

Dr. Debabrata Panda (PhD)

Senior Assistant Professor

Department of Biodiversity and Conservation of Natural Resources

Head (I/C), Department of Botany

Central University of Odisha, Koraput-763004, India

E-mail: dpanda80@gmail.com / dpanda@cuo.ac.in

Phone: +91-9437511187 (Mobile); Tel: 91-6852-251288 (O)



Date of Birth: May 26, 1980

Educational Qualification:

- **Ph. D** (Botany) Central Rice Research Institute, Cuttack, India [2008]
- **M.Phil** (Botany) Utkal University, Bhubaneswar, India [2003]
- **M.Sc** (Botany) Utkal University, Bhubaneswar, India [2002]
- **B.Sc** (Botany-Hons) F. M. University, India [2000]

Teaching and Research Experiences:

- **Assistant Professor in the Department of Biodiversity and Conservation of Natural Resources, Central University of Orissa** from May 2012- Present
- **Scientist-B**, Rubber Research Institute of India (Rubber Board) GOI from **December 2010- May 2012**.

Research Guidance

Ph.D.: 4 (Awarded), 2(Continuing)

MPhil.: 9 (Awarded)

MSc. Dissertation: 106

Publications

National/ International Journal: 110; **Books:** 10; **Book Chapter:** 31

Google Scholar: <https://scholar.google.co.in/citations?user=X9wFsAIAAAAJ&hl=en>

SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=7102938170>

ORCID: <https://orcid.org/0000-0002-8019-3062>

Research Project: (04)

1. Principal Investigator (PI) for Science and Technology Department, Govt of Odisha funded project entitled 'Molecular characterization of selected indigenous rice landraces of Jeypore tract of Odisha in relation to drought stress tolerance' completed in March 2022.
2. Principal Investigator (PI) for Science and Technology Department, Govt of Odisha funded project entitled 'Metabolite Profiling and Bioprospecting of Underutilized Wild Yams (*Dioscorea spp.*) used by Tribals of Koraput, Odisha' started during December 2022.

3. Principal Investigator (PI) in Science and Technology Department, Govt of Odisha funded Collaborative Research Project in Biotechnology entitled Molecular Profiling of Indigenous Finger millet Genotypes of Northern Eastern Ghats region in Southern Odisha for Nutritional traits and Climate Resilience started during September 2023.
4. Principal Investigator (PI) in Department of Agriculture & Farmers Empowerment, Govt of Odisha funded Consultant Project entitled “Study on nutritional analysis & microbial diversity associated with local landraces of selected crops and commodities in the Similipal landscape” started during April 2025.

PROFESSIONAL RECOGNITION & AWARD RECIEVED

- 1 **Nature Conservation Award 2003 by the Orissa Environmental Congress (OEC)** in its 14th Annual Conference of OEC on 23 December 2023.
- 2 **Prof. Gadadhara Mishra Memorial Plant Physiology Award 2003** by the Orissa Botanical Society (OBS) on 17th December 2023.
- 3 **Best Article Award** in International Rice Research Notes, **29 (1):2004** for the Celebration of International year of rice-2004, **International Rice Research Institute (IRRI), The Philippines.**
- 4 **Research Excellence Award- 2021** from InSc (Institute of Scholar), Bangalore, India.
- 5 **Young Scientist award** by Orissa Botanical Society in 30th Annual conference of Orissa Botanical Society – 2005, India.
- 6 **Best Paper presentation award** In National seminar on Environmental stress impact on plants” Utkal University, Bhubaneswar in 2010.
- 7 **Best Poster award** In National seminar on Molecular approaches for crop improvement, NDUA&T, Faizabad in 2007
- 8 **Best Paper presentation Award** In 42nd Annual Conference of Orissa Botanical Society, Bhubaneswar during 20-21st January 2018.
- 9 **Best Poster award** In *National seminar on Molecular approaches for crop improvement*, NDUA&T, Faizabad in **2007**.
- 10 **Poster Award** in *National Conference on Emerging Trends in Plant Science Research*, Ravenshaw University, Odisha during 01-03 March **2020**
- 11 **Best Botany Honours graduate** of Bhadrak College under F.M. University in the year **2000**.
- 12 Qualified the **National Eligibility Test (NET)** in Life Sciences for lectureship conducted by CSIR/UGC, New Delhi on June 2003.
- 13 Qualified **ARS-NET** for Assistant Professorship in Plant Physiology conducted by ICAR, New Delhi on may 2008.
- 14 Qualified **NET for Assistant Professor in Plant Science** conducted by ICAR, New Delhi in **2010**
- 15 **Life member of** Orissa Botanical Society, Odisha, India
- 16 **Life Member of** Orissa Environmental Society, Odisha, India

