

JUNAGADH AGRICULTURAL UNIVERSITY, JUNAGADH

F. Vegetable crops

| Sr. No. | Variety/ Hybrid | |
|------------|---------------------|---|
| 14. | Tomato | |
| | 14.1 | Junagadh Tomato 3 (JT 3) |
| | 14.2 | Gujarat Tomato 6 (GT 6) |
| 15. | Brinjal | |
| | 15.1 | Junagadh Brinjal Green Round 1 (JBGR 1) |
| | 15.2 | Gujarat Junagadh Brinjal 2 (GJB 2) |
| | 15.3 | Gujarat Junagadh Brinjal 3 (GJB 3) |
| | 15.4 | Gujarat Junagadh Long Brinjal 4* (GJLB 4) |
| | 15.5 | Gujarat Junagadh Brinjal Hybrid 4 (GJBH 4) |
| | 15.6 | Gujarat Round Brinjal 5 (GRB 5) |
| 16. | Okra | |
| | 16.1 | Gujarat Okra 3* (GO 3) |
| | 16.2 | Gujarat Okra Hybrid 2* (GOH 2) |
| | 16.3 | Gujarat Junagadh Okra 3 (GJO 3) |
| | 16.4 | Gujarat Junagadh Okra Hybrid 3* (GJOH 3) |
| | 16.5 | Gujarat Junagadh Okra Hybrid 4* (GJOH 4) |
| | 16.6 | Gujarat Okra 6 (GO 6) |
| 17. | Garlic | |
| | 17.1 | Gujarat Garlic 4* (GG 4) |
| | 17.2 | Gujarat Junagadh Garlic 5 (GJG 5) |
| 18. | Onion | |
| | 18.1 | Gujarat Junagadh Red Onion 11 (GJRO 11) |
| | 18.2 | Gujarat Junagadh White Onion 3 (GJWO 3) |
| 19. | Sponge Gourd | |
| | 19.1 | Gujarat Sponge Gourd 1* (GSG 1) |
| | 19.2 | Gujarat Junagadh Sponge Gourd 2 (GJSG 2) |
| 20. | Ridge Gourd | |
| | 20.1 | Gujarat Junagadh Ridge Gourd Hybrid 1(GJRGH 1) |
| 21. | Indian Bean | |
| | 21.1 | Gujarat Junagadh Indian Bean 11 (GJIB 11) |
| | 21.2 | Gujarat Junagadh Indian Bean 2 (GJIB 2) |

* Released at state and national level.

14. Tomato

14.1 Junagadh Tomato 3 (JT 3)

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| 1 | Name of crop | Tomato |
| 2 | Botanical name | <i>Lycopersicon esculentum</i> L. |
| 3 | Name of variety | Junagadh Tomato 3 (JT 3) |
| 4 | Parentage with details of its pedigree | The genotype was selection from the local collection made from surrounding area of Kuwadava village of Rajkot district. |
| 5 | Breeding method | Pure line selection. |
| 6 | Year of release | 2007-08 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | JT 3 (JTL 02-7) IC: 565031 |
| 9 | Potential yield (q/ha) | 415.5 |
| 10 | Average yield (q/ha) | 384.6 |

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| 11 | Recommended regions/areas of adoption | The tomato variety is suitable for cultivation under open field condition in late <i>kharif</i> and <i>rabi</i> season for Saurashtra region. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| • | Plant height (cm) | 69.5 |
| • | Plant spread (cm) | 36.9 |
| • | Days to flower | 47 |
| • | Days to first picking | 80 |
| • | Number of branches | 5.64 |
| • | Number of locules | 4.29 |
| • | Fruit length (cm) | 7.45 |
| • | Fruit girth (cm) | 16.08 |
| • | Fruit weight (g) | 54.9 |
| • | No. of fruit/plant | 31.52 |
| • | Fruit yield/plant (kg) | 1.731 |
| • | Fruit colour | Red |
| • | Fruit shape | Flat round |
| • | Plant habit | Determinate |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : August-September • Spacing: 75 x 60 cm. • Seed rate: 300 to 350 g/ha. • Fertilizer: N:P:K 75 : 37.5 : 62.5 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The plant is bushy type and heavy fruit bearer, the plant fruit has thick skin, 4-5 locules high T. S. S. content. The fruit is medium in size, flat round in shape with attractive red colour. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 7.33 • Total soluble sugar (%): 1.85 • Ascorbic Acid (mg/100g) : 25.87 • Carotenoids (mg/100g) : 12.40 • Lycopine (mg/100g) : 4.93 • Acidity (%) : 1.70 • Dry matter (%) : 7.50 • Peel colour (od/g) : 1.39 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The leaf curl virus, leaf blight, and tomato spotted wilt virus are less in the variety. The fruit borer damage is less. |
| 17 | Days to last picking/ Maturity group | 155/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



14.2 Gujarat Tomato 6 (GT 6)

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| 1 | Name of crop | Tomato |
| 2 | Botanical name | <i>Lycopersicon esculentum</i> L. |
| 3 | Name of variety | Gujarat Tomato 6 (GT 6) |
| 4 | Parentage with details of its pedigree | Junagadh Ruby x JT 3 (R-05-6-B-8-6-B-B) |
| 5 | Breeding method | Hybridization followed by pedigree method of selection |
| 6 | Year of release | 2017-18 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GT 6 (JTL-12-07) IC : 625670 |
| 9 | Potential yield (q/ha) | 356.70 |
| 10 | Average yield (q/ha) | 316.05 |
| 11 | Recommended regions/areas of adoption | Tomato growing area of Gujarat state during late <i>kharif-rabi</i> season |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 64.42 |
| | • Plant spread (cm) | 47.59 |
| | • Days to first picking | 99 |
| | • Days to last picking | 143 |
| | • No. of pickings | 10 |
| | • Number of branches | 3.20 |
| | • Number of locules | 4.08 (3-4) |
| | • Fruit length (cm) | 4.42 |
| | • Fruit girth (cm) | 16.15 |
| | • Fruit weight (g) | 61.76 |
| | • No. of fruit/plant | 52 |
| | • Fruit colour | Red |
| | • Fruit shape | Flat round |
| | • Plant habit | Determinate |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : July/August: for late <i>kharif</i> Sep./October: for <i>Rabi</i> • Spacing: 75 x 60 cm. • Seed rate: 300 to 350 g/ha. • Fertilizer: N:P:K 75 : 37.5 : 62.5 kg/ha. |
| 14 | Specific attributes/ Describe at least two identifiable characteristics of the variety | <ul style="list-style-type: none"> • Fruits are medium in size, flat round in shape with groove and attractive red colour. • Leaves are slightly broad and slightly green in colour. • Branches are profuse in nature. • Flowers are pale yellow in colour. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 6.50 • Total soluble sugar (%): 4.06 • Ascorbic Acid (mg/100g) : 21.59 • Lycopine (mg/100g) : 4.73 • Acidity (%) : 0.27 • Protein : 0.39 |
| 16 | Diseases and pests resistance (give details of any resistance to) | The reaction against leaf curl was found less and the damage due to fruit borer and leaf miner was found |

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| | pest or diseases including races) | superior to check varieties. |
| 17 | Days to last picking/Maturity group | 143 (140-154)/Early maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



15. Brinjal

15.1 Junagadh Brinjal Green Round 1 (JBGR 1)

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| 1 | Name of crop | Brinjal |
| 2 | Botanical name | <i>Solanum melongena</i> L. |
| 3 | Name of variety | Junagadh Brinjal Green Round 1 (JBGR 1) |
| 4 | Parentage with details of its pedigree | The genotype was collection from Ajab village of Junagadh district and was maintained in germplasm as line No. 16 in the year 1999. |
| 5 | Breeding method | Pure line selection. |
| 6 | Year of release | 2005-06 |
| 7 | Gazette notification | S. O. 2978 (E) & Date: 26.12.2008 |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | JBGR 1 (JBGR-99-5) IC: 565030 |
| 9 | Potential yield (q/ha) | 480.71 |
| 10 | Average yield (q/ha) | 401.07 |
| 11 | Recommended regions/areas of adoption | The brinjal variety is suitable for cultivation during late <i>kharif</i> and <i>rabi</i> season for Saurashtra and Middle Gujarat. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 63.0 |
| | • Plant spread (cm) | 54.98 |
| | • Days to first picking after T.P. | 66 |
| | • Number of branches/plant | 4.27 |
| | • Fruit length (cm) | 14.26 |
| | • Fruit girth (cm) | 26.67 |
| | • Fruit weight (g) | 193.0 |
| | • No. of fruit/plant | 18.06 |
| | • Fruit yield/plant (kg) | 3.383 |
| | • Fruit colour | Green |
| | • Fruit shape | Round |
| | • Fruit size | Medium to long |
| | • Plant habit | Semi spreading |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : August-September • Spacing: 90 x 60 cm. • Seed rate: 350 g/ha. • Fertilizer: N:P:K 100 : 37.5 : 37.5 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable | Fruit are medium to big in size with round shape, attractive green colour and good shining. Calyx and |

