

RICE

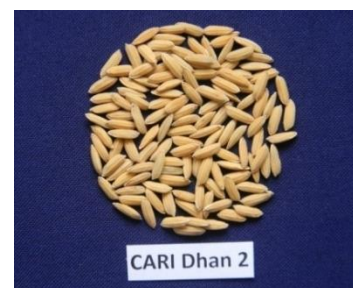
1. Technology: CARI Dhan 1

- **Scientists associated in developing technology:** Asit B. Mandal, T.V.R.S. Sharma, P.K. Singh, and R.C. Srivastava
- **Technology description:** It is a medium duration variety which matures in about 122-125 days with plant height of 115 cm, with 7-8 panicle bearing tillers. It gives 4.0-4.5 t/ha yield in normal soils of Andaman and Nicobar Islands (ANI) and possesses long medium grains. It is moderately resistant to sheath blight, bacterial blight, leaf spot and tolerant to stem borer and water logging. It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2009.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A&N Islands and fits well in rice - vegetable cropping system of Islands.
- **Benefit:** It has medium slender grains, medium duration and gives 10-15% more yield (4-4.5 t/ha) compared to local check varieties.



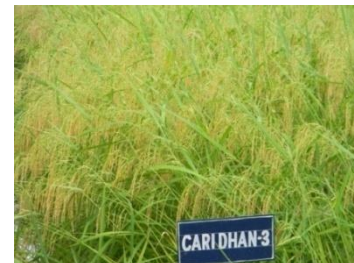
2. Technology: CARI Dhan 2

- **Scientists associated in developing technology:** Asit B. Mandal, T.V.R.S. Sharma, P.K. Singh, and R.C. Srivastava
- **Technology description:** It is medium duration (120 days) variety and has medium slender grains and plant height of 110-125 cm. It bears 7 to 8 effective tillers/plant and has panicle length of 25 cm. It gives yield from 5.0 to 5.5 t/ha in lowland rainfed conditions in coastal areas. It is resistant to sheath blight, leaf spot and tolerant to water logging. It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2009.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A&N Islands and fits well in rice - vegetable cropping system of Islands.
- **Benefit:** It is medium slender grain, medium duration variety which gives 15-20% more yield (5-5.5 t/ha) compared to local check varieties.



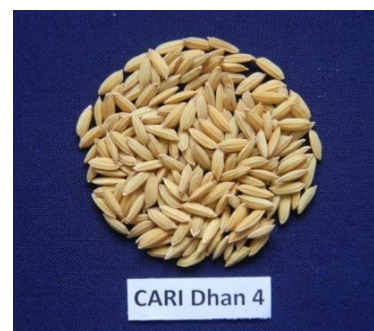
3. Technology: CARI Dhan 3

- **Scientists associated in developing technology:** Asit B. Mandal, T.V.R.S. Sharma, P.K. Singh, and R.C. Srivastava
- **Technology description:** It is a medium statured (115 cm) variety having medium duration (120 days). It bears 7-8 tillers per plant with panicle length of 26 cm. Its yield ranges from 4.5 to 5 t/ha. It has medium slender fine grains and resistant to sheath and bacterial blight and tolerant to stem borer and water logging. It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2009.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A&N Islands and fits well in rice - vegetable cropping system of Islands.
- **Benefit:** It is medium slender grained and medium duration variety. This gives 10-15% more yield (4.5–5.0 t/ha) compared to local check varieties.



4. Technology: CARI Dhan 4

- **Scientists associated in developing technology:** Asit B. Mandal, T.V.R.S. Sharma, P.K. Singh, and R.C. Srivastava
- **Technology description:** It is a long duration (140 days) and salt tolerant variety. It has intermediate stature (120 cm) with 6-8 tillers per plant and panicle length of 25 cm. It gives yield of about 4.5 - 5 t/ha in normal soils and about 3.2 t/ha in moderately saline conditions under island conditions. It is resistant to sheath blight and leaf spot. It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2009.
- **Subject Area/ Industry (in which it used):** It is suitable for coastal saline soils of A&N Islands.
- **Benefit:** It has medium bold grains, long duration and gives 20-25% more yield (3-3.2 t/ha) compared to local check varieties in coastal saline soils.



