

# Improved / Hybrid Varieties of Sorghum

### **M-35-1**

|                       | Release year  | 1937-38  |
|-----------------------|---|--|
| Dr. M                 | Name of Institute /<br>University   | Department of Agril., Bombay State   |
| A BAR                 | Soil type   | Medium deep  |
|                       | Climate   | Dry Rainfed  |
| M.35-1                | Sowing Time /<br>Planting period  | 2 <sup>nd</sup> fortnight of September to 2 <sup>nd</sup> fortnight of October |
| Seed Rate (Per acre)  | 4 kg  |  |
| Crop duration         | 120-125 Days  |  |
| Productivity          | 15-18 q/ha.   |  |
| Characters / features | Semi- compact, Oval panicle, Pearly white bold and round grains,<br>Drought tolerant, Tolerant to major pest and diseases |  |
| Remark                | Superior grain and fodder quality   |  |

#### Swati (RSV 9R/SPV 504)

|                       | Release year   | 1984   |
|-----------------------|--|--|
|                       | Name of Institute /<br>University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| E. 24. 25             | Soil type  | Deep Soil  |
| AN 22                 | Climate  | Rabi Season  |
|                       | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre   |  |
| Crop duration         | 120-125 days   |  |
| Productivity          | Grain Yield: 24-28 q/ha.<br>Fodder Yield: 50-60 q/ha.  |  |
| Characters / features | Round bold grain, Tolerant to shoot fly, Tolerant to Charcoal rot,<br>Tolerant to high temperature |  |



| 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | Release year                                   | 1990   |
|--|--|--|
|  | Name of Institute /<br>University              | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|  | Soil type                                      | Medium –deep soil                                      |
|  | Climate  | Kharif Season  |
| SSV84                                    | Sowing Time /<br>Planting period               | 15 <sup>th</sup> June to7 <sup>th</sup> July           |
| Seed Rate (Per acre)                     | 4 kg/ Acre                                     |  |
| Crop duration                            | 120-125 days                                   |  |
|  | Green cane Yield :                             | 30-35 t/ha.  |
| Productivity                             | Grain Yield :                                  | 1.0-1.2 t/ha.  |
|  | Ethanol Yield :                                | 800-1000 Liter/ha                                      |
| Characters / features                    | Non tan pigment, Tu<br>fly, Brix at maturity : | rtle white grain, Moderately tolerant to shoot 18-20 % |

## SSV-84 - Ethanol Purpose

### **Selection-3**

|                       | Release year  | 1994                           |
|-----------------------|---|--------------------------------|
|                       | Name of Institute /<br>University   | MPKV, Rahuri                   |
| Land the tria         | Soil type   | Shallow Soil                   |
| and the second        | Climate   | Rabi Season                    |
| W I V                 | Sowing Time /<br>Planting period  | 15th September to 15th October |
| Seed Rate (Per acre)  | 4 kg/ acre  |                                |
| Crop duration         | 110-115 days  |                                |
| Droductivity          | Grain Yield : 5-6   |                                |
| Productivity          | Fodder Yield: 15-18   |                                |
| Characters / features | Early, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |                                |
| Remark                | Suitable for shallow soil under rainfed condition                           |                                |



|                       | Release year   | 1998 (State level & 2000 at National level)            |
|-----------------------|--|--|
| a a                   | Name of Institute /<br>University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| 1.14 1.24             | Soil type  | Deep Soil  |
| W DELL                | Climate  | Rabi Season  |
|                       | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre   |  |
| Crop duration         | 120-125 days   |  |
| Productivity          | Grain Yield : 25-30 q/ha.<br>Fodder Yield: 70-78 q/ha.   |  |
| Characters / features | Medium bold and pearly white grain, Tolerant to shoot fly,<br>Tolerant to Charcoal rot, Tolerant to Stem borer |  |

### Phule Yashoda (RSV 56/SPV 1359/ CSV 216)

### Phule Mauli (RSLG 262)

|                       | Release year  | 1999   |
|-----------------------|---|--|
|                       | Name of Institute /<br>University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| St. Art.              | Soil type   | Medium Soil  |
| Sec. And              | Climate   | Rabi Season  |
|                       | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre  |  |
| Crop duration         | 110-112 days  |  |
| Productivity          | Grain Yield : 15-18 q/ha.<br>Fodder Yield: 45-50 q/ha.                      |  |
| Characters / features | Early, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |  |



|                       | Release year  | 2004  |
|-----------------------|---|---|
|                       | Name of Institute /<br>University   | Sorghum Improvement Project,<br>MPKV, Rahuri  |
|                       | Soil type   | Medium-Deep Soil                              |
| NNA (SJ S             | Climate   | Kharif Season                                 |
| 制用影响的人体               | Sowing Time /<br>Planting period  | 15 <sup>th</sup> June to 7 <sup>th</sup> july |
| Seed Rate (Per acre)  | 4 kg/ Acre  |   |
| Crop duration         | 115-120 days  |   |
|                       | Green cane Yield : 35-40 t/ha.  |   |
| Productivity          | Grain Yield: .0.8-1.0 t   | /ha.  |
|                       | Ethanol Yield : 1000 to 1200 Liter/ha   |   |
| Characters / features | Non tan pigment, Tolerant to shoot fly, Tolerant to foliar diseases,<br>Brix at maturity : 18-20% |   |