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| | characteristics of the variety | pedicle are green and medium in size. Moderate grooves are present on fruits. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 5.88 • Total soluble sugar (%): 3.82 • Acidity (%) : 1.64 • Protein (%) : 1.54 • Glycoalkaloid (od/g.): 0.28 • Peel colour (od/g.): 2.22 • Poly phenol oxidase (od/min/g.): 1.83 • Total phenol (mg/100g.): 50.70 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The variety showed lower incidence of little leaf, jassids, whitefly, fruit borer. |
| 17 | Days to last picking/Maturity group | 169/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



15.2 Gujarat Junagadh Brinjal 2 (GJB 2)

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| 1 | Name of crop | Brinjal |
| 2 | Botanical name | <i>Solanum melongena</i> L. |
| 3 | Name of variety | Gujarat Junagadh Brinjal 2 (GJB 2) |
| 4 | Parentage with details of its pedigree | JNDB-67 x Line No. JNDB-N-6 |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2009-10 |
| 7 | Gazette notification | S. O. 2277 (E) & Date: 17.08.2015 |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJB 2 (JBR 02-11) IC: 573507 |
| 9 | Potential yield (q/ha) | 423.13 |
| 10 | Average yield (q/ha) | 342.94 |
| 11 | Recommended regions/areas of adoption | The brinjal variety is suitable for cultivation during late <i>kharif</i> for Gujarat state. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 53.96 |
| | • Plant spread (cm) | 60.58 |
| | • Days to first picking after T.P. | 60.6 |
| | • Number of branches/plant | 4.11 |
| | • Fruit length (cm) | 11.88 |
| | • Fruit girth (cm) | 14.91 |
| | • Fruit weight (g) | 68.4 |
| | • No. of fruit/plant | 26.17 |

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| • | Fruit yield/plant (kg) | 1.790 |
| • | Fruit colour | Pink purple |
| • | Fruit shape | Medium long |
| • | Fruit size | Medium |
| • | Plant habit | Semi spreading |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P.: August for late <i>kharif</i> and October for <i>rabi</i> season. • Spacing: 90 x 60 cm • Seed rate: 300 to 350 g/ha. • Fertilizer: N:P:K 100 : 37.5 : 37.5 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | Fruit are medium long in shape and size with pink purple colour and good shining. Calyx and pedicle are green and medium in size. White dots are present on fruit tip surface and fruit pulp is white with less seeds. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 7.00 • Total soluble sugar (%): 3.95 • Acidity (%) : 1.85 • Protein (%) : 1.67 • Glycoalkaloid (od/g.) : 0.36 • Peel colour (od/g.): 2.43 • Poly phenol oxidase (od/min/g.) : 1.42 • Total phenol (mg/100g.) : 50.51 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The variety has good tolerance against little leaf diseases and fruit borer, jassids, whitefly damage is also less. |
| 17 | Days to last picking/Maturity group | 146/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



15.3 Gujarat Junagadh Brinjal 3 (GJB 3)

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| 1 | Name of crop | Brinjal |
| 2 | Botanical name | <i>Solanum melongena</i> L. |
| 3 | Name of variety | Gujarat Junagadh Brinjal 3 (GJB 3) |
| 4 | Parentage with details of its pedigree | JNDB-37 x JNDB-92 (1999-97-69-25-23-20-19) |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2011-12 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJB 3 (JBGR 06-7) IC: 589770 |
| 9 | Potential yield (q/ha) | 421.70 |

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| 10 | Average yield (q/ha) | 393.88 |
| 11 | Recommended regions/areas of adoption | The brinjal variety is suitable for cultivation during late <i>kharif</i> season for Gujarat state. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 45.55 |
| | • Plant spread (cm) | 61.51 |
| | • Days to first picking after T.P. | 75.80 |
| | • Number of branches/plant | 3.64 |
| | • Fruit length (cm) | 13.43 |
| | • Fruit girth (cm) | 22.02 |
| | • Fruit weight (g) | 124.8 |
| | • No. of fruit/plant | 16.04 |
| | • Fruit yield/plant (kg) | 1.903 |
| | • Fruit colour | Green |
| | • Fruit shape | Oval |
| | • Fruit size | Medium |
| | • Fruit cross section | Few groove |
| | • Fruit position | Pendant |
| | • Plant growth habit | Semi spreading |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P.: 15th August to 15th September for late <i>kharif</i> season. • Spacing: 90 x 60 cm. • Seed rate: 300 to 350 g/ha. • Fertilizer: N:P:K 100 : 37.5 : 37.5 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | Fruit are medium to big in size with oval shape. Fruit are green in colour and good shining. Fruit pulp is creamy white with less seeds and fruit surface is smooth. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 9.00 • Total soluble sugar (%): 3.07 • Acidity (%) : 1.41 • Protein (%) : 1.48 • Glycoalkaloid (od/g.) : 0.4 • Peel colour (od/g.): 1.48 • Poly phenol oxidase (od/min/g.) : 1.36 • Total phenol (mg/100g.) : 42.84 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The variety is good tolerance against little leaf diseases and fruit borer, jassids, whitefly damage is also less. |
| 17 | Days to last picking/Maturity group | 160/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



15.4 Gujarat Junagadh Long Brinjal 4 (GJLB 4)

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| 1 | Name of crop | Brinjal |
| 2 | Botanical name | <i>Solanum melongena</i> L. |
| 3 | Name of variety | Gujarat Junagadh Long Brinjal 4 (GJLB 4) |
| 4 | Parentage with details of its pedigree | GBL-1 x Junagadh Oblong |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2014-15 |
| 7 | Gazette notification | S. O. 3666 (E) & Date: 06.12.2016 |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJLB 4 (JBL-08-8) IC: 612167 |
| 9 | Potential yield (q/ha) | 448.42 |
| 10 | Average yield (q/ha) | 396.03 |
| 11 | Recommended regions/areas of adoption | The brinjal variety is suitable for cultivation during late <i>kharif season</i> for Zone VI (Arid western plains of Rajasthan, Gujarat, Haryana and Delhi). |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 62.22 |
| | • Plant spread (cm) | 73.15 |
| | • Days to first picking after T.P. | 67 |
| | • Number of branches/plant | 3.31 |
| | • Fruit length (cm) | 13.81 |
| | • Fruit girth (cm) | 16.75 |
| | • Fruit weight (g) | 102.10 |
| | • No. of fruit/plant | 21 |
| | • Fruit yield/plant (kg) | 2.140 |
| | • Fruit colour | Light purple |
| | • Fruit shape of apex | Round |
| | • Fruit shape of general | Long |
| | • Fruit size | Small |
| | • Fruit glossiness at harvest maturity | Strong |
| | • Fruit stripes and patches | Absent |
| | • Plant growth habit | Semi spreading |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : 1st to 15th October • Spacing: 90 x 60 cm or 90 x 45 cm. • Seed rate: 400 to 500 g/ha. • Fertilizer: N:P:K 100 : 37.5 : 37.5 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | Fruit are medium in size with long shape. Fruit are light purple in colour with good shining. Fruit pulp is white with less seeds and fruit surface is smooth. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 8.50 • Total soluble sugar (%): 3.36 • Acidity (%) : 1.19 • Protein (%) : 1.51 • Glycoalkaloid (od/g.) : 0.34 • Peel colour (od/g.) : 3.35 • Poly phenol oxidase (od/min/g.) : 1.30 • Total phenol (mg/100g.) : 38.85 |

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| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The reaction as against little leaf diseases and fruit borer, jassids, whitefly damage is also less. |
| 17 | Days to last picking/Maturity group | 159/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