LIST OF PUBLICATIONS

1. **D. Panda**, P. Muni, A. Panda, K. Lenka (2024) Nutritional and nutraceutical richness of neglected little millet genotypes from Eastern Ghats of India: implications for breeding and food value. *Planta*, 259: 37, (Springer, IF: 4.300; ISSN: 0032-0935).
2. **D. Panda**, P. K. Behera, S. K. Lenka (2024) The influence of leaf vein density on yield physiology of indica rice landraces from Eastern Ghats of India. *Cereal Research Communications*. <https://doi.org/10.1007/s42976-024-00545-z>. (Springer, ISSN 0133-3720, IF: 1.6).
3. **D. Panda**, B. Singh, M. Nanda (2024) Diversity of nutritional compositions in selected coffee varieties from Koraput regions of Eastern Ghats. *Vegetos*. DOI: 10.1007/s42535-024-01047-3. (Springer, ISSN 2229-4473).
4. P.K. Senapati, E. Kariali, K. Kisan, B.B. Sahu, **D. Panda**, P.K. Mohapatra (2024) Comprehensive studies reveal physiological and genetic diversity in traditional rice cultivars for UV-B sensitivity. *Scientific Report* 14, 13137 (2024). (Nature, IF: 4.6; ISSN 2045-2322).
5. Sahoo, B.B., **Panda, D.**, Panda, A. *et al.* (2024). Exploring the morphological and biochemical characteristics of *Kharif* onion (*Allium cepa* L.): principal component and path coefficient analysis. *Vegetos*. <https://doi.org/10.1007/s42535-024-01005-z>. (Springer, ISSN 2229-4473).
6. Chandra, U., Reju, M.J., Jessy, M.D., **Panda, D.**, Mydin, K.K. and Khoyamthem, P. (2024). Juvenile yield performance of poly-cross progenies of Hevea in Garo Hills of Meghalaya. *Rubber Science*, 37(1): 110-116. (ISSN -2454-4841, Rubber Board).
7. **D. Panda**, A. Panda B. Bhoi, K. Lenka (2023) Genotypic variability of drought-tolerance responses in underutilized indigenous finger millet genotypes. *Plant Physiology Report*. 28: 362–377. (Springer, IF: 1.7; ISSN 2662-253X).
8. P.K. Behera, V. Kumar, S. S. Sharma, S.K. Lenka, **D. Panda** (2023) Genotypic diversity and abiotic stress response profiling of short-grain aromatic landraces of rice (*Oryza sativa* L. *Indica*). *Current Plant Biology* 33: 100269 (Elsevier IF: 5.40; ISSN 2214-6628).
9. **D. Panda**, K. Rani, P.K. Behera, B. Padhan, S.K. Lenka (2023). Nutritional diversity and food potential of indigenous pigmented rice landraces from Koraput regions of Eastern Ghats. *Discover Food*, 3: 16. (Springer, ISSN 2731-4286).
10. **D. Panda**, B. Padhan, M. Nanda, A. Sahu, J. K. Nayak (2023) Blending neglected and underutilised wild yam tubers from forest to functional food. *Food and Humanity*. 1: 1338-1344. (Elsevier ISSN: 2949-8244).
11. S. K. Padhi, A. Sahoo, **D. Panda** (2023) Nutritional and nutraceutical variability in neglected Niger (*Guizotia abyssinica* (L.f.) Cass.) accessions from Eastern Ghats of India. *Oil Crop Science*, 8 (3): 174-183. (Elsevier ISSN: 2096-2428).
12. D. Panda, R. K. Behera, P.K. Behera, S. K. Padhi J. K. Nayak (2023). Nutritional and Nutraceutical Potential of Underutilized Wild Flowers used by Tribal People of Koraput for Health Benefit. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* <https://doi.org/10.1007/s40011-023-01520-0>. (Springer, ISSN 0369-8211).
13. P. K. Behera and **D. Panda** (2023). Germplasm resources, genes and perspective for aromatic rice. *Rice Science* 30(4): 294-305. (Elsevier IF: 4.80 ISSN: 1672-6308).

14. **D. Panda** and P. K. Behera (2023) Folk Rice Landraces from Koraput Valley of Eastern Ghats of India Improving Tribal Food and Nutritional Security. *Science and Culture* 89 (9–10): 364-367, DOI: <https://doi.org/10.36094/sc.v89.2023>.
15. S.K. Palita, **D. Panda** and J.K. Nayak (2023) Indigenous communities and Biodiversity Conservation: and Indian Perspective. *Science and Culture* 89 (9–10): 347-356, DOI: <https://doi.org/10.36094/sc.v89.2023>.
16. **D. Panda**, S.K. Barik, S.K. Padhi, J.K. Nayak (2023) Nutritional and nutraceutical potential of underutilized wild edible fruits used by tribal people of Koraput, India for health benefit. *Science and Culture* 89: 218-223,
17. J.K. Nayak, J. R. Patnaik and **D. Panda** (2023) Plant Resources used for Tooth Brushing and Dental Care by the Paraja and the Gadaba Tribes of Koraput District, Odisha, India. *Science and Culture* 