybrid Bitter gourd NBGH-1067 (Dolly)

### Characteristics

Fruit length (cm).....20-25  
Fruit weight (g).....120-130  
Fruit colour.....Shiny green  
Fruit shape.....Long

### Special features

- Shiny green, medium sharp prickled, thick long attractive fruits
- Wider adaptability with prolific fruit bearing ability
- Hybrid ready for first harvest within 55-60 days after sowing
- Excellent keeping quality and suitable for long distance market
- Tolerant to DM, PM and CMV diseases





# Bitter gourd



## Hybrid Bitter gourd NBGH - 676

### Characteristics

Fruit length (cm).....	30-35
Fruit weight (g).....	130-140
Fruit colour.....	Dark green
Fruit shape.....	Extra long

### Special features

- Extra long, sharp prickled, dark green coloured attractive fruits
- Fruits ready for first harvest from 50-55 days after sowing
- Prolific fruiting habit with wider adaptability
- Tolerant to PM, DM and CMV diseases

## Hybrid Bitter gourd NBGH - 1190

### Characteristics

Fruit Length (cm).....	15-20
Fruit Weight (gm).....	110-120
Fruit colour.....	Dark green
Fruit shape.....	Spindle

### Special Features

- Strong and vigorous plant growth with prolific fruit bearing
- Dark green, spindle shape, long, sharp prickled attractive glossy fruits.
- Hybrid ready for first harvest within 50-55 days after sowing
- Highly tolerant to DM, BGMV & CMV diseases.
- High yielding hybrid due to excellent virus tolerance and wider adaptability.



# Bitter gourd



## Hybrid Bitter gourd NBGH-470 (Aparva)

### Characteristics

Fruit length (cm).....	25-30
Fruit weight (g).....	120-130
Fruit colour.....	Shiny green
Fruit shape.....	Long

### Special features

- Dark shiny green, medium thick long sharp prickled fruits
- Uniform sized, tender attractive fruits
- Fruits ready for first harvest within 55-60 days after sowing

## Hybrid Bitter gourd NBGH-517 (Everest)

### Characteristics

Fruit length (cm).....	20-25
Fruit weight (g).....	100-120
Fruit colour.....	Shiny White
Fruit shape.....	Straight Long

### Special features

- Shiny white with slight green shaded, sharp prickled, long fruits
- Profuse bearing and attractive tender fruits
- Hybrid ready for first harvest within 55-60 days after sowing
- Tolerant to CMV and PM diseases



# Bitter gourd

## Bitter gourd NBG-162 (Raksha)



### Characteristics

Fruit length (cm).....	10-15
Fruit weight (g).....	70-80
Fruit colour.....	Dark green
Fruit shape.....	Spindle

### Special features

- Dark green, spindle shaped, sharp prickled fruits
- Fruits ready for first harvest within 55-60 days after sowing
- High yield with attractive fruits

## Cultivation practices for Bitter gourd

**Soil.....**Medium heavy well drained fertile soil.

**Seed rate/ha.....**1.5-2.0 kg

**Spacing (cm).....**150 x 60 or 120 x 60

### Manures & Fertilizer

Apply 15-20 ton/ha. FYM at the time of land preparation

After 10 days of sowing, apply 100 kg N, 80 kg P & 80 kg K, then after 35 days apply 100 kg N/ha.

### Irrigation

During rainy season irrigation may be required during initial growth period. In summer irrigation should be given regularly at 5-7 days interval or according to crop need.

### Plant Protection

**Leaf miner:** Dichlorovos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolpos 2 ml/lit. **Aphids, jassids :-** Thiamethoxam 0.66 gm/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb 2 gm/lit or Tebuconazole @ 1 gm/lit.

**Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit. **Powdery mildew :-** Tebuconazole @ 1 gm/lit or Difenoconazole @ 0.5 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

## *Sponge gourd*





# Sponge gourd



## Hybrid Sponge Gourd NSGH-88

### Characteristics

Fruit length (cm).....20-25  
Fruit weight (g).....100-120  
Fruit colour .....Shiny green

### Special features

- Shiny green, medium long, very tender, non spongy, attractive fruits
- Fruits ready for first harvest from 45-50 days after sowing
- Good keeping quality and suitable for distant market
- Tolerant to PM, DM & CMV diseases

## Hybrid Sponge Gourd NSGH-341

### Characteristics

Fruit length (cm).....25-30  
Fruit weight (g).....130-150  
Fruit colour.....Dark green

### Special features

- Uniform straight, dark green, long tender fruits
- Hybrid ready for first harvest from 45-50 days after sowing
- Continuous fruiting habit due to refushing ability
- Tolerant to PM, DM and CMV diseases



# Sponge gourd



## Hybrid Sponge Gourd NSGH-393

### Characteristics

Fruit length (cm).....25-30  
Fruit weight (g).....140-150  
Fruit colour.....Shiny green

### Special features

- Long, shiny green, straight attractive tender fruits
- Prolific and continuous fruiting habit
- Hybrid ready for first harvest from 40-45 days after sowing
- Highly tolerant to PM, DM and CMV diseases

## Hybrid Sponge Gourd NSGH-21 (Champa)

### Characteristics

Fruit length (cm).....20-25  
Fruit weight (g).....120-130  
Fruit colour.....Dark green

### Special features

- Long straight, dark green, uniform tender, non spongy attractive fruits
- Hybrid ready for first harvest from 45-50 days after sowing
- Tolerant to DM and CMV diseases



# Sponge gourd



## Hybrid Sponge Gourd NSGH-309

### Characteristics

Fruit length (cm).....15-20  
Fruit weight (g).....110-120  
Fruit colour.....Pale green

### Special features

- Pale green, black seeded, straight tender attractive fruits
- Hybrid ready for first harvest from 45-50 days after sowing
- Tolerant to PM and CMV diseases

## Hybrid Sponge Gourd NSGH-389

### Characteristics

Fruit length (cm).....20-25  
Fruit weight (g).....120-130  
Fruit colour.....Pale green

### Special features

- Pale green, white seeded, straight uniform sized tender fruits
- Fruit ready for first harvest within 45-50 days after sowing
- Excellent taste and keeping quality
- Tolerant to PM and CMV diseases



# Sponge gourd



## Sponge Gourd NSG-28

### Characteristics

Fruit length (cm).....20-25  
Fruit weight (g).....100-120  
Fruit colour.....Shiny green

### Special features

- Shiny green, medium long quality fruits
- First picking can be done from 40-45 days after sowing
- Profuse fruit bearing, continuous fruiting habit
- Excellent taste and keeping quality
- Tolerant to DM and CMV diseases

## Sponge Gourd NSG-99 (Heena)

### Characteristics

Fruit length (cm).....15-20  
Fruit weight (g).....90-100  
Fruit colour.....Pale green

### Special features

- Pale green, black seeded medium long cylindrical fruits
- First harvesting can be done from 45-50 days after sowing
- Highly tolerant to PM, DM and CMV diseases





# Sponge gourd

## Cultivation practices for Sponge gourd

**Soil** .....Medium heavy well drained fertile soil.

**Seed rate/ha**.....1.5 - 2.0 kg

**Spacing (cm)**.....150 x 60 or 120 x 60

**Manures & Fertilizer**.....15-20 ton/ha. FYM at the time of land preparation.  
After 10 days of sowing apply 100 kg N, 80 kg P & 80 kg K and after 35 days apply 100 kg N/ha.

### Irrigation

During rainy season irrigation may be required during initial growth period. In summer irrigation should be given regularly at 5-7 days interval or according to crop need.