# CSV 19 SS (RSSV 9) - Ethanol Purpose

### Phule Uttara (RSSGV 3) – Hurda Purpose

|                                      | Release year   | 2005   |
|--------------------------------------|--|--|
|                                      | Name of Institute /<br>University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| S KD                                 | Soil type  | Medium/Deep Soil                                       |
|                                      | Climate  | Rabi Season  |
| LAM DOMORY M<br>REDICTABLETY - BOKYS | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)                 | 4 kg/ Acre   |  |
| Crop duration                        | 95-100 days for hurda110-114 days for grain purpose.   |  |
| Productivity                         | Hurda Yield : 20-25 q/ha.<br>Fodder Yield: 50-55 q/ha.   |  |
| Characters / features                | Sweet grain at dough stage, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |  |



| Adama 🚳               | Release year   | 2006   |
|-----------------------|--|--|
|                       | Name of Institute /<br>University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| Section Contraction   | Soil type  | Medium Soil  |
|                       | Climate  | Rabi Season  |
| A CARLER OF           | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre   |  |
| Crop duration         | 118-120 days   |  |
| Productivity          | Grain Yield : 20-25 q/ha.<br>Fodder Yield: 55-60 q/ha.                                     |  |
| Characters / features | Medium bold grain, Tolerant to shoot fly, Tolerant to Charcoal rot,<br>Tolerant to drought |  |

### Phule Chitra (RSV 237/SPV 1546)

# Phule Vasudha (RSV 423/SPV1704)

|                         | Release year  | 2007   |
|-------------------------|---|--|
|                         | Name of Institute /<br>University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| A RECEIPT               | Soil type   | Deep Soil  |
|                         | Climate   | Rabi Season  |
|                         | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate<br>(Per acre) | 4 kg/ Acre  |  |
| Crop duration           | 116-120 days  |  |
| Productivity            | Grain Yield : 25-28 q/ha.<br>Fodder Yield: 55-60 q/ha.  |  |
| Characters / features   | Round and pearly white bold grain, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |  |



|                       | Release year   | 2007   |
|-----------------------|--|--|
|                       | Name of Institute /<br>University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type  | Deep Soil  |
|                       | Climate  | Rabi Season  |
|                       | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre   |  |
| Crop duration         | 118-122 days   |  |
| Productivity          | Grain Yield : 24-28 q/ha.<br>Fodder Yield: 65-70 q/ha.                                 |  |
| Characters / features | Round bold grain, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |  |

### CSV-22 (RSV 491/SPV 1626)

### Phule Anuradha (RSV458/SPV1709)

|                       | Release year  | 2008   |
|-----------------------|---|--|
|                       | Name of Institute /<br>University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type   | Shallow soil   |
| CAR AL                | Climate   | Rabi Season  |
|                       | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre  |  |
| Crop duration         | 105-110 days  |  |
| Productivity          | Grain Yield : 8-10 q/ha.<br>Fodder Yield: 30-35 q/ha.   |  |
| Characters / features | Early. Bolder grain&Pearly white, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant drought |  |



|                       | Release year  | 2010   |
|-----------------------|---|--|
|                       | Name of Institute<br>/ University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type   | Medium to Deep Soil                                    |
| SANA                  | Climate   | Rabi Season  |
|                       | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre  |  |
| Crop duration         | 118-120 days  |  |
| Productivity          | Grain Yield : 40-45 q/ha.   |  |
| -                     | Fodder Yield: 90-100 q/ha.  |  |
| Characters / features | Round bold grain and pearly white, Tolerant to shoot fly, Tolerant to foliar diseases, Tolerant to stem borer |  |