15.5 Gujarat Junagadh Brinjal Hybrid 4 (GJBH 4)

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| 1 | Name of crop | Brinjal | | |
| 2 | Botanical name | <i>Solanum melongena</i> L. | | |
| 3 | Name of variety | Gujarat Junagadh Brinjal Hybrid 4 (GJBH 4) | | |
| 4 | Parentage with details of its pedigree | Line No. JBR-2-11 x Line No. JBR-03-16 | | |
| 5 | Breeding method | Heterosis breeding | | |
| 6 | Year of release | 2014-15 | | |
| 7 | Gazette notification | S. O. 3666 (E) & Date: 06.12.2016 | | |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | Accession 1) GJBH 4 (JBH-07-1) 2) JBR-2-11 (Female) 3) JBR-3-16 (malel) | IC No. 612170 612171 612172 | |
| 9 | Potential yield (q/ha) | 547.88 | | |
| 10 | Average yield (q/ha) | 428.01 | | |
| 11 | Recommended regions/areas of adoption | The brinjal hybrid is suitable for cultivation during late <i>kharif season</i> for Saurashtra and Middle Gujarat. | | |
| 12 | Characteristics/Distinguishing morphological in brief: | | | |
| | Description of hybrid parents | (GJBH 4) JBH-07-1 | JBR-2-11 | JBR-03-16 |
| • | Plant height (cm) | 54.74 | 47.19 | 62.39 |
| • | Plant spread (cm) | 69.28 | 54.94 | 53.38 |
| • | Days to first picking after T.P. | 64 | 61 | 51 |
| • | Days to last picking after T.P. | 153 | 146 | 145 |
| • | Number of branches/plant | 3.53 | 3.87 | 3.14 |
| • | Fruit length (cm) | 14.09 | 11.25 | 12.30 |
| • | Fruit girth (cm) | 16.24 | 14.28 | 17.38 |
| • | Fruit weight (g) | 79.30 | 63.00 | 85.20 |
| • | No. of fruit/plant | 28 | 26 | 24 |
| • | Fruit yield/plant (kg) | 2.23 | 1.79 | 2.04 |
| • | Leaf length (cm) | 12.5 | 19.5 | 15.0 |
| • | Leaf width (cm) | 9.0 | 7.0 | 8.0 |
| • | Flower colour | Light purple | Light purple | Dark purple |
| • | Leaf margin | Pointed | Sinuate | Pointed |
| • | Leaf colour of vein | Light purple | Purple | Dark purple |
| • | Fruit colour | Deep yellow | Purple yellow | Yellow |
| • | Fruit colour of flesh | Greenish | Whitish | Greenish |

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| • | Fruit shape of apex | Flattented | Flattented | Flattented |
| • | Fruit shape of general | Oblong | Oblong | Oblong |
| • | Fruit size | Medium | Medium | Medium |
| • | Fruit glossiness at harvest maturity | Strong | Strong | Medium |
| • | Fruit stripes and patches | Absent | Absent | Absent |
| • | Plant growth habit | Erect | Semi-spreading | Erect |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : 1st to 15th October • Spacing: 90 x 60 cm or 90 x 45 cm. • Seed rate: 400 to 500 g/ha. • Fertilizer: N:P:K 100 : 37.5 : 37.5 kg/ha. | | |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | Fruit are medium in size with oblong shape. Fruit are pink purple in colour with good shining. Fruit pulp is white with less seeds and fruit surface is smooth. | | |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 9.33 • Total soluble sugar (%): 3.33 • Acidity (%) : 1.17 • Protein (%) : 1.48 • Glycoalkaloid (od/g.) : 0.35 • Peel colour (od/g.) : 2.71 • Poly phenol oxidase (od/min/g.) : 1.38 • Total phenol (mg/100g.) : 38.18 | | |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The reaction as against little leaf diseases and fruit borer, jassids, whitefly damage is also less. | | |
| 17 | Days to last picking/Maturity group | 153/ Medium maturity group. | | |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) | | |



15.6 Gujarat Round Brinjal 5 (GRB 5)

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| 1 | Name of crop | Brinjal |
| 2 | Botanical name | <i>Solanum melongena</i> L. |
| 3 | Name of variety | Gujarat Round Brinjal 5 (GRB 5) |
| 4 | Parentage with details of its pedigree | JBR-03-16 x JBGR-06-07 (R-06-7-B-3-2-B-B) |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2017-18 |
| 7 | Gazette notification | |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GRB 5 (JB-12-06) IC: 625671 |

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| 9 | Potential yield (q/ha) | 471.93 |
| 10 | Average yield (q/ha) | 395.04 |
| 11 | Recommended regions/areas of adoption | Brinjal growing area of the Gujarat state during late <i>kharif-rabi</i> season |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 70.33 |
| | • Plant spread (cm) | 80.88 |
| | • Days to first picking after T.P. | 64 |
| | • Days to last picking after T.P. | 163 |
| | • Number of branches/plant | 3.40 |
| | • Fruit length (cm) | 10.13 |
| | • Fruit girth (cm) | 17.95 |
| | • Fruit weight (g) | 87.68 |
| | • No. of pickings | 15 |
| | • No. of fruit/plant | 32 |
| | • Fruit colour | Light purple |
| | • Fruit shape of apex | Round |
| | • Fruit shape of general | Round |
| | • Fruit size | Medium |
| | • Fruit glossiness at harvest maturity | Medium |
| | • Fruit stripes and patches | Present |
| | • Plant growth habit | Erect |
| | • Time of physiological ripeness | Early |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : 15th August to 15th September • Spacing: 90 x 60 cm • Seed rate: 300 to 350 g/ha. • Fertilizer: N:P:K 100 : 37.5 : 37.5 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | <ul style="list-style-type: none"> • Fruits are medium in size with round shape. • Fruit pulp is white with less seed. • Fruits are green in colour with purple shadow strips and good shining • Plants are medium in size and erect type. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (%) : 9.00 • Total soluble sugar (%): 4.12 • Acidity (%) : 0.12 • Protein (%) : 0.89 • Glycoalkaloid (od/g.) : 0.47 • Peel colour (od/g.) : 2.92 • Poly phenol oxidase (od/min/g.) : 1.40 • Total phenol (mg/100g.) : 28.12 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | With respect to the damage due to jassids, whitefly and % fruit borer damage, the proposed entry was found superior than check varieties. |
| 17 | Days to last picking/Maturity group | 163/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



16. Okra

16.1 Gujarat Okra 3 (GO 3)

| | | |
|----|---|--|
| 1 | Name of crop | Okra |
| 2 | Botanical name | <i>Abelmoschus esculentus</i> (L.) Moench |
| 3 | Name of variety | Gujarat Okra 3 (GO 3) |
| 4 | Parentage with details of its pedigree | HRB 55 x Arka Anamika |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2006-07 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GO 3 (JNDOL-03-1) IC: 553031 |
| 9 | Potential yield (q/ha) | 110.50 (Zone VII) and (162.76) Zone VIII |
| 10 | Average yield (q/ha) | 86.68 (Zone VII) and (127.25 Zone) VIII |
| 11 | Recommended regions/areas of adoption | The okra variety is suitable for cultivation during <i>kharif</i> season for semi-arid lava plateau and central high lands (Zone VII) comprising of Madhya Pradesh (Excluding Eastern Part) and Maharashtra states and humid to semi-arid western Ghats and Karnataka plateau (Zone VIII) comprising of Karnataka, Kerala and Tamil Nadu states. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 133 |
| | • Days to 50 % flowering | 47 |
| | • Number of branches/plant | 2.17 |
| | • Fruit length (cm) | 13.43 |
| | • Fruit girth (cm) | 5.40 |
| | • 10 fruit weight (g) | 156 |
| | • No. of fruit/plant | 18.99 |
| | • Intermodal length (cm) | 1.56 |
| | • Fruit colour | Green |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Sowing season: <i>Kharif</i> • Spacing: 60 x 30 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 100 : 50 : 50 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The plant has deeply lobed (serrated) leaves, which is the special mark for identification of variety. |
| 15 | Quality / Nutritional / Other features | The pods are green, tender, smooth and attractive. |
| 16 | Diseases and pests resistance | YVMV diseases and jessids & pod borer incidence |