### Plant Protection

**Leaf miner:** Dichlorovos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit.

**Aphids, jassids :-** Thiamethoxam 0.66 gm/lit **White fly :-** Difenthiuron @ 12.5 gm/15 lit.

**Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb 2 gm/lit or Tebuconazole @ 1 gm/lit.

**Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit.

**Powdery mildew :-** Tebuconazole @ 1 gm/lit or Difenconazole @ 0.5 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



## *Cucumber/Longmelon*



# Cucumber



## Hybrid Cucumber NCH-388

### Characteristics

Fruit colour.....Dark Green  
Fruit length (cm).....18-20  
Fruit weight (g).....100-120

### Special features

- Dark green, cylindrical, uniform sized, attractive tender fruits
- Very crispy taste and excellent keeping quality
- Fruits ready for first harvest from 50-55 days after sowing
- Tolerant to fusarium wilt, PM, DM and CMV diseases

## Hybrid Cucumber NCH-311

### Characteristics

Fruit colour.....Light Green  
Fruit length (cm).....18-20  
Fruit weight (g).....100-120

### Special features

- Light green with white striped, uniform cylindrical quality fruits
- Very tender, crispy & very attractive fruits
- Hybrid ready for first harvest from 50-52 days after sowing
- Tolerant to fusarium wilt, PM and DM diseases
- Not recommended for spring season cultivation





# Cucumber/ Long melon



## Hybrid Cucumber NCH-527

### Characteristics

Fruit colour.....Greenish white  
Fruit length (cm).....15-18  
Fruit weight (g).....100-120

### Special features

- Uniform cylindrical, greenish white fruits
- Very attractive, crispy tender fruits
- Gynoeceious base hybrid with prolific fruit bearing
- Tolerant to fusarium wilt, PM and CMV diseases
- Not recommended for winter cultivation

## Hybrid Long melon NCH-125

### Characteristics

Fruit colour.....Light green with dark green spots  
Fruit length (cm).....25-30  
Fruit wt (g).....140-150

### Special Features

- Uniform sized fruits having light green colour with dark green spots
- Very long tender attractive fruits
- Profuse fruit bearing & high yielding hybrid
- Very crispy and excellent taste
- Non bitter taste in all season
- Highly tolerant to DM & CMV diseases





# Long melon



## Long melon

### NCS-61 (Nagini)

#### Characteristics

Fruit colour.....Light green  
Fruit length (cm).....35-40  
Fruit weight (g).....200-250

#### Special features

- Light green, very tender, long, uniform sized, attractive fruits
- Fruits ready for first harvest from 50-55 days after sowing
- Highly tolerant to fusarium wilt, powdery mildew and CMV diseases
- Recommended for spring season cultivation

## Cultivation practices for Cucumber & Long melon

**Soil**.....Medium heavy well drained fertile soil.

**Seed rate/ha**.....1.0 - 1.5 kg

**Spacing (cm)**.....150 x 60 or 120 x 90

**Manures & Fertilizer**.....Apply 15-20 ton/ha. FYM at the time of land preparation  
Apply 100 kg N, 80 kg P & 80 kg K after 10 days of sowing and after 30 days apply 100 kg N/ha.

#### Irrigation

During rainy season irrigation may be required during initial growth period. In summer irrigation should be given regularly at 5-7 days interval or according to crop need.

#### Plant Protection

**Leaf miner** : Dichlorovos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit.

**Aphids, jassids** :- Thiamethoxam 0.66 gm/lit. **White fly** :- Difenthiuron @ 12.5 gm/15 lit.

**Thrips** :- Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew** :- Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb @ 2 gm/lit or Tebuconazole @ 1 gm/lit.

**Fusarium wilt** :- Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit. **Powdery mildew** :- Tebuconazole or Difenoconazole @ 0.5 ml/lit.