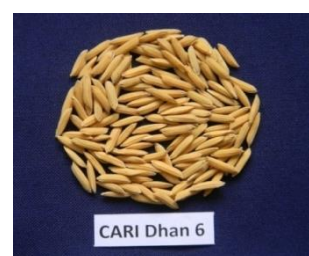
5. Technology: CARI Dhan 5

- **Scientists associated in developing technology:** Asit B. Mandal, T.V.R.S. Sharma, P.K. Singh, and R.C. Srivastava
- **Technology description:** It is a long duration (150 days) variety for saline soils with short stature (95.5 cm) and higher yield. It bears 9-10 tillers per plant with panicle length of 24 cm. Its grain yield ranges from 5.0 to 5.5 t/ha in normal soils and 3.2 to 3.7 t/ha in saline soil conditions. Due to its higher yield and other favourable characters, this variety has become very popular among farmers of A&N Islands. It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2009.
- **Subject Area/ Industry (in which it used):** It is suitable for coastal saline soils of A & N Islands.
- **Benefit:** It has medium boldgrain, long duration variety and gives 20-25% more yield (3-3.2 t/ha) compared to local check varieties in coastal saline soils.



6. Technology: CIARI Dhan 6

- **Scientists associated in developing technology:** P.K. Singh, Krishna Kumar, Ajanta Birah, R.K. Gautam, Naresh Kumar, T.V.R.S. Sharma, A.K. Singh, S.K. Zamir Ahmed and S. Dam Roy
- **Technology description:** It is a medium duration (125 days), long slender grain, high yielding (5 to 5.5 t/ha) rice variety for rainfed low land conditions of Andaman and Nicobar Islands. It is short statured (100 cm) and bears 7-8 effective tillers (panicle bearing) per plant with panicle length of 24 cm. It is resistant to bacterial leaf blight disease which is number one disease of Andaman and Nicobar Islands. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI, Port Blair in 2013.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A& N Islands and fits well in rice - vegetable cropping system of Islands.
- **Benefit:** It is long slender grain and medium duration rice variety. This gives 15-20% more yield (5-5.5 t/ha) as compared to local check varieties and resistant against bacterial leaf blight disease of rice.



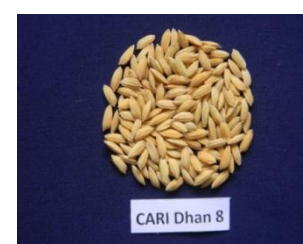
7. Technology: CIARI Dhan 7

- **Scientists associated in developing technology:** P.K. Singh, Krishna Kumar, Ajanta Birah, R.K. Gautam, Naresh Kumar, T.V.R.S. Sharma, A.K. Singh, S.K. Zamir Ahmed and S. Dam Roy
- **Technology description:** It is medium duration (130 days), medium slender grains with higher yield (5 to 5.5 t/ha). It is resistant to bacterial leaf blight disease and is suitable for rainfed low land conditions of Andaman and Nicobar Islands. It is short statured (100 cm) and bears 6-7 tillers per plant with panicle length of 25cm. It is also resistant to lodging. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2013.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A& N Islands and fits well in rice - vegetable cropping system of Islands.
- **Benefit:** It is a medium slender grain, medium duration variety which gives 18-20% more yield (5-5.5 t/ha) compared to local check varieties, and has resistance against bacterial leaf blight disease of rice.



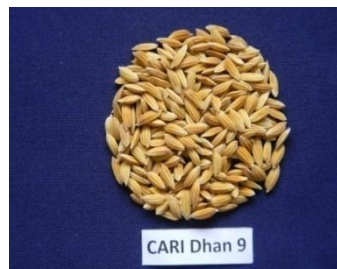
8. Technology: CIARI Dhan 8

- **Scientists associated in developing technology:** R.K. Gautam, P.K. Singh, A.K. Singh, S.K. Zamir Ahmed, K. Sakthivel and S. Dam Roy
- **Technology description:** It is a long duration (215 days) high yielding, tall statured (188 cm), bears 6-7 tillers per plant, long panicle with low spikelet fertility, medium bold grains with yellow husk and good grain quality. It is suitable for low input management conditions and also gives good straw yield for fodder purpose. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2014.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A& N Islands for late sowing.
- **Benefit:** It is suitable for low input management conditions and also gives good straw yield for fodder purpose which gives 18-20% more yield (3.0 t/ha) compared to parent mixed variety C14-8.