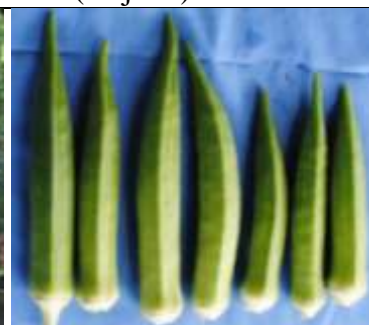
| | | |
|----|--|--|
| | (give details of any resistance to pest or diseases including races) | is less. |
| 17 | Days to last picking/Maturity group | 105/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



16.2 Gujarat Okra Hybrid 2 (GOH 2)

| | | | | |
|------------------------------------|--|--|---|---------------------|
| 10.2 Gujarat Okra Hybrid 2 (GOH 2) | | | | |
| 1 | Name of crop | Okra | | |
| 2 | Botanical name | <i>Abelmoschus esculentus</i> (L.) Moench | | |
| 3 | Name of variety | Gujarat Okra Hybrid 2 (GOH 2) | | |
| 4 | Parentage with details of its pedigree | KS-404 x HRB-108-2 | | |
| 5 | Breeding method | Heterosis breeding | | |
| 6 | Year of release | 2008-09 | | |
| 7 | Gazette notification | S. O. 2978 (E) & Date: 26.12.2008 | | |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | Accession 1) GOH 2 (JOH-02-2) 2) KS-404 (female) 3) HRB-108-2 (male) | IC No. 560491 560492 560493 | |
| 9 | Potential yield (q/ha) | 152.19 | | |
| 10 | Average yield (q/ha) | 148.36 | | |
| 11 | Recommended regions/areas of adoption | The okra hybrid is suitable for cultivation during <i>kharif</i> season for Saurashtra and Middle & South Gujarat. The okra hybrid release in Zone II (West Bengal and Assam), IV (Punjab, Tarai & Plain of UP, Bihar and Jarkhand), VI (Rajasthan, Gujarat, Haryana and New Delhi), VII (MP (Excluding Eastern Part, Maharashtra and Goa)) and VIII (Karnataka Kerala and Tamil Nadu) at state and national levels. | | |
| 12 | Characteristics/Distinguishing morphological in brief: | | | |
| | Descriptions of hybrid parents | GOH 2 (JOH-02-2) | KS-404 (Female) | HRB-108-2 (Male) |
| • | Plant height (cm) | 158.8 | 141.4 | 152.1 |
| • | Days to 50 % flowering | 43.4 | 43.8 | 42.2 |
| • | No. of fruit/plant | 24.5 | 18.4 | 22.3 |
| • | Fruit length (cm) | 11.8 | 11.8 | 11.2 |
| • | Fruit girth (cm) | 5.8 | 6.1 | 5.5 |
| • | 10 fruit weight (g) | 139 | 142 | 135 |
| • | Intermodal length (cm) | 6.7 | 6.5 | 6.8 |
| • | Fruit colour | Green | Green | Green |
| • | Fruit size | Medium | Thick | Medium |
| • | Stem colour initial stage | Green | Green | Green |
| • | Stem colour at flowering & | Reddish | Reddish | Reddish |

| | | | | |
|----|--|---|-------------------------------------|-------------------------------|
| | fruiting stage | | | |
| • | Leaf shape | Deeply lobbed serrated | Deeply lobbed serrated | Deeply lobbed serrated |
| • | Base of petals colour | Pinkish red in both the sides | Pinkish red only in the inner sides | Pinkish red in both the sides |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Sowing season: <i>Kharif</i> • Spacing: 60 x 30 cm. • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 100 : 50 : 50 kg/ha. | | |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The leaves are deeply lobbed and serrated. Stem colour at initial stage in green and maturity stage in reddish. The fruit are green, tender and attractive. Base of flowers petals is pinkish red on both sides. | | |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Dry weight (%) : 8.06 • Moisture (%) : 91.94 • Fiber (%) : 0.65 • Protein (%) : 0.96 • Acidity (%) : 0.27 • Total Soluble Sugar (%) : 1.24 • Ascorbic Acid (mg/100g) : 5.83 | | |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The YVMV diseases and jessids & pod borer incidence is less. | | |
| 17 | Days to last picking/Maturity group | 110/Medium maturity group. | | |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) | | |



16.3 Gujarat Junagadh Okra 3 (GJO 3)

| | | |
|----|--|---|
| 1 | Name of crop | Okra |
| 2 | Botanical name | <i>Abelmoschus esculentus</i> (L.) Moench |
| 3 | Name of variety | Gujarat Junagadh Okra 3 (GJO 3) |
| 4 | Parentage with details of its pedigree | Arka Abhay x VRO-4 (K-96-6-1-2-1-3-1-B) |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2009-10 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJO 3 (JOL-2K-19) IC: 565033 |
| 9 | Potential yield (q/ha) | 184.47 |
| 10 | Average yield (q/ha) | 150.52 |

| | | |
|----|--|---|
| 11 | Recommended regions/areas of adoption | The <i>kharif</i> okra growing areas of Gujarat state. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 151.1 |
| | • Days to 50 % flowering | 44.2 |
| | • Number of branches/plant | 2.37 |
| | • Fruit length (cm) | 11.70 |
| | • Fruit girth (cm) | 5.57 |
| | • 10 fruit weight (g) | 128 |
| | • No. of fruit/plant | 19.0 |
| | • Intermodal length (cm) | 7.52 |
| | • Fruit colour | Green |
| | • Stem colour at initial stage | Green |
| | • Stem colour at flowering & fruiting stage | Reddish |
| | • Leaf shape | Deeply lobbed and serrated |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Sowing season: <i>Kharif</i> • Spacing: 60 x 30 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 100 : 50 : 50 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The leaves are deeply lobbed and serrated. Stem colour at initial stage in green and maturity stage is reddish. The variety registered superior green fruit yield, tender and attractive. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Dry weight (%) : 8.70 • Moisture (%) : 91.30 • Fiber (%) : 0.69 • Protein (%) : 0.99 • TSS (%) : 7.50 • Total Phenols (mg/100g) : 0.698 • Total Soluble Sugar (%) : 1.39 • Ascorbic Acid (mg/100g): 0.29 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The YVMV disease incidence is less. The reaction to major pests like jessids, thrips, whiteflies & pod borer damage is also less. |
| 17 | Days to last picking/Maturity group | 115/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



16.4 Gujarat Junagadh Okra Hybrid 3 (GJOH 3)

| | | |
|---|-----------------|---|
| 1 | Name of crop | Okra |
| 2 | Botanical name | <i>Abelmoschus esculentus</i> (L.) Moench |
| 3 | Name of variety | Gujarat Junagadh Okra Hybrid 3 (GJOH 3) |

| | | | | |
|----|--|---|---|-------------------|
| 4 | Parentage with details of its pedigree | JF-108-2 x JM-03-1 | | |
| 5 | Breeding method | Heterosis breeding | | |
| 6 | Year of release | 2010-11 | | |
| 7 | Gazette notification | S. O. 2277 (E) & Date: 17.08.2015 | | |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | Accession 1) GJOH 3 (JOH-05-9) 2) JF-108-2 (female) 3) JM-03-1 (male) | IC No. 585698 585699 585610 | |
| 9 | Potential yield (q/ha) | 153.65 | | |
| 10 | Average yield (q/ha) | 137.44 | | |
| 11 | Recommended regions/areas of adoption | The <i>khariif</i> okra growing areas of Zones V (Eastern MP, Orissa, Andhra Pradesh and Chhattisgarh), VI (Rajasthan, Gujarat, Haryana and New Delhi) and VII (MP (Excluding Eastern part), Maharashtra and Goa) at national level. | | |
| 12 | Characteristics/Distinguishing morphological in brief | | | |
| | Descriptions of hybrid parents | GJOH 3 (JOH-05-9) | JF-108-2 (Female) | JM-03-1 (Male) |
| • | Plant height (cm) | 122.3 | 141.4 | 128.2 |
| • | Days to 50 % flowering | 40.5 | 41.8 | 42.2 |
| • | Number of fruits per plant | 18.6 | 16.4 | 15.3 |
| • | Fruit length (cm) | 11.5 | 11.8 | 10.6 |
| • | Fruit girth (cm) | 4.99 | 4.95 | 5.56 |
| • | 10 fruit weight (g) | 1392 | 135 | 132 |
| • | Intermodal length (cm) | 5.41 | 6.52 | 5.68 |
| • | Fruit colour | Dark green | Green | Dark green |
| 13 | Agronomical Practices | <ul style="list-style-type: none">• Sowing season: <i>Khariif</i>• Spacing: 60 x 30 cm• Seed rate: 8 to 10 kg/ha.• Fertilizer: N:P:K 100 : 50 : 50 kg/ha. | | |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The leaves are deeply lobbed and serrated. Stem colour at initial stage in green and maturity stage is reddish. The pods are smooth, dark green, tender and attractive in colour. | | |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none">• Dry weight (%) : 11.39• Moisture (%) : 88.61• Fiber (%) : 1.15• Protein (%) : 1.46• TSS (%) : 9.00• Total Phenols (mg/100g) : 0.593• Total Soluble Sugar (%) : 1.26• Ascorbic Acid (mg/100g): 6.30 | | |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The YVMV disease incidence was less. The reaction to major pests like jessids, thrips, whiteflies & pod borer damage is also less. | | |
| 17 | Days to last picking/Maturity group | 105/Medium maturity group. | | |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) | | |