**Angular leaf spot** :- Streptomycin sulfate @ 6 gm/15 lit.

#### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



## Tinda NRL-3 (Gabaru)

### Characteristics

Fruit colour.....Shiny light green  
Fruit shape.....Round  
Fruit wt. (gm).....80 - 100

### Special Features

- Shiny green, hairy, tender round, delicious and attractive fruits
- Excellent taste & keeping quality
- Fruit ready for harvest from 50-55 days after sowing
- Highly tolerant to wilt disease
- Very high yielding

## Cultivation practices for Round gourd (Tinda)

**Soil**.....Medium heavy well drained fertile soil.

**Seed rate/ha**.....1.50-2.00 kg

**Spacing (cm)**.....150 x 60 or 120 x 90

**Manures & Fertilizer**.....Apply 15-20 ton/ha. FYM at the time of land preparation.  
After 10 days of sowing, apply 80 kg N, 60 kg P & 60 kg K, then after 30 days apply 80 kg N/ha.

**Irrigation**.....Roundgourd should be irrigated at 5-6 days interval in summer and according to necessity.

### Plant Protection

**Leaf miner** : Dichlorovos @ 1 ml/lit or Quinolphos 2 ml/lit. **Aphids, jassids** :- Imidacloprid @ 7 ml/ 15 lit.

**White fly** :- Difenthiuron @ 12.5 gm/15 lit. **Thrips** :- Monocrotophos @ 2 ml/lit or Fipronil @ 2 ml/lit.

**Downy mildew** :- Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb @ 2 gm/lit or Tebuconazole @ 1 gm/lit.

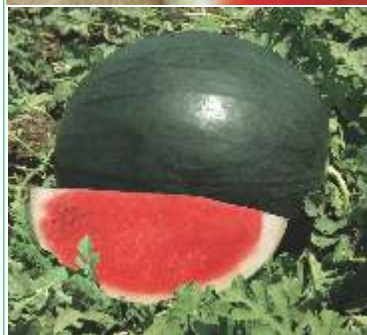
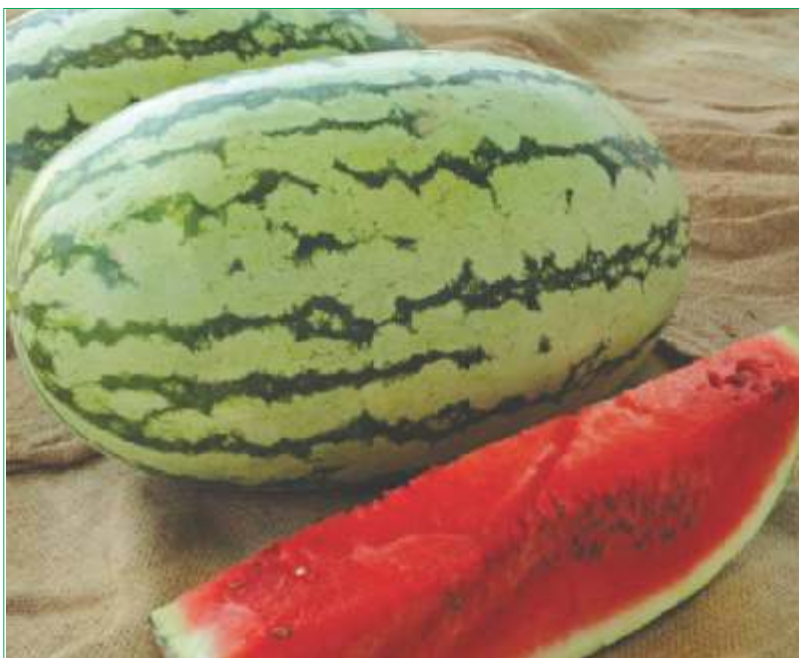
**Fusarium wilt** :- Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit. **Powdery mildew** :- Tebuconazole @ 0.5 ml/lit.