9. Technology: CIARI Dhan 9

- **Scientists associated in developing technology:** R.K. Gautam, P.K. Singh, A.K. Singh, S.K. Zamir Ahmed, K. Sakthivel and S. Dam Roy
- **Technology description:** This is a long duration (216 days) high yielding, tall statured (200 cm), bears 6-7 tillers per plant, long panicle with low spikelet fertility, medium bold grains with brown husk and good grain quality. It is suitable for low input management conditions and also gives good straw yield for fodder purpose. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2014.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A& N Islands for late sowing.
- **Benefit:** It is suitable for low input management conditions and also gives good straw yield for fodder purpose which gives 20-24% more yield (3.5 t/ha) compared to parent mixed variety C14-8.



PULSES (GREEN GRAM/MUNG)

10. Technology: CIARI Mung 1

- **Scientists associated in developing technology:** A.K. Singh, Krishan Kritania, R.K. Gautam, Sanjeev Gupta, G.P. Dixit, Naresh Kumar, P.K. Singh, Krishna Kumar, S.K. Zamir Ahmed and S. Dam Roy.
- **Technology description:** This is medium duration (66-70 Days) variety with synchronous maturity (at 75-80% physiological maturity), high yielding, bold seeded, brown and long pods with more number of seeds per pod, medium statured variety, profuse branches, test weight (>5.42g) and appreciable field resistance to charcoal rot, powdery mildew and MYMV. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2014.
- **Subject Area/ Industry (in which it used):** It is suitable for rainfed lowland ecosystem of A& N Islands for late sowing.
- **Benefit:** Yield is 1.8 t/ha and the variety is resistant to charcoal rot, powdery mildew and MYMV.



11. Technology: CIARI Mung 2

- **Scientists associated in developing technology:** A.K. Singh, R.K. Gautam, Khokan Mondal, Sanjeev Gupta, G.P. Dixit, Naresh Kumar, P.K. Singh, Krishna Kumar, S.K. Zamir Ahmed and S. Dam Roy



- **Technology description:** This is medium duration (66-70 days) variety with synchronous maturity (at 80% physiological maturity), high yielding, bold seeded, black and long pods with more number of seeds per pod, medium statured variety, profuse branches, test weight (>5.06g) and appreciable field resistance to charcoal rot, powdery mildew and MYMV. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2014.
- **Subject Area/ Industry (in which it used):**
- **Benefit:** Yield is 1.6 t/ha and variety is resistant to charcoal rot, powdery mildew and MYMV.



12. Technology: CIARI Mung 3

- **Scientists associated in developing technology:** A.K. Singh, R.K. Gautam, Prashant Mondal, Sanjeev Gupta, G.P. Dixit, Naresh Kumar, P.K. Singh, Krishna Kumar, S.K. Zamir Ahmed and S. Dam Roy



- **Technology description:** This is medium duration (64-68 days) variety with synchronous maturity (at 80% physiological maturity), high yielding, medium seeded, black and long pods with more number of seeds per pod, medium statured variety, profuse branches, test weight (>4.9g) and appreciable field resistance to charcoal rot, powdery mildew, terminal drought and MYMV. This variety is suited for rice-fallow conditions. It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2014.
- **Subject Area/ Industry (in which it used):**
- **Benefit:** Yield is 1.4 t/ha and the variety is resistant to charcoal rot, powdery mildew and MYMV.



13. Technology: CIARI Mung 4

- **Scientists associated in developing technology:** A.K. Singh, Sudhir Tirki, P.K. Singh, R.K. Gautam, Naresh Kumar, T.P. Swarnam, T. Subramani, A. Velmurugan, S.K. Zamir Ahmed and S. Dam Roy
- **Technology description:** This is a medium duration (61-70 days) variety, synchronous maturity (at 90 % physiological maturity), determinate plant type having high yield potential (1.92 t/ha), bold seeded, 100 seed weight (6.1-6.9 g), long pods (12.3 -15.6 cm), more number of seeds per pod (12-16), medium statured (59.2 -70.1 cm) variety with black pods, profuse branches (3.0-7.0) and appreciable field resistance to charcoal rot, powdery mildew prevailing in the Islands and mungbean yellow mosaic virus (MYMV).
- **Subject Area/ Industry (in which it used):**
- **Benefit:** Yield is 1.49 t/h and the variety is resistant to charcoal rot, powdery mildew and MYMV.