16.5 Gujarat Junagadh Okra Hybrid 4 (GJOH 4)

| | | | | |
|----|---|---|---|----------------------------------|
| 1 | Name of crop | Okra | | |
| 2 | Botanical name | <i>Abelmoschus esculentus</i> (L.) Moench | | |
| 3 | Name of variety | Gujarat Junagadh Okra Hybrid 4 (GJOH 4) | | |
| 4 | Parentage with details of its pedigree | JF-55 x JOL-2K-19 | | |
| 5 | Breeding method | Heterosis breeding | | |
| 6 | Year of release | 2014-15 | | |
| 7 | Gazette notification | Awaited | | |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | Accession GJOH 4 (JOH-08-19) JF-55 (female) JOL-2K-19 (male) | IC No. 611697 611698 611699 | |
| 9 | Potential yield (q/ha) | 143.36 | | |
| 10 | Average yield (q/ha) | 140.00 | | |
| 11 | Recommended regions/areas of adoption | The okra hybrid suitable for cultivation during <i>kharif</i> season for Zone VI (Arid Western Plains of Rajasthan, Gujarat, Haryana and Delhi) and Zone VII (Madhya Pradesh and Maharashtra) release at state and national levels. | | |
| 12 | Characteristics/Distinguishing morphological in brief: | | | |
| | Descriptions of hybrid parents | GJOH 4 (JOH-08-19) | JF-55 (Female) | JOM-2K-19 (Male) |
| • | Plant height (cm) | 109.50 | 90.10 | 95.50 |
| • | Days to 50 % flowering | 45.35 | 48.50 | 45.00 |
| • | Days to first picking | 53 | 55 | 52 |
| • | Number of fruits per plant | 20.51 | 15.16 | 18.30 |
| • | Fruit length (cm) | 11.89 | 10.68 | 10.38 |
| • | Fruit girth (cm) | 5.31 | 5.32 | 5.14 |
| • | 10 fruit weight (g) | 123 | 119 | 109 |
| • | Fruit colour | Medium dark green, tender, long and attractive | Dark green, tender, short | Light green, tender, medium long |
| • | Leaf shape | Deeply lobbed and serrated | Deeply lobbed and serrated | Deeply lobbed and serrated |
| 13 | Agronomical Practices | • Sowing season: <i>Kharif</i> • Spacing: 60 x 30 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 100 : 50 : 50 kg/ha. | | |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The leaves are deeply lobbed and serrated. Stem colour at seedling stage colour in green and flowering and fruiting stage colour in reddish. The pods are smooth, medium dark green, tender, long and attractive in | | |

| | | |
|----|--|---|
| | | colour. Flower colour on base of the flower petal light red in colour. |
| 15 | Quality / Nutritional / Other features | NA |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The YVMV disease incidence was less. The reaction to major pests like jessids, thrips, whiteflies & pod borer damage was also less. |
| 17 | Days to last picking/Maturity group | 102/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



16.6 Gujarat Okra 6 (GO 6)

| | | |
|----|--|---|
| 1 | Name of crop | Okra |
| 2 | Botanical name | <i>Abelmoschus esculentus</i> (L.) Moench |
| 3 | Name of variety | Gujarat Okra 6 (GO 6) |
| 4 | Parentage with details of its pedigree | AOL-03-1 x JOL-2K-19 (K-2007-5-B-6-4-B-B) |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2017-18 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GO 6 (JOL-11-12) IC: 625723 |
| 9 | Potential yield (q/ha) | 154.68 |
| 10 | Average yield (q/ha) | 125.44 |
| 11 | Recommended regions/areas of adoption | The <i>kharif</i> okra growing areas of Gujarat state. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 111.83 |
| | • Days to 50 % flowering | 45 |
| | • Fruit length (cm) | 12.94 |
| | • Fruit girth (cm) | 5.84 |
| | • 10 fruit weight (g) | 146.4 |
| | • No. of pickings | 14 |
| | • No. of fruit/plant | 14.79 |
| | • Intermodal length (cm) | 7.53 |
| | • Fruit colour | Dark green |
| | • Stem colour at initial stage | Green |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Sowing season: 15th June to 15th July • Spacing: 60 x 30 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 150 : 50 : 50 kg/ha. |

| | | |
|----|--|--|
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | <ul style="list-style-type: none"> Fruits are smooth, tender, dark green in colour and attractive. Leaf petiole length is short. Flower petal colour is cream. Calyx is green in colour. Shape of fruit is apex is narrow acute. Hairiness on seed is present. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> Dry weight (%) : 8.70 Moisture (%) : 91.30 Protein (%) : 1.05 TSS (%) : 8.50 Total Phenols (mg/100g) : 0.30 Total Soluble Sugar (%) : 1.31 Ascorbic Acid (mg/100g): 6.49 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The fruit borer, jassids, white fly and YVMV incidence was found less as compared to all check varieties. |
| 17 | Days to last picking/Maturity group | 99/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



17. Garlic

17.1 Gujarat Garlic 4 (GG 4)

| | | |
|----|--|--|
| 1 | Name of crop | Garlic |
| 2 | Botanical name | <i>Allium sativum</i> L. |
| 3 | Name of variety | Gujarat Garlic 4 (GG 4) |
| 4 | Parentage with details of its pedigree | The genotype was selection from the local collection made from surrounding area of Choki village of Junagadh district and maintained in germplasm as line No. 213. |
| 5 | Breeding method | Clonal selection. |
| 6 | Year of release | 2006-07 |
| 7 | Gazette notification | S. O. 2978 (E) & Date: 26.12.2008 |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GG 4 (JG-99-213) IC: 573470 |
| 9 | Potential yield (q/ha) | 93.24 |
| 10 | Average yield (q/ha) | 89.33 |
| 11 | Recommended regions/areas of adoption | The garlic variety is suitable for cultivation under <i>rabi</i> season for Saurashtra and Middle Gujarat and Zone IV (Gujarat & Rajasthan). |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 55 |
| | • No. of leaves/Plant | 11.5 |

| | | |
|----|--|---|
| • | No. of cloves/Bulb | 21.0 |
| • | Bulb polar diameter (cm) | 2.72 |
| • | Bulb equator diameter (cm) | 3.82 |
| • | Clove length (cm) | 2.17 |
| • | Clove girth (cm) | 0.89 |
| • | Bulb weight (g) | 19.1 |
| • | Bulb colour | White |
| • | Leaf colour | Medium green |
| • | Leaf width | Narrow |
| • | Bulb size | Medium |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Sowing season : Second fortnight of October • Spacing: 15 x 10 cm • Seed rate: 500 to 700 kg cloves/ha. • Fertilizer: N:P:K 50 : 50 : 50 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The bulbs are medium in size, compact and white in colour, the leaf width is narrow with medium green colour. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (*Brix) : 36.12 • Soluble sugar (%): 22.59 • Reducing sugar (%) : 2.31 • Non reducing sugar (%) : 20.28 • Ascorbic Acid (mg/100g) : 6.44 • Carotenoids (mg/100g) : 0.45 • Pyruvic acid (mg/g.) : 2.86 • Protein (%) : 1.14 • Dry matter (%) : 38.45 • Drying ratio : 2.60 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The stem phylum leaf blight and powdery mildew disease and thrips are less in the variety. |
| 17 | Maturity group | 134/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