### Phule Revati (RSV1006/SPV1830)

#### Phule Panchami (RPOSV 3) - Popping purpose

|                       | Release year   | 2010   |
|-----------------------|--|--|
|                       | Name of Institute<br>/ University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type  | Medium – Deep soil                                     |
|                       | Climate  | Rabi Season  |
|                       | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre   |  |
| Crop duration         | 118-120 day  |  |
| Productivity          | Grain Yield : 12-14 qt./ha.<br>Fodder Yield: 40-45 qt./ha.                               |  |
| Characters / features | Popping purpose, Tolerant to shoot fly, Tolerant to Charcoal rot,<br>Tolerant to drought |  |



| Phile Suchira         | Release year  | 2012   |
|-----------------------|---|--|
|                       | Name of Institute /<br>University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type   | Medium Soil  |
|                       | Climate   | Rabi Season  |
|                       | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre  |  |
| Crop duration         | 120-125 days  |  |
| Productivity          | Grain Yield : 24-28 q/ha.<br>Fodder Yield: 65-70 q/ha.                                    |  |
| Characters / features | Round bold grain, Tolerant to shoot fly, Tolerant to Charcoal rot,<br>Tolerant to drought |  |

### Phule Suchitra (RSV1098/SPV2048)

## Phule Godhan (CSV-30 F / RSSV-167 / SPV-2057)

|                       | Release year                      | 2013  |
|-----------------------|-----------------------------------|---|
|                       | Name of Institute /<br>University | Sorghum Improvement Project,<br>MPKV, Rahuri  |
|                       | Soil type                         | Medium Soil                                   |
|                       | Climate                           | Kharif Season                                 |
|                       | Sowing Time /<br>Planting period  | 15 <sup>th</sup> June to 7 <sup>th</sup> July |
| Seed Rate (Per acre)  | 12 kg/ Acre                       |   |
| Crop duration         | 76-80 days                        |   |
| Productivity          | Fodder Yield: 50-60 q/ha.         |   |
| Characters / features |                                   |   |
| Remark                |                                   |   |



### Phule Madhur (RSSGV 46) – Hurda Purpose

|                       | Release year   | 2015   |
|-----------------------|--|--|
|                       | Name of Institute<br>/ University  | Sorghum Improvement Project,<br>MPKV, Rahuri           |
| Sec. 12               | Soil type  | Medium-Deep Soil                                       |
| 144 1319              | Climate  | Rabi Season  |
|                       | Sowing Time /<br>Planting period   | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre   |  |
| Crop duration         | 115-118 days for maturity& 95-100 days for hurda   |  |
| Productivity          | Hurda Yield : 30-35 q/ha.<br>Fodder Yield: 65-70 q/ha.   |  |
| Characters / features | Sweet grain at dough stage & free thresh ability, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |  |

### Phule Vasundhara (RSSH 50) Hybrid – Ethanol Purpose

|                       | Release year  | 2015  |
|-----------------------|---|---|
|                       | Name of Institute<br>/ University   | Sorghum Improvement Project,<br>MPKV, Rahuri  |
|                       | Soil type   | Medium –Deep soil                             |
| A PARA                | Climate   | Kharif Season                                 |
| 物发生多国                 | Sowing Time /<br>Planting period  | 15 <sup>th</sup> June to 7 <sup>th</sup> July |
| Seed Rate (Per acre)  | 4 kg/ Acre  |   |
| Crop duration         | 130-135 days  |   |
| Productivity          | Green cane Yield : 50-55 t/ha.<br>Grain Yield: .08-1.0 t/ha.  |   |
|                       | Ethanol Yield : 1000 to 1200 Liter/ha   |   |
| Characters / features | Non tan pigment, Higher plant height, Moderately Tolerant to Shoot fly, Tolerant to foliar diseases |   |



| <b>Phule Rohini</b> | (RPASV 3) |
|---------------------|-----------|
|---------------------|-----------|

|                       | Release year  | 2015   |
|-----------------------|---|--|
|                       | Name of Institute<br>/ University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type   | Medium – Deep soil                                     |
|                       | Climate   | Rabi Season  |
| The same the          | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre  |  |
| Crop duration         | 115-120 days  |  |
| Productivity          | Grain Yield : 18-20 q/ha.<br>Fodder Yield: 45-50 q/ha.                          |  |
| Characters / features | Red grain, Tolerant to shoot fly, Tolerant to Charcoal rot, Tolerant to drought |  |

# Phule Yashomati (RSV 1910)

|                       | Release year  | 2021   |
|-----------------------|---|--|
|                       | Name of Institute<br>/ University   | Sorghum Improvement Project,<br>MPKV, Rahuri           |
|                       | Soil type   | Shallow soils  |
|                       | Climate   | Rabi Season  |
|                       | Sowing Time /<br>Planting period  | 15 <sup>th</sup> September to 15 <sup>th</sup> October |
| Seed Rate (Per acre)  | 4 kg/ Acre  |  |
| Crop duration         | 112-115 days  |  |
| Productivity          | Grain Yield : 9.2 q/ha.<br>Fodder Yield: 42.6 q/ha.   |  |
| Characters / features | Pearly white, medium bold and round grain, Tolerance to shoot fly<br>and stem borer, Moderately resistant to Charcoal rot and foliar<br>diseases (rust and leaf blight) |  |