14. Technology: CIARI Mung 5

- **Scientists associated in developing technology:** A.K. Singh, Niranjana Roy, P.K. Singh, R.K. Gautam, Naresh Kumar, T.P. Swarnam, T. Subramani, A. Velmurugan, S.K. Zamir Ahmed and S. Dam Roy
- **Technology description:** This is medium duration (58-69 Days) variety with synchronous maturity (at 85% physiological maturity), determinate plant type having high yielding potential (1.27 -1.94t/ha), medium seeded, 100 seed weight (4.2 -4.9 g), long pods (9-13 cm), more number of seeds per pod (10-14), medium statured (63-79 cm) variety with black pods, profuse branches (3-5) and appreciable field resistance to charcoal rot, powdery mildew prevailing in the Islands and mungbean yellow mosaic virus (MYMV).
- **Subject Area/ Industry (in which it used):**
- **Benefit:** Yield is 1.27 -1.94t/ha and the variety is resistant to charcoal rot, powdery mildew and MYMV.



PULSES (URD)

15. Technology: CIARI Urd 1

- Scientists associated in developing technology:** A.K. Singh, P.K. Singh, R.K. Gautam, Naresh Kumar, T.P. Swarnam, T. Subramani, A. Velmurugan, S.K. Zamir Ahmed and S. Dam Roy
- Technology description:** This is medium duration (62-70 days) variety with synchronous maturity(at 80% physiological maturity), indeterminate plant type having high yielding potential (9-13 q/ha), medium sized seeds, 100 seed weight (4.5-5.1 g), long pods (4.8-5.7 cm), more number of seeds per pod (5-8), medium statured (34-59 cm) variety with black pods, profuse branches (4-9) and appreciable field resistance to charcoal rot, leaf crinkle and powdery mildew diseases prevailing in the Islands and mung bean yellow mosaic virus (MYMV).
- Subject Area/ Industry (in which it used):**
- Benefit:** It is high yielding variety and resistance to charcoal rot, leaf crinkle and powdery mildew diseases prevailing in the Islands and mung bean yellow mosaic virus (MYMV).



16. Technology: CIARI Urd 2

- Scientists associated in developing technology:** A.K. Singh, P.K. Singh, R.K. Gautam, Naresh Kumar, T.P. Swarnam, T. Subramani, A. Velmurugan, S.K. Zamir Ahmed and S. Dam Roy
- Technology description:** This is a medium duration (64-72 days) variety with synchronous maturity (at 80% physiological maturity), indeterminate plant type having high yield potential (9-14 q/ha), bold seeded, 100 seed weight (5.2-5.9g), long pods (5.3-5.7 cm), more number of seeds per pod (5-8), medium statured (37-73 cm) variety with black pods, profuse branches (4-8) and appreciable field resistance to charcoal rot, leaf crinkle and powdery mildew diseases prevailing in the Islands and mung bean yellow mosaic virus (MYMV).
- Subject Area/ Industry (in which it used):**
- Benefit:** It is high yielding variety and resistance to charcoal rot, leaf crinkle and powdery mildew diseases prevailing in the Islands and mung bean yellow mosaic virus (MYMV).



COCONUT

17. Technology: CARI- Annapurna

- **Scientists associated in developing technology:** M.A. Suryanarayana, M. Sankaran, V. Damodaran, D.R. Singh, S. Dam Roy, T. Damodaran, R.P. Medhi, E.V.V. Bhaskar Rao, P.K. Khosy, B.C. Viraktamath, Joshi Joseph, S. Chander Rao, R. Dhanapal, B. Augustine Jerard, P.M. Kumaran, M.J. Rathnambal, R.V. Nair, P.M. Jacob, V. Arunachalam, S.K. Rizal, K.V.K. Nampoodhiri, George V. Thomas
- **Technology description:** This variety is a dwarf palm with large size nuts, variant of the Niu-lekha, one of the collections from Fiji Islands. The peculiar feature of this selection is that it is dwarf to semi-tall with the nut characters of tall which is desirable for copra yield. The copra out turn/palm (13.70 Kg) and spacing adopted is 6 x 6 m instead of 7.5 x 7.5m. Drought tolerant, and cultivable in Island conditions. It has been released by Institute Variety Release Committee, ICAR-CIARI, Port Blair, in 2013. Yields: High copra content (245g/nut).
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands.
- **Benefit:** The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions.



18. Technology: CARI-Surya

- **Scientists associated in developing technology:** M.A. Suryanarayana, M. Sankaran, V. Damodaran, D.R. Singh, S. Dam Roy, T. Damodaran, R.P. Medhi, E.V.V. Bhaskar Rao, P.K. Khosy, B.C. Viraktamath, Joshi Joseph, S. Chander Rao, R. Dhanapal, B. Augustine Jerard, P.M. Kumaran, M.J. Rathnambal, R.V. Nair, P.M. Jacob, V. Arunachalam, S.K. Rizal, K.V.K. Nampoodhiri & George V. Thomas
- **Technology description:** This variety is a dwarf palm with crown shape in circular, spherical nut shape, palms are dwarf with closer, internodes, compressed crown and shorter petioles. The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions. It has been released by Institute Variety Release Committee, ICAR-CIARI, Port Blair, in 2013. Yields: average 104.9 nos. nuts/palm/year.
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands.
- **Benefit:** The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions.