17.2 Gujarat Junagadh Garlic 5 (GJG 5)

| | | |
|---|--|--|
| 1 | Name of crop | Garlic |
| 2 | Botanical name | <i>Allium sativum</i> L. |
| 3 | Name of variety | Gujarat Junagadh Garlic 5 (GJG 5) |
| 4 | Parentage with details of its pedigree | The genotype was collection from local market of Visavadar of Junagadh district and maintained in germplasm as line No. 260. |
| 5 | Breeding method | Clonal selection. |
| 6 | Year of release | 2013-14 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about | GJG 5 (JG-07-13) IC: 611307 |

| | | |
|----|--|---|
| | the submission of germplasm samples with NBPGR | |
| 9 | Potential yield (q/ha) | 81.32 |
| 10 | Average yield (q/ha) | 79.42 |
| 11 | Recommended regions/areas of adoption | The garlic variety is suitable for cultivation under <i>rabi</i> season for Saurashtra and Middle Gujarat. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 44.88 |
| | • No. of leaves/Plant | 12.23 |
| | • No. of cloves/Bulb | 17.85 |
| | • Bulb polar diameter (cm) | 2.87 |
| | • Bulb equator diameter (cm) | 3.18 |
| | • Clove size (diameter) | Medium |
| | • Clove colour and colour flesh | White |
| | • 10 Bulb weight (g) | 130.92 |
| | • Bulb colour | White |
| | • Leaf colour | Light green |
| | • Leaf width | Narrow |
| | • Leaf waxiness | Weak |
| | • Leaf shape | Strongly concave |
| | • Bulb size | Compact and Medium |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Sowing season : Second fortnight of October • Spacing: 15 x 10 cm • Seed rate: 500 to 700 kg cloves/ha. • Fertilizer: N:P:K 50 : 50 : 50 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The bulbs are medium in size, compact and attractive white in colour, the leaf width is medium with light green colour. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • T. S. S. (*Brix) : 37.50 • Total carbohydrate (%) : 26.71 • Total protein (%) : 3.72 • Reducing sugar (%) : 2.34 • Ascorbic Acid (mg/100g) : 6.87 • Carotenoids (mg/100g) : 0.44 • Pyruvic acid (mg/g.) : 2.93 • Dry matter (%) : 38.89 • Drying ratio : 2.57 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The stem phylum leaf blight and powdery mildew disease and thrips are less in the variety. |
| 17 | Maturity group | Early maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



18. Onion

18.1 Gujarat Junagadh Red Onion 11 (GJRO 11)

| | | |
|----|---|---|
| 1 | Name of crop | Onion |
| 2 | Botanical name | <i>Allium cepa</i> L. |
| 3 | Name of variety | Gujarat Junagadh Red Onion 11 (GJRO 11) |
| 4 | Parentage with details of its pedigree | The sample of red onion was local collection from Mahuva taluka of Bhavnagar district and maintained in germplasm No. 117 (Mahuva-7). |
| 5 | Breeding method | Mass selection. |
| 6 | Year of release | 2014-15 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJRO 11 (JDRO-07-13) IC: 612169 |
| 9 | Potential yield (q/ha) | 371.63 |
| 10 | Average yield (q/ha) | 336.29 |
| 11 | Recommended regions/areas of adoption | The onion variety is suitable for cultivation in <i>rabi</i> season under irrigated condition of Gujarat state. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Number of leaves/ pseudo stem | 10.02 |
| | • Foliage length (cm) | 49.54 |
| | • Bulb length (cm) | 3.96 |
| | • Bulb girth (cm) | 5.36 |
| | • Bulb weight (g) | 59.61 |
| | • Bolting (%) | 2.34 |
| | • Jointed bulbs (%) | 1.74 |
| | • Bulb colour | Red |
| | • Bulb shape | Flat globe |
| | • Thickness of rings | Medium |
| | • Firmness of flesh | Medium |
| | • Colour of epidermis of fleshy scale | Purple |
| | • Predominant number of axes | Three |
| | • Cross section | Asymmetrical |
| | • Degree of spitting into bulb lets | Absent |
| | • Foliage attitude | Erect |
| | • Foliage waxiness | Present |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : November-December • Spacing: 15 x 10 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 75 : 60 : 50 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The bulbs are medium in size, flat globe in shape and red in colour and recorded less jointed bulb per cent (1.74 %). |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Moisture (%) : 89.44 • T. S. S. (*Brix) : 13.14 • Soluble sugar (%) : 1.22 • Reducing sugar (%) : 0.36 • Non reducing sugar (%) : 0.86 • Ascorbic Acid (mg/100g) : 3.89 • Pyruvic acid (mg/100g.) : 11.35 |

| | | |
|----|--|--|
| | | <ul style="list-style-type: none"> • Total Protein (%) : 1.16 • Total phenol mg/100g : 13.66 • Acidity (%) : 0.34 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | Purple blotch disease and thrips is less in the variety. |
| 17 | Days to maturity/Maturity group | 124/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



18.2 Gujarat Junagadh White Onion 3 (GJWO 3)

| | | |
|----|--|--|
| 1 | Name of crop | Onion |
| 2 | Botanical name | <i>Allium cepa</i> L. |
| 3 | Name of variety | Gujarat Junagadh white Onion 3 (GJWO 3) |
| 4 | Parentage with details of its pedigree | The sample of white onion was local collection from Talaja taluka of Bhavnagar district and maintained in germplasm No. 120 (Borda village). |
| 5 | Breeding method | Mass selection. |
| 6 | Year of release | 2015-16 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJWO 3 (JWO-05-7) IC: 612168 |
| 9 | Potential yield (q/ha) | 519.33 |
| 10 | Average yield (q/ha) | 398.06 |
| 11 | Recommended regions/areas of adoption | The onion variety is suitable for cultivation in <i>rabi</i> season under irrigated condition of Gujarat state. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Number of leaves/ pseudo stem | 10.7 |
| | • Foliage length (cm) | 49.7 |
| | • Bulb length (cm) | 4.23 |
| | • Bulb girth (cm) | 5.16 |
| | • Bulb weight (g) | 65.73 |
| | • Bolting (%) | 1.02 |
| | • Jointed bulbs (%) | 1.70 |
| | • Bulb colour | White |
| | • Bulb shape | Flat globe |
| | • Thickness of rings | Medium |
| | • Thickness of neck | Thick |
| | • Firmness of flesh | Medium |
| | • Colour of epidermis of fleshy scale | White |
| | • Predominant number of axes | Three |
| | • Cross section | Asymmetrical |

| | | |
|----|--|---|
| • | Degree of spitting into bulb lets | Absent |
| • | Foliage attitude | Erect |
| • | Foliage waxiness | Present |
| • | Anthocyanin pigmentation | Dark green |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of T. P. : November-December • Spacing: 15 x 10 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 75 : 60 : 50 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The bulbs are medium in size, flat globe in shape and white in colour and foliage is dark green. Four months storage study, the weight loss per cent (18.06 %) has also observed lower. The variety is suitable for dehydration purpose. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Moisture (%) : 90.73 • T. S. S. (*Brix) : 13.15 • Soluble sugar (%) : 1.04 • Reducing sugar (%) : 0.24 • Non reducing sugar (%) : 0.79 • Ascorbic Acid (mg/100g) : 3.19 • Pyruvic acid (mg/100g.) : 11.35 • Total Protein (%) : 1.19 • Total phenol mg/100g : 18.23 • Acidity (%) : 0.37 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | Purple blotch disease and thrips are less in the variety. |
| 17 | Days to maturity/Maturity group | 123/ Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