**Alternaria leaf blight**:- Mancozeb and Metalaxyl-M or DM-45 @ 2.5 ml/lit.

### Special Recommendation

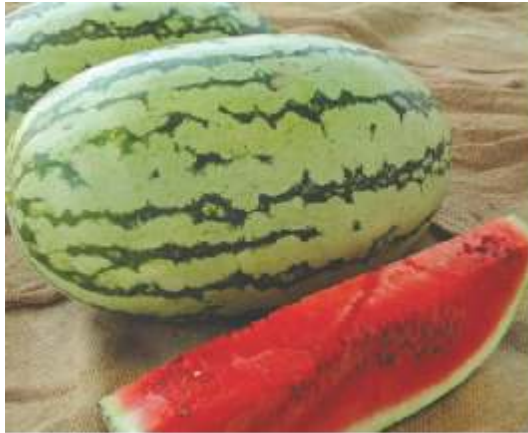
- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

## *Watermelon /Muskmelon*



*Watermelon* *Muskmelon*  
*Muskmelon* *Watermelon*

# Watermelon



## Hybrid Watermelon NWMH - 455

### Characteristics

Fruit colour.....Light green  
with Dark green strips  
Fruit shape.....Oblong  
Fruit wt. (kg).....8-10

### Special features

- Light green with dark green stripped, big uniform, oblong shaped fruits
- Very compact crispy, dark red coloured sweet flesh
- Fruits ready for harvest within 90-95 days after sowing
- Long shelf life and good for long distance transportation
- Highly tolerant to bud necrosis virus and fusarium wilt diseases

## Hybrid Watermelon NWMH-945 (Ice box)

### Characteristics

Fruit colour.....Black  
Fruit shape.....Oblong  
Fruit wt. (kg).....3-4

### Special features

- Early maturity and fruits ready to harvest within 70-75 days after sowing
- Oblong shaped shiny black skinned fruits
- Very dark red, compact, crispy flesh with high TSS and less seed content
- Excellent shelf life and suitable for long distance shipping
- Highly tolerant to fusarium wilt, bud necrosis virus and alternaria blight diseases





# Watermelon



## Hybrid Watermelon NWMH-354

### Characteristics

Fruit colour.....Black  
Fruit shape.....Round  
Fruit wt. (kg).....6-8

### Special features

- Medium big, pure black coloured round shaped attractive fruits
- Dark red coloured crispy, compact flesh with high sugar content
- Fruits ready for harvest from 90-95 days after sowing
- Good rind thickness and excellent shipping ability
- Highly tolerant to bud necrosis & fusarium wilt diseases

## Hybrid Watermelon NWMH-148+

### Characteristics

Fruit colour.....Light green with dark green strips  
Fruit shape.....Oblong  
Fruit wt. (kg).....10-12

### Special features

- Supreme medium maturity hybrid with strong vine
- Light green skin cover with thin dark green strips
- Oblong shape big sized fruits with dark red coloured, compact flesh and high sugar content
- Fruits ready for harvest from 90-95 days after sowing
- Wider adaptability with excellent shipping ability
- Highly tolerant to fusarium wilt and alternaria blight diseases



# Watermelon/ Muskmelon

## Cultivation practices for Watermelon

**Soil.....**Light to medium heavy, well drained fertile soil.

**Seed rate/ha.....**1.0-1.5 kg

**Spacing (cm).....**180 x 60 or 150 x 60

**Manures & Fertilizer.....**Apply 25-30 ton/ha. FYM at the time of land preparation  
Apply 100 kg N, 100 kg P & 100 kg K after 15 days of sowing and after 30 days apply 50 kg N/ha.

### Irrigation

In general irrigation once in 5-6 days is necessary depending upon soil, temperature and location. Sudden wetting and drying of soil should be strictly avoided because it results in to fruit cracking.

### Plant Protection

**Leaf miner :** Dichlorovos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit. **Aphids, jassids :-**Thiamethoxam 0.66 gm/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :-** Mancozeb and Metalaxyl-M 2.5 gm/lit or Tebuconazole @ 1 gm/lit. **Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit. **Powdery mildew :-** Tebuconazole or Difenconazole @ 0.5 ml/lit.