19. Technology: CARI-Omkar

- **Scientists associated in developing technology:** R.P. Medhi, T. Damodaran, R.C. Srivastava, D.R. Singh, M. Sankaran, V. Damodaran, M.A. Suryanarayana, E.V.V. Bhaskar Rao, P.K. Khosy, B.C. Viraktamath, Joshi Joseph, S. Chander Rao, R. Dhanapal, V. Arunachalam, B. Augustine Jerard, P.M. Kumaran, M.J. Rathnambal, R.V. Nair, P.M. Jacob & George V. Thomas
- **Technology description:** This variety is a dwarf palm with close internodes, short petioles and compressed crown, semi-circular crown with less than 20 leaves on the crown. Nut shape is pear with less meat content. The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions. It has been released by Institute Variety Release Committee, ICAR-CIARI, Port Blair, in 2013. Yields: 110.8 nuts / palm/ year in average.
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands
- **Benefit:** The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions.



20. Technology: CARI-Chandan

- **Scientists associated in developing technology:** M.A. Suryanarayana, M. Sankaran, V. Damodaran, D.R. Singh, S. Dam Roy, T. Damodaran, R.P. Medhi, E.V.V. BhaskarRao, P.K. Khosy, B.C. Viraktamath, Joshi Joseph, S. Chander Rao, R. Dhanapal, B. Augustine Jerard, P.M. Kumaran, M.J. Rathnambal, R.V. Nair, P.M. Jacob, V. Arunachalam, S.K. Rizal, K.V.K. Nampoodhiri & George V. Thomas
- **Technology description:** This variety is a dwarf palm with close internodes, short petioles and semi-circular compressed crown. Spherical nut shape and smooth without prominent ridges. Nut shape is spherical. A promising cultivar for the island conditions and coastal ecosystem. The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions. It has been released by Institute Variety Release Committee, ICAR-CIARI, Port Blair, in 2014. Yields : 98.10 nuts / palm/ year in average
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands
- **Benefit:** The palms are very attractive and have a good ornamental value. Drought tolerant, and cultivable in Island conditions.



SWEETPOTATO

21. Technology: CARI-Swarna

- **Scientists associated in developing technology:** M. Sankaran, V. Damodaran, D.R. Singh, T. Damodaran, R Sudha, Shrawan Singh, L.B. Singh, R.P. Medhi & S. Dam Roy
- **Technology description:** It is a seedling selection from the South Andaman. The plants are spreading, emerging leaves colour- light purple, petiole purple colour and tubers- light pink, orange fleshed. Moderate resistant to weevil and cultivable in island conditions. Duration is 110 – 120 days. It has high yield potential of 20 – 21 t/ ha. It has been released by Institute Variety Release Committee, ICAR-CIARI, Port Blair, in 2013.
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands.
- **Benefit:** Resistant to weevil and cultivable in island conditions.



22. Technology: CARI-Aparna

- **Scientists associated in developing technology:** M. Sankaran, V. Damodaran, D.R. Singh, T. Damodaran, R Sudha, Shrawan Singh, L.B. Singh, R.P. Medhi & S. Dam Roy
- **Technology description:** It is a seedling selection from the South Andaman. The plants are semi- spreading, emerging leaves colour- light purple, petiole purple colour and tubers- light pink, white fleshed. Moderate resistant to Weevil and cultivable in island conditions. Duration is 110 – 120 days. It has the yield potential of (20-21t/ha). It has been released by Institute Variety Release Committee, ICAR-CIARI, Port Blair, in 2013.
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands.
- **Benefit:** Moderate Resistant to Weevil and cultivable in island conditions.



