Fifteen new crop varieties Released from IARI
October-December, 2015

1. Mustard (Pusa Double Zero Mustard 31)
2. Wheat
   - HD CSW 18
   - HD 3117
3. Cauliflower
   - Pusa Snowball Hybrid1
   - Pusa Kartiki
4. Carrot (Pusa Kulfi)
5. Radish (Pusa Sweta)
6. Tomato (Pusa Cherry Tomato 1)
7. Summer squash (Pusa Pasand)
8. Bitter gourd
   - Pusa Rasdar
   - Pusa Purvi
9. Sweet orange
   - Pusa Round
   - Pusa Abhinav
10. Gladiolus
    - Pusa Srijan
    - Pusa Unnati
11. Chickpea (BG 3022) was released by CVRC (central variety release committee)
**Pusa Double Zero Mustard 31**

Pusa Double Zero Mustard 31 is the first double zero (Erucic acid <2% and glucosinolates < 30ppm) Indian mustard variety of the country released for timely sown irrigated conditions of National Capital Region of Delhi and adjoining areas in the states of Haryana, Rajasthan and UP. It has an average seed yield of 2379 kg/ha in multi-location coordinated trials and 2518 kg/ha under Delhi conditions. Its seed coat colour is yellow and seed contains 40.56% oil content. It has compact and erect plant type and matures in 144 days. Improved oil and seed meal quality (Canola quality) makes this variety beneficial for farmers, traders and consumers.

**HD CSW 18**

Wheat variety HD CSW 18 was released for early sown under conservation agriculture condition of Delhi and NCR region. It has an average yield of 6.29 t/ha with wide adaptability. It has long ear head with long grain (40 g test weight). It is highly resistant to brown rust and moderately resistant to yellow rust.

**HD 3117**

Wheat variety HD 3117 was released for conservation agriculture under late sown irrigated conditions of Delhi and NCR region. Average yield of this variety under late sown (after 15 Dec.) condition is 4.78 t/ha under tilled condition and 4.79 t/ha under conservation agriculture condition. Its grain is amber white with around 11.7% protein content. It is free from brown and yellow rusts under natural condition. It is highly tolerant to Karnal bunt.

**BG 3022**

Extra-large seeded Kabuli chickpea variety BG 3022 has been released for timely sown irrigated conditions of north west plains zone (NWPZ). It has 100-seed weight of 36 g with an average grain yield of 1.8 t/ha which is 10.4 % higher than that of the best check.
Pusa Snowball Hybrid 1

Pusa Snowball Hybrid 1 is the first indigenously developed snowball cauliflower hybrid using CMS system. Its marketable yield is 50-55 t/ha with average curd weight of about 1.5 kg. The curds of this variety are very compact, attractive, snow white in colour with self branching habit. It has field tolerance to black rot disease.

Pusa Kartiki

Cauliflower Variety Pusa Kartiki has marketable curd yield of 34.14 t/ha at Delhi location with curd weight of 500-600 g. This variety is tolerant to high temperature and humidity and is resistant to black rot disease. It is suitable for June to October under Delhi and North Indian conditions. Pusa Kulfi is the first pale mustard colour variety of carrot with an average root yield of 27.94 t/ha. Its marketable maturity period is 90-100 days, and roots are better in length and diameter. This variety is rich in nutrients like carotenoids, lutein, thiamine and niacin.

Pusa Sweta

Radish variety Pusa Sweta has an average root yield of 44.04 t/ha which is higher than the prevailing popular varieties of radish. It takes 50-55 days to marketable maturity and can be kept in field for couple of weeks with yield advantage of 15-18 t/ha. Its roots are pith free, white coloured, broad and cylindrical in shape. It is better in quality.

Pusa Cherry

Pusa Cherry Tomato 1 is the first indigenous cherry tomato variety suitable for green house environment. Its average yield is 15-18 t/1000 m area with an average per plant yield of 4-5 kg. Its first fruit harvest is at 70-75 days and crop lasts for 9-10 months. Its plant is of indeterminate habit with an average vine length of 9-13 m. It is tolerant to root-knot nematode.
Pusa Pasand

Pusa Pasand is a fattish round variety of summer squash for spring season conditions of north India both under open and protected cultivation. It has the average fruit yields of 16.3, 24.1 and 22.9 t/ha during spring summer under open field condition, naturally ventilated polyhouse and plastic low tunnel during winter season, respectively. Its fruits are ready for harvest in 45-50 DAS. It has an average fruit weight of 75-80 g with continuous fruit setting which is a desirable trait.

Pusa Rasdar

Bitter gourd variety Pusa Rasdar has the average yields of 454 kg/100m2 and 407 kg/100m2 under insect proof net and polyhouse conditions, respectively. It is an extra early (41-45 days for fruit harvest) variety for protected cultivation. It has an average fruit weight of 110 g. Its fruits are smooth, non-pricked with tender skin and fleshy.

Pusa Purvi

Pusa Purvi is the first small fruit variety of bitter gourd with an average fruit yield of 10.5 t/ha. Its fruits are small in size (4-5 cm long and 3-4 cm diameter) having pointed tubercles with crispy flesh and are suitable for stuffed cuisine. Its fruits contain more calcium, manganese, zinc and iron. Their antioxidants activities like vitamin C, CUPRAC and FRAP values are significantly high.

Pusa Round (MS 13)

The sweet orange variety Pusa Round (MS 13) has an average fruit yield of 24.43 kg/plant with fruit weight of 268.68 g and 48.26% juice. Its juice has 10.14oB TSS and this variety can be grown on closer spacing up to 400 plants/ha.
**Pusa Abhinav (ALC 40)**

The acid lime variety Pusa Abhinav (ALC 40) has an average fruit yield of 13.9 kg/plant. It has 365 fruits per plant with average fruit weight of 38.10 g. It has high juice content (58.86%) with 8.71 oB TSS. This variety can be grown on closer spacing up to 400 plants/ha. It is resistant to fruit cracking.

**Pusa Srijan**

Gladiolus hybrid Pusa Srijan produces spikes of more than 85 cm length in which florets ranges from 15-17 in number which lasts for more than 9 days in vase. Its rachis ength is more than 45 cm. It is a very good multiplier producing 3.10 corms and 27.44 cormels from each mother corm. This is an early flowering hybrid which takes 73 days to first floret opening. Its floret colour is attractive purple group (N-78B) (Dark pink/mauve). It is highly suitable for garden display/kitchen garden and landscaping.

**Pusa Unnati**

Gladiolus hybrid Pusa Unnati produces spikes of more than 115 cm length in which florets ranges from 16-20 in number which lasts for more than 9 days in vase. Its rachis length is more than 56 cm. It is a very good multiplier producing 2.55 corms and 49.78 cormels from each mother corm. It takes 107 days to first floret opening. Its floret colour is red purple group (72B) (inner two tepals are light white at base). It is highly suitable for cut flowers and bouquet preparation.