**Alternaria :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or DM-45 @ 2 ml/lit.

**Gummy stem blight:-** Bavistin or Dithane M-45 @ 2 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

## Hybrid Muskmelon

### NMMH-24

#### Characteristics

**Fruit colour.....**Yellow with green strips

**Fruit shape.....**Flat round

**Fruit wt. (g).....**900-1000

**Flesh colour.....**Orange

#### Special features

- Vigorous and strong vine growth
- Flat round, yellow with green striped attractive fruits
- Less seed cavity with very firm dark orange flesh
- Fruits matures within 70-75 days after sowing
- Very high TSS with musky flavor
- Highly tolerant to fusarium wilt, PM and viral diseases



# Muskmelon



## Hybrid Muskmelon NMMH-225

### Characteristics

Fruit colour.....Golden yellow with dense netting  
Fruit shape.....Round  
Fruit wt. (g).....800-900

### Special features

- Round with golden yellow coloured dense netted fruits
- Dark orange colour firm flesh with small seed cavity
- Very sweet taste with wonderful aroma
- Early maturing, high yielding hybrid matures within 65-70 days after sowing
- Good for storage and long transport
- Excellent disease tolerance & wider adaptability

## Hybrid Muskmelon NMMH-203

### Characteristics

Fruit colour.....Creamy yellow with netting  
Fruit shape.....Round to oblong  
Fruit wt. (g).....1000-1100  
Flesh colour.....Orange

### Special features

- Round to oblong shaped, creamy yellow fruits with dense netting
- Small seed cavity, orange colour, firm flesh with excellent aroma and more sweetness
- Uniform sized delicious attractive fruits, matures in 65-70 days after sowing
- Excellent keeping quality & suitable for long distance transportation
- Highly tolerant to gummy stem blight, fusarium wilt, PM and CMV diseases



# Muskmelon



## Hybrid Muskmelon NMMH-247

### Characteristics

Fruit colour.....Creamy yellow  
Fruit shape.....Oval  
Fruit wt. (g).....1000 - 1100  
Flesh colour.....Dark orange

### Special features

- Vigorous plant type and prolific fruit bearing
- Oval shaped uniform sized, creamy yellow fruits with strong & dense white colour netting
- Dark orange coloured, firm flesh with excellent sweetness and strong musky flavour
- Fruits ready to harvest within 70-72 days after sowing
- Excellent shelf life & highly suitable for long distance transportation
- Highly tolerant to fusarium wilt, PM, DM and CMV diseases

## Cultivation practices for Muskmelon

**Soil.....**Light to medium heavy, well drained fertile soil.

**Seed rate/ha.....**0.750- 1.0 kg

**Spacing (cm).....**180 x 60 or 150 x 60

**Manures & Fertilizer.....**Apply 25-30 ton/ha. FYM at the time of land preparation.  
After 10 days of sowing, apply 100 kg N, 100 kg P & 100 kg K, then after 30 days apply 50 kg N/ha.

### Irrigation

Generally irrigation once in 5-6 days is necessary depending upon soil.

### Plant Protection

**Leaf miner :** Dichlorovos @ 1 ml/lit or Chloropyriphos @ 2 ml/lit or Quinolphos 2 ml/lit.

**Aphids, jassids :-**Thiamethoxam 0.66 gm/lit. **White fly :-** Difenthiuron @ 12.5 gm/15 lit.

**Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit. **Downy mildew :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Tebuconazole @ 1 gm/lit **Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit.

**Powdery mildew :-** Tebuconazole or Difenconazole @ 0.5 ml/lit

**Alternaria leaf blight :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or DM-45 @ 2 ml/lit.

**Gummy stem blight :-** Bavistin or DM-45 @ 2 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha through drip or drenching method
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



# Cluster bean



## Cluster bean

### NCB-12 (Nandini)

#### Characteristics

Growth habit.....Tall, erect  
Pod length (cm).....6-7  
Pod pubescence.....Present

#### Special features

- Tall and predominantly single stem plant type
- Pubescent (local type), medium long quality pods
- Excellent organoleptic taste
- Tolerant to powdery mildew disease