GREATER YAM

23. Technology: CARI-Yamini

- **Scientists associated in developing technology:** M. Sankaran, V. Damodaran, D.R. Singh, R. C. Srivastava, L.K. Bharthi & R.P. Medhi.
- **Technology description:** Clonal selection from accessions collected from Little Andaman. Pink, and Tubers- conical shape and white flesh. Ideal as the plants are leaf shape – cordate, petiole greenish, inter crop in the coconut and arecanut plantations. Moderate tolerant to anthracnose disease and leaf spot and cultivable in island conditions. Immune to anthracnose disease (*Collectotrichum gloeosporioides*) and leaf spot (*Cercospora sp.*). It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2010. Yields is 45 – 50 t/ ha.
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands
- **Benefit:** Highly suitable for islands & coastal areas. This crop could be the ideal inter crop in the coconut and arecanut plantations.



GREEN ORCHID

24. Technology: CARI-Pretty Green Bay Orchid- ornamental purpose

- **Scientists associated in developing technology:** D.R. Singh, R. C. Srivastava, Sujatha Nair, Shrawan Singh, R.P. Medhi & T.V.R.S. Sharma.
- **Technology description:** Ground orchid (*Eulophia andamanensis* Rchbf.) is CARI-Pretty Green Bay identified as potential terrestrial orchid and considered as export potential commodity owing to its good keeping quality and long attractive spike with many green florets. An ornamental plant, 35-45 flower / spike and 4-5 spike / plant. Small flower with 120-150 cm spike length and cultivable in island conditions. It has been released by State Variety Release Committee, Andaman and Nicobar Administration in 2010. Yields is 5 t/ ha.
- **Subject Area/ Industry (in which it used):** Sub-Tropical coastal areas of Islands.
- **Benefit:** Potential terrestrial orchid and considered as export potential commodity owing to its good keeping quality and long attractive spike with many green florets.



NONI

25. Technology: CIARI Samridhi (*Morinda citrifolia* L.)

- **Scientists associated in developing technology:** D.R. Singh, Shrawan Singh, Krishna Kumar & Ajanta Birah
- **Technology description:** CIARISamridhi variety is Dwarf statured, consistent yielder, above bearer, richest in phytochemical compounds with high antioxidant activity. Fruiting start at 10-12 months. It matures early in about 100 - 105 days and can be harvested from fruit setting to full maturity stage. The average yield is 16.0-20.0 t/ha/year. It can be grown round the year. This variety is released by IVRC (ICAR-CIARI, Port Blair) in 2014. Suitable as intercrop in arecanut and coconut plantations.
- **Subject Area/ Industry (in which it used):** Rainfed conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** Suitable as intercrop in arecanut and coconut plantations.



26. Technology: CIARI Sanjivini (*Morinda citrifolia* L.)

- **Scientists associated in developing technology:** D.R. Singh, Shrawan Singh, Krishna Kumar & Ajanta Birah
- **Technology description:** CIARI Sanjivini variety is Dwarf statured, consistent yielder, above bearer, richest in phytochemical compounds with high antioxidant activity. Fruiting start at 12-14 months. It matures early in about 100 -105 days and can be harvested from fruit setting to full maturity stage. The average yield is 14.0-17.0 t/ha/year. It can be grown round the year. This variety is released by IVRC (ICAR-CIARI, Port Blair) in 2014. Suitable as intercrop in coconut plantations.
- **Subject Area/ Industry (in which it used):** Rainfed conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** Suitable as intercrop in arecanut and coconut plantations.



27. Technology: CIARI Sampada (*Morinda citrifolia* L.)

- **Scientists associated in developing technology:** D.R. Singh, Shrawan Singh, Krishna Kumar & Ajanta Birah
- **Technology description:** CIARI Sampada variety is vigorous, consistent yielder, medium sized fruits, above bearer, rich in phytochemical compounds with high antioxidant activity as demanded by industry. Well suited to tropical climatic conditions of Islands. Fruiting start at 12-14 months. It matures early in about 110 - 120 days and can be harvested from fruit setting to full maturity stage. The average yield is 15.0-17.0 t/ha/year. It can be grown round the year. This variety is released by IVRC (ICAR-CIARI, Port Blair) in 2014. Suitable as intercrop in coconut plantations.
- **Subject Area/ Industry (in which it used):** Rainfed conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** Well suited to tropical climatic conditions of Islands. Suitable as intercrop in coconut plantations.



28. Technology: CIARI Rakshak (*Morinda citrifolia* L.)

- **Scientists associated in developing technology:** D.R. Singh, Shrawan Singh, Krishna Kumar & Ajanta Birah
- **Technology description:** CIARI Rakshak variety is Dwarf, well adaptive to sea water affected lands, consistent yielder, showed high level of phytochemicals and antioxidant activity which is comparable with Noni genotypes grown in normal soils. Fruiting start at 10-12 months. It matures early in about 100 -110 days and can be harvested from fruit setting to full maturity stage. The average yield is 7.0-9.0 t/ha/year. It can be grown round the year. This variety is released by IVRC (ICAR-CIARI, Port Blair) in 2014.
- **Subject Area/ Industry (in which it used):** Sea water challenged lands in humid tropical climatic conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** Well suited to tropical climatic conditions of Islands. Suitable as intercrop in coconut plantations.