19. Sponge Gourd

19.1 Gujarat Sponge Gourd 1 (GSG 1)

| | | |
|---|--|---|
| 1 | Name of crop | Sponge Gourd |
| 2 | Botanical name | <i>Luffa cylindrica</i> Roem. |
| 3 | Name of variety | Gujarat Sponge Gourd 1 (GSG 1) |
| 4 | Parentage with details of its pedigree | The genotype was collection from Ajab, village Junagadh district and maintained in germplasm lion No. 55. |
| 5 | Breeding method | Mass selection. |
| 6 | Year of release | 2004-05 |
| 7 | Gazette notification | S. O. 597 (E) & Date: 25.04.2006 |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GSG 1 (JSGL-55) IC: NA |

| | | |
|----|--|---|
| 9 | Potential yield (q/ha) | 213.20 |
| 10 | Average yield (q/ha) | 131.29 |
| 11 | Recommended regions/areas of adoption | The sponge gourd variety is suitable for cultivation during <i>kharif</i> season for the Gujarat state and Zone VII (MP (Excluding Eastern Part), Maharashtra and Goa). |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Daye to male flowering | 44.00 |
| | • Days to female flowering | 44.63 |
| | • Days to first picking | 59.91 |
| | • Days to last picking | 109.12 |
| | • Vine length (m) | 5.5 |
| | • Fruit length (cm) | 23.22 |
| | • Fruit girth (cm) | 12.64 |
| | • Fruit weight (g) | 147.36 |
| | • No. of fruit / plant | 11.98 |
| | • Fruit yield / plant (kg) | 1.765 |
| | • No. of pickings | 16.77 |
| | • Fruit colour | Light green |
| | • Fruit size | Medium |
| | • Seed colour | Black |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of sowing : June-July • Spacing: 150 cm x 100 cm • Seed rate: 2 kg/ha. • Fertilizer: N:P:K 50 : 25 : 25 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The fruit of this variety are medium size, good shape with attractive light green colour and contain higher Soluble Sugar (1.99 %). |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Moisture (%) : 92.17 • Soluble sugar (%) : 1.99 • Reducing sugar (%) : 0.948 • Non reducing sugar (%) : 1.042 • Chlorophyll 'a' (mg/g) : 0.093 • Chlorophyll 'b' (mg/g) : 0.071 • Soluble protein (%) : 0.345 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | Downy mildew disease and leaf miner are less in the variety. |
| 17 | Days to last picking/Maturity group | 109 days/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



19.2 Gujarat Junagadh Sponge Gourd 2 (GJSG 2)

| | | |
|----|---|---|
| 1 | Name of crop | Sponge Gourd |
| 2 | Botanical name | <i>Luffa cylindrica</i> (L.) Roem |
| 3 | Name of variety | Gujarat Junagadh Sponge Gourd 2 (GJSG 2) |
| 4 | Parentage with details of its pedigree | Pusa Chikni x NSG 28 |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2014-15 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJSG 2 (JSG-05-04) IC: 616390 |
| 9 | Potential yield (q/ha) | 139.73 |
| 10 | Average yield (q/ha) | 114.04 |
| 11 | Recommended regions/areas of adoption | The sponge gourd variety is suitable for the cultivation during <i>kharif</i> season for the Saurashtra and Middle Gujarat region. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Daye to male flowering | 39 |
| | • Days to female flowering | 43 |
| | • Days to first picking | 55 |
| | • Days to last picking | 98 |
| | • Vine length (m) | 7.78 |
| | • Fruit length (cm) | 27.29 |
| | • Fruit girth (cm) | 12.37 |
| | • Fruit weight (g) | 162.02 |
| | • No. of fruit / plant | 13.36 |
| | • Fruit yield / plant (kg) | 2.16 |
| | • No. of primary branches/vine | 3 |
| | • Fruit skin colour | Green |
| | • Fruit size | Long |
| | • Fruit shape | Cylindrical |
| | • Seed colour | Black |
| | • Flash texture | Smooth |
| | • Flower size | Medium big |
| | • Early plant vigor | Very good |
| | • Plant growth habit | Long vine |
| | • Stem pubescence | Smooth |
| | • Stem shape | Angular |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of sowing : 15th June to 15th July • Spacing: 200 cm x 100 cm • Seed rate: 3 kg/ha. • Fertilizer: N:P:K 50 : 25 : 25 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The fruit of this variety are long size, green colour, shining. Leaf size is large and multifold leaf margin and more tendrils branching (1+4). |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Moisture (%) : 93.06 • Dry Wt. (%) : 6.94 • TSS (%) : 6.25 • Soluble sugar (%) : 1.671 |

| | | |
|----|--|---|
| | | <ul style="list-style-type: none"> Reducing sugar (%) : 0.781 Non reducing sugar (%) : 0.890 Chlorophyll 'A' (mg/g) : 0.62 Chlorophyll 'B' (mg/g) : 0.91 Soluble protein (%) : 0.218 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | Mosaic, Downy mildew disease and fruit fly, leaf miner are less in the variety. |
| 17 | Days to last picking/Maturity group | 98 days/Early maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



20. Ridge Gourd

20.1 Gujarat Junagadh Ridge Gourd Hybrid 1 (GJRGH 1)

| | | | | | | | | | | | | |
|----------------------|--|--|------------------|----------------|------------------|---------------|----------------------|--------|-------------------|--------|---------------------|--------|
| 1 | Name of crop | Ridge Gourd | | | | | | | | | | |
| 2 | Botanical name | <i>Luffa acutangula</i> Roxb. L. | | | | | | | | | | |
| 3 | Name of variety | Gujarat Junagadh Ridge Gourd Hybrid 1 (GJRGH 1) | | | | | | | | | | |
| 4 | Parentage with details of its pedigree | JRGL 11 x JRGL 32 | | | | | | | | | | |
| 5 | Breeding method | Heterosis breeding. | | | | | | | | | | |
| 6 | Year of release | 2011-12 | | | | | | | | | | |
| 7 | Gazette notification | Awaited | | | | | | | | | | |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | <table><tr><td>Accession</td><td>IC No.</td></tr><tr><td>1) GJRGH 1 (JRGL-28)</td><td>587780</td></tr><tr><td>2) JRGL-32 (Male)</td><td>587781</td></tr><tr><td>3) JRGL-11 (Female)</td><td>587782</td></tr></table> | | | Accession | IC No. | 1) GJRGH 1 (JRGL-28) | 587780 | 2) JRGL-32 (Male) | 587781 | 3) JRGL-11 (Female) | 587782 |
| Accession | IC No. | | | | | | | | | | | |
| 1) GJRGH 1 (JRGL-28) | 587780 | | | | | | | | | | | |
| 2) JRGL-32 (Male) | 587781 | | | | | | | | | | | |
| 3) JRGL-11 (Female) | 587782 | | | | | | | | | | | |
| 9 | Potential yield (q/ha) | 146.22 | | | | | | | | | | |
| 10 | Average yield (q/ha) | 113.30 | | | | | | | | | | |
| 11 | Recommended regions/areas of adoption | The hybrid is suitable for the cultivation during <i>kharif</i> season for the Saurashtra and Middle Gujarat region. | | | | | | | | | | |
| 12 | Characteristics/Distinguishing morphological in brief: | | | | | | | | | | | |
| | Description of the parents | GJRGH 1 (JRGL-28) | JRGL-11 (Female) | JRGL-32 (Male) | | | | | | | | |
| • | Daye to male flowering | 46.30 | 47.90 | 44.45 | | | | | | | | |
| • | Days to female flowering | 52.14 | 53.43 | 49.25 | | | | | | | | |
| • | First male appearing node | 6.30 | 8.90 | 7.83 | | | | | | | | |
| • | First female appearing node | 7.80 | 12.50 | 10.26 | | | | | | | | |
| • | Male and female flower ratio | 11.10 | 9.35 | 10.25 | | | | | | | | |
| • | Days to first picking | 59 | 60 | 65 | | | | | | | | |
| • | Days to last picking | 110 | 109 | 102 | | | | | | | | |
| • | Vine length (m) | 5.10 | 4.80 | 5.73 | | | | | | | | |
| • | No. of primary branches/vine | 8.50 | 7.60 | 6.60 | | | | | | | | |
| • | Fruit length (cm) | 34.63 | 31.18 | 32.23 | | | | | | | | |