**Note :-** avoid sowing during  
15th April to 15th August in heavy  
fertile soil due to more plant vigour

## Clusterbean

### NCB-115

#### Characteristics

Growth habit.....Medium tall  
Pod length (cm).....12-14  
Pod pubescence.....Absent

#### Special features

- Medium tall and predominantly single stem plant type
- Non pubescent, very long, attractive smooth stringless quality pods
- Pods ready for first picking 45-50 days after sowing
- Excellent organoleptic taste
- Tolerant to powdery mildew disease



# Cluster bean/ French bean

## Cultivation practices for Clusterbean

**Soil** .....Medium heavy well drained fertile soil.

**Seed rate/ha**.....8-10 kg

**Spacing (cm)**.....60 x 15 or 45 x 15

**Manures & Fertilizer**.....Apply 25 tones of well composted organic manure should be applied at the time of land preparation. Application of 25 kg N, 60 kg P & 60 kg K fertilizer at the time of sowing & 25 kg N should be applied 25 days after sowing.

**Irrigation**.....Depending on the atmospheric conditions two or three protective irrigations should be given.

### Plant Protection

**Leaf miner:** Dichlorovos @ 1 ml/lit **Aphids, jassids :-** Imidacloprid @ 0.5/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit. **Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or Mancozeb @ 2 gm/lit or Tebuconazole @ 1 gm/lit.

**Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit **Powdery mildew :-** Tebuconazole @ 1 gm/lit.

**Alternaria leaf blight:-** Mancozeb and Metalaxyl-M or DM-45 @ 2.5 ml/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha with organic fertilizer
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.



### French bean

## NFL-75 (Arka Sharad)

### Characteristics

Growth habit.....Determinate

Plant height (cm).....50 - 60

Pod length (cm).....14 - 16

Pods colour.....Light green

Seed colour.....White

### Special Features

- Light green long, tender quality pods
- Stringless round pods
- Excellent taste & quality
- Highly tolerant to disease & pests

## Pea

### Pea NP-20



#### Characteristics

Growth habit.....Semi determinate  
Pod length (cm).....8-10  
Numbers of seeds/pod.....8-10

#### Special features

- Semi determinate growth habit and profuse pods bearing
- Round, firm and attractive light green colour quality pods
- Very sweet grains due to high TSS
- Highly tolerant to powdery mildew and wilt diseases
- Suitable for vegetable purpose

### Cultivation practices for Pea

**Soil.....**Well drained and fertile soil is desirable. but it can grow in different types of soil.

**Seed rate/ha.....**70-80 kg

**Spacing (cm).....**45 x 15

**Manures & Fertilizer.....**Apply 15-20 ton FYM/ha. Should be applied thoroughly at the time of land preparation. At time of sowing, 30 kg N, 30 kg P & 30 kg K/ha, should be applied. After 30 days of sowing apply 30 kg N/ha.

**Irrigation.....**It should be irrigated at intervals of 8-10 days.

#### Plant Protection

**Leaf miner:** Dichlorovos @ 1 ml/lit.

**Aphids, jassids :-** Imidacloprid @ 0.5/lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit.

**Thrips :-** Thiamethoxam 0.66 gm/lit or Fipronil @ 2 ml/lit.

**Downy mildew :-** Mancozeb and Metalaxyl-M @ 2.5 gm/lit or

Mancozeb 2 gm/lit or Tebuconazole @ 1 gm/lit

**Fusarium wilt :-** Biosanjivani @ 5+5 gm/lit or Bavistin @ 2 ml/lit

**Powdery mildew :-** Tebuconazole @ 1 gm/lit.

#### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica** @ 250 gm/ ha with organic fertilizer
- 3 foliar spray of **Nirmal Bioforce** @ 2ml/lit at pre-flowering, flowering & fruiting stage.