MUSHROOM

29. Technology: CARI Mushroom 1

- **Scientists associated in developing technology:** K. Sakthivel, R.K. Gautam, V.K. Pandey, Archana Sharma, N.C. Choudhari, P.K. Singh, K. Abirami and S. Dam Roy
- **Technology description:** It is a local collection from Mangultan. This is a cream coloured little slimy mushroom with irregular and curvy margins with no or very short stipes. The yield ranges is 700 g to 1 Kg per kilogram of substrate. The total life cycle of the mushroom is 25 days. It has been released by Institute Variety Release Committee, Andaman and Nicobar Administration in 2016.
Average Yield: 700 g-1 Kg per Kilogram of substrate
- **Subject Area/ Industry (in which it used):** It is suitable for growing in Islands conditions
- **Benefit:** It is a high yielding variety



30. Technology: CARI Mushroom 2

- **Scientists associated in developing technology:** K. Sakthivel, R.K. Gautam, V.K. Pandey, N.C. Choudhri, P.K. Singh, A.S. Krishnamoorthy, S. Nakkeeran, Archana Sharma, T. Subramani, and S. Dam Roy
- **Technology description:** It is a National collection from Tamil Nadu and Karnataka farmers. This is a white coloured mushroom with normal texture. The margins are regular with long stipes. The yield ranges from 800 g to 1 kg per kilogram of substrate. The total life cycle is 45 days. It has been released by Institute Variety Release Committee, Andaman and Nicobar Administration in 2016.
Average Yield: 800 g-1 Kg per Kilogram of substrate
- **Subject Area/ Industry (in which it used):** It is suitable for growing in Islands conditions
- **Benefit:** It is a high yielding variety



31. Technology: CARI Mushroom 3

- **Scientists associated in developing technology:** K. Sakthivel, R.K. Gautam, V.K. Pandey, N.C. Choudhri, A.S. Krishnamoorthy, S. Nakkeeran, Archana Sharma, and S. Dam Roy
- **Technology description:** It is a National collection from Tamil Nadu and Karnataka farmers. This is a light blue colored mushroom with normal texture. The margins are both regular and irregular. The yield ranges from 800 g to 1 kg per kilogram of substrate. The total life cycle is 40-45 days. It has been released by Institute Variety Release Committee, Andaman and Nicobar Administration in 2016.
Average Yield: 800 g-1 Kg per Kilogram of substrate
- **Subject Area/ Industry (in which it used):** It is suitable for growing in Islands conditions
- **Benefit:** It is a high yielding variety



VEGETABLES

32. Technology: CARI Brinjal 1

- **Scientists associated in developing technology:** Krishna Kumar, P.K. Singh, Ajanta Birah, Shrawan Singh, Naresh Kumar, A.K. Singh, D.R. Singh, R.K. Gautam, & L.B. Singh.
- **Technology description:** It is a high yielding and bacterial wilt resistant brinjal variety for island conditions. It gives 25-35 t/ha fruit yield. Its plants are medium tall with profuse branching. Fruits are light green and oblong in shape with less seeds. It is highly resistant to Bacterial wilt disease which is very severe disease of brinjal in India including A & N Islands. This variety also exhibited drought tolerance ability during water stress situations and is thus suitable for growing in islands conditions during dry season (October to May). It has been recommended for cultivation in Andaman and Nicobar Island by Institute Variety Release Committee, CIARI Port Blair in 2013.
- **Subject Area/ Industry (in which it used):** It is suitable for growing in Islands conditions and bacterial wilt prone areas.
- **Benefit:** It has high yielding ability (25-35 t/ha fruit yield) and is bacterial wilt resistance.



33. Technology: CARI Lal Marsha (*Amaranthus tricolor L.*)

- **Scientists associated in developing technology :** Shrawan Singh, D.R. Singh, L.B. Singh, S.K. Zamir Ahmed & S. Dam Roy.
- **Technology description:** It is a promising selection for higher yield, attractive leaf colour and better adaptability to tropical hot humid climate of Islands. It has attractive broad and reddish or purple magenta colour leaves, fast growth habit and more acceptances among the farmers and consumers. It is a non-hybrid variety. Interestingly, it is more preferred in home gardens for its attractive red purple colour which adds aesthetic value. It is rich in anthocyanin a strong antioxidant for better health. It became ready for first harvest within 27-30 days and have yield potential of 14-16 t/ha in island condition. It is released by IVRC (ICAR-CIARI, Port Blair) in 2014. Suitable for round the year cultivation.
- **Subject Area/ Industry (in which it used):** Humid tropical climatic conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** It is more acceptable among the consumers due to its attractive and colourful leaves. In islands, it is commonly called as '*Lal Marsha*'. It is rich in anthocyanin, a strong antioxidant for better health.



34. Technology: CARI Poi (*Basella alba* L.)

- **Scientists associated in developing technology :** Shrawan Singh, D.R. Singh, Krishna Kumar, Ajanta Birah, L.B. Singh, S.K. Zamir Ahmed & S. Dam Roy.
- **Technology description:** It is attractive green and broad leaves with short intermodal length, better shelf-life, tolerance to foliar disease and pests. It is rich in Iron and Calcium, ascorbic acid and carotenoids. It is an early duration crop matures in 40-45 days
 - Recommended manures and fertilizers:
 - 10 t/ha compost
 - 80 kg nitrogen (1/2 as basal dose; 1/4 after 1st and 1/4 after 2nd harvesting)
 - 40 kg/ha phosphorus
 - 50kg/ha potassium as basal application through organic or inorganic sources
 - (ii) Average yield: 55.0-60.0 t/ha/year

This variety has been released by IVRC (ICAR-CIARI, Port Blair) in 2013.

- **Subject Area/ Industry (in which it used):** It is highly suitable to tropical climatic conditions.
- **Benefit:** It is rich in Iron and Calcium, ascorbic acid and carotenoids.



35. Technology: CIARI Shan (*Basella rubra* L.)

- **Scientists associated in developing technology :** Shrawan Singh, D.R. Singh, L.B. Singh & S. Dam Roy.
- **Technology description:** The 'CIARI Shan' has dark attractive purple/magenta color stems and green leaves with coloured veins and short intermodal length. It is rich in anthocyanin and micronutrients. It is highly suitable to tropical climatic conditions of Islands. It is ready to harvest at 35-40 days stage, when it attains the height of 25-30 cm. It has escaped foliar disease and pests.
- **Recommended manures and fertilizers:**
 - 25 t/ha compost
 - 80 kg nitrogen (1/2 as basal dose; 1/4 after 1st and 1/4 after 2nd harvesting) 40 kg/ha phosphorus
 - 50kg/ha potassium as basal application through organic or inorganic sources (for multi-harvest crop)
 - This genotype performs well with organic farming practice, for this apply 3-5 tons of vermicompost in addition of 25 -30 tons of well decomposed FYM.

(ii) **Average yield:** 48 - 52 t/ha/years

This variety has been released by IVRC of ICAR-CIARI, Port Blair in 2014.

- **Subject Area/ Industry (in which it used):** Irrigated and rainfed conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** It is rich in anthocyanin and micronutrients. It is highly suitable to tropical climatic conditions of Islands.



36. Technology: CARI Broad Dhaniya, Culantro/Burma dhaniya (*Eryngium foetidum* L.)

- **Scientists associated in developing technology:** Shrawan Singh, D.R. Singh, R.C. Srivastava & L.B. Singh.
- **Technology description:** CARI-Broad Dhaniya is developed through mass selection method from local collections. It has broad and large sized serrated, acute, dentate and shiny green leaves with small spines. It has excellent vegetative growth, more number of leaves, large sized leaves, rich in phytochemical compounds and micronutrients. Well suited to tropical climatic conditions of Islands. It is suitable for organic cultivation and shaded conditions, fertilizer responsive but nitrogen fertilizers should be avoided as it increases nitrate content in leaves, performs better with application of vermicompost @ 5-8t/ha. Spacing 30cm x 20 cm and suitable as intercrop in plantations. Its richness in micronutrients and phytochemicals shows its potential for making value added products.
Average yield: 10-12t/ha/year
This variety has been released by SVRC of A& N Administration, Port Blair in 2010.
- **Subject Area/ Industry (in which it used):** Humid tropical climatic conditions of Andaman & Nicobar Islands and similar ecosystem available elsewhere.
- **Benefit:** It is rich in phytochemical compounds and micronutrients. Well suited to tropical climatic conditions of Islands.