| | | | | |
|----|--|---|----------------|------------------|
| • | Fruit girth (cm) | 11.87 | 11.40 | 10.81 |
| • | Fruit weight (g) | 119.43 | 112.82 | 108.10 |
| • | No. of fruit / plant | 17.08 | 13.36 | 14.10 |
| • | Fruit yield / plant (kg) | 2.016 | 1.523 | 1.750 |
| • | Petiole length (cm) | 11.6 | 10.80 | 11.30 |
| • | Pedicle length (cm) | 9.20 | 8.10 | 10.0 |
| • | Number of ridges on fruit | 10 | 10 | 10 |
| • | 100 seed weight | 15.50 | 11.50 | 12.10 |
| • | Fruit skin colour | Green | Green | Green |
| • | Fruit size | Long | Medium | Large |
| • | Fruit shape | Elliptical | Elliptical | Curve |
| • | Seed colour | Black | Black | Black |
| • | Flash texture | Smooth | Smooth | Smooth |
| • | Flower size | Big | Medium | Medium |
| • | Ridge expression | Highly prominent | Prominent | Medium prominent |
| • | Early plant vigor | Very good | Good | Good |
| • | Plant growth habit | Medium vine | Medium vine | Long vine |
| • | Stem pubescence | Smooth | Smooth | Smooth |
| • | Stem shape | Angular | Angular | Angular |
| • | Tendrils | Present | Present | Present |
| • | Tendrils type | Coiled | Coiled | Coiled |
| • | Tendrils branching | Branched (1+3) | Branched (1+3) | Branched (1+4) |
| • | Leaf margin | Multifold | Multifold | Serrate |
| • | Leaf size | Large | Medium | Large |
| • | Leaf pubescence nature | Intermediate | Soft | Soft |
| • | Leaf pubescence density | Dense | Sparse | Dense |
| • | Sex type | Monocious | Monocious | Monocious |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of sowing : 15th June to 15th July • Spacing: 200 cm x 100 cm • Seed rate: 3 kg/ha. • Fertilizer: N:P:K 50 : 25 : 25 kg/ha. | | |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The fruit of this hybrid are long size with green colour. Petiole and pedicle length is more and the ridge expression of the fruit is highly prominent. Dorsal side petal having five prominent nerves-male flowers. | | |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Moisture (%) : 93.20 • Dry Wt. (%) : 6.80 • TSS (%) : 5.83 • Total sugar (%) : 1.29 • Reducing sugar (%) : 0.753 • Non reducing sugar (%) : 0.538 • Pulp/Skin ratio : 5.634 • Chlorophyll 'B' (mg/g) : 1.240 • Protein (%) : 0.230 • Fiber content (%) : 2.328 | | |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The hybrid is medium tolerance against downy mildew disease. Fruit fly and mines per leaf are less in the hybrid. | | |
| 17 | Days to last picking/Maturity | 109 days/Medium maturity group. | | |

| | | |
|----|-------------------------------|--|
| | group | |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



21. Indian Bean

21.1 Gujarat Junagadh Indian bean 11 (GJIB 11)

| | | |
|----|---|--|
| 1 | Name of crop | Indian bean |
| 2 | Botanical name | <i>Dolichos lablab</i> L. |
| 3 | Name of variety | Gujarat Junagadh Indian bean 11 (GJIB 11) |
| 4 | Parentage with details of its pedigree | The genotype was collection from the local collection was maintained in germplasm as lion No. 16. |
| 5 | Breeding method | Pure line selection. |
| 6 | Year of release | 2010-11 |
| 7 | Gazette notification | Awaited |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJIB 11 (JIB (V) 16 IC: 587779 |
| 9 | Potential pod yield (q/ha) | 111.31 |
| 10 | Average pod yield (q/ha) | 95.39 |
| 11 | Recommended regions/areas of adoption | The Indian bean variety is suitable for cultivation during late <i>kharif</i> season in Saurashtra and Middle Gujarat. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 57.25 |
| | • Plant spread (cm) | 49.31 |
| | • No. of branches/plant | 4.91 |
| | • Pod length (cm) | 13.22 |
| | • Pod width (cm) | 1.09 |
| | • Ten pod weight (g) | 53.44 |
| | • No. of seeds per pod | 5.11 |
| | • Days to first picking | 98 |
| | • Days to last picking | 149 |
| | • Pod colour | Green |
| | • Pod shape | Medium long |
| | • Pod size | Medium |
| | • Plant habit | Semi spreading |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of sowing : 15th to 30th September • Spacing: 150 cm x 75 cm • Seed rate: 8 to 10 kg/ha. • Fertilizer: N:P:K 20 : 40 : 00 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The pod of this variety is medium long in size with green colour. Plant is semi spreading and flower is violate in colour. |
| 15 | Quality / Nutritional / Other | <ul style="list-style-type: none"> • Moisture (%) : 86.3 |

| | | |
|----|--|---|
| | features | <ul style="list-style-type: none"> • Dry matter (%) : 13.7 • Poly phenol oxidase (od/min/g.) : 0.14 • Glycoalkaloid (od/gm.) : 0.32 • TSS (%) : 11.6 • Peel colour (od/g.) : 1.36 • Protein (%) : 2.12 • Acidity (%) : 3.56 • Total phenol (mg/100g.) : 27.23 • Total soluble sugar (%) : 1.93 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The variety possessed tolerance leaf spot and leaf blight disease. Mosaic virus incidence is also recorded less (1.22 %) in the variety. The reaction of pod borer, leaf miner and aphids damage are also recorded lower. |
| 17 | Days to last picking/Maturity group | 149 days/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |



21.2 Gujarat Junagadh Indian bean 2 (GJIB 2)

| | | |
|----|--|---|
| 1 | Name of crop | Indian bean (<i>Papdi</i>) |
| 2 | Botanical name | <i>Dolichos lablab</i> L. |
| 3 | Name of variety | Gujarat Junagadh Indian bean 2 (GJIB 2) |
| 4 | Parentage with details of its pedigree | JNDIB 88 x JNDIB 23 (1998-7-7-18-14-13) |
| 5 | Breeding method | Hybridization followed by pedigree method of selection. |
| 6 | Year of release | 2011-12 |
| 7 | Gazette notification | S. O. 3666 (E) & Date: 06.12.2016 |
| 8 | Acknowledge particulars about the submission of germplasm samples with NBPGR | GJIB 2 (JIB (P)-04-14 IC: 589768 |
| 9 | Potential pod yield (q/ha) | 143.11 |
| 10 | Average pod yield (q/ha) | 112.46 |
| 11 | Recommended regions/areas of adoption | The Indian bean (<i>papdi</i>) variety is suitable for cultivation during late <i>kharif</i> season in Saurashtra and Middle Gujarat. |
| 12 | Characteristics/Distinguishing morphological in brief: | |
| | • Plant height (cm) | 77.86 |
| | • Plant spread (cm) | 65.24 |
| | • No. of branches/plant | 5.55 |
| | • Pod length (cm) | 8.00 |
| | • Pod width (cm) | 1.997 |
| | • Ten pod weight (g) | 50.25 |
| | • No. of seeds per pod | 4.28 |

| | | |
|----|--|---|
| • | Days to first picking | 91.0 |
| • | Days to last picking | 155.86 |
| • | Pod colour | Green |
| • | Pod shape | Flat and medium long |
| • | Pod size | Big |
| • | Pod tip | Acute |
| • | Pod edge | Green |
| • | Pod curvature | Curved |
| • | Plant habit | Semi erect |
| • | Stem colour | Green |
| • | Petiole length | Short |
| • | Petiole colour | Green |
| • | Leaf blade tip angle | Very acute |
| • | Leaf blade colour | Green |
| • | Corolla colour | White |
| • | Inflorescence spike length | Long |
| • | Pedicle length and thickness | Intermediate |
| • | Grain colour | Light green |
| 13 | Agronomical Practices | <ul style="list-style-type: none"> • Time of sowing : 15th August to 15th September • Spacing: 120 cm x 60 cm • Seed rate: 15 to 20 kg/ha. • Fertilizer: N:P:K 20 : 40 : 00 kg/ha. |
| 14 | Specific attributes/Describe at least two identifiable characteristics of the variety | The pod of this variety is flat and medium long in shape with green colour. Plant is semi spreading and flower is white in colour. Grain colour is light green and inflorescence length is more. |
| 15 | Quality / Nutritional / Other features | <ul style="list-style-type: none"> • Moisture (%) : 82.53 • Dry matter (%) : 17.47 • Poly phenol Oxidase (od/min/gm.) : 0.133 • Glycoalkaloid (od/gm.) : 0.26 • TSS (%) : 15.5 • Peel colour (od/gm.) : 1.17 • Protein (%) : 4.69 • Acidity (%) : 2.26 • Total phenol (mg/100g.) : 32.64 • Total soluble sugar (%) : 2.23 |
| 16 | Diseases and pests resistance (give details of any resistance to pest or diseases including races) | The variety possessed leaf spot and leaf blight disease intensity is also less. The reaction of pod borer, leaf miner and aphids damage are also recorded lower. |
| 17 | Days to last picking/Maturity group | 156 days/Medium maturity group. |
| 18 | Originating source/ Institute | Vegetable Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat) |