# Cow pea



## Cow pea NCP-506

### Characteristics

Growth habit.....Semi indeterminate  
Pod length (cm).....24-26  
Seed colour.....White

### Special Features

- Semi indeterminate growth habit
- Very long (24-26 cm) green pods
- White with brown eye bold seed
- Very high yielding variety
- Suitable for dual purpose
- High tolerant to YMV & PM diseases

## Cultivation practices for Cowpea

**Soil.....**Well drained and fertile soil is desirable. but it can grow in different types of soil.

**Seed rate/ha.....**15-20 kg

**Spacing (cm).....**45 x 10

**Manures & Fertilizer.....**Apply 15-20 ton FYM/ha. Should be applied thoroughly at the time of land preparation.  
Apply N-25 kg/ha & P-25 kg/ha

**Irrigation.....**Give irrigation immediately after sowing and on 3rd day, there after once a week .

### Plant Protection

**Aphids :-** Dimethoate 30 EC 1 ml/lit. Or methyl demeton 25 EC 1 ml/lit.

**Pod borer :-** Quinalphos 25 EC 2 ml/lit.

**Powdery mildew:-** Suphur 25 kg/ha. Or Spary weltable suphur 29/lit.

### Special Recommendation

- Apply 25 kg **Nirmal Bio Power Gold** granule per ha at the time of sowing near root zone
- Apply **Nirmal Rizamica @** 250 gm/ ha with organic fertilizer
- 3 foliar spray of **Nirmal Bioforce @** 2ml/lit at pre-flowering, flowering & fruiting stage.



# Radish



## Radish NRD-45

### Characteristics

Growth habit.....Semi spreading  
Leaf blade.....Serrated  
Root length (cm).....35-40

### Special features

- Uniform straight, snow white coloured roots with mild pungency
- Root contains watery flesh with less self core
- Roots ready for first harvest within 45-50 days after transplanting
- Recommended for winter season cultivation

## Radish NRD-48

### Characteristics

Growth habit.....Erect  
Day to 1st. harvest.....40 - 45  
Leaf blade.....Palmete  
Root length (cm).....25 - 30

### Special Features

- Uniform straight root with mild pungent taste
- Snow white coloured roots with watery fleshiness
- Good keeping quality.
- Recommended for kharif season cultivation



## Cultivation practices for Radish

**Soil.....**Medium heavy well drained fertile soil.

**Seed rate/ha.....**9-10 kg

**Spacing (cm).....**30 x 10 or 20 x 5

### Manures & Fertilizer

Apply FYM 20-25 ton/ha at the time of land preparation

- Apply 25 kg N, 100 kg P and 50 kg K/ha at the time of sowing and 25 kg N/ha after 30 days.

### Irrigation

Radish crop should be irrigated immediately after sowing, on third day and then once in 5-7 days.

### Plant Protection

**Sucking pest:** Imidacloprid 0.5 ml/lit or Thiamethoxam @ 7 gm/15 lit.

**White fly :-** Difenthiuron @ 12.5 gm/15 lit or

**Thrips :-** Fipronil @ 2 ml/lit

**Damping off :-** Drench with Copper oxychloride @ 2 gm/lit of water

**White rust :-** Mancozeb @ 2 gm /lit or Azoxystrobin @ 2 gm/lit.

### Special Recommendation

- 3 foliar spray of Nirmal Bioforce @ 2ml/lit at pre-flowering, flowering & fruiting stage.

# Back Inner





# Back Page



## **Nirmal Seeds Pvt. Ltd.**

(An ISO 9001:2015 Certified Company)

### **Registered and Administrative Office:**

P.O.Box No.: 63, Bhadgaon Road, Pachora-424201, Dist. Jalgaon (MH),

**INDIA.** Phone: (02596) 244366, 244396 Fax.: (02596) 244045,

e-mail: [info@nirmalseedsindia.com](mailto:info@nirmalseedsindia.com) CIN-U01100MH1988PTC049277.

[www.nirmalseedsindia.com](http://www.nirmalseedsindia.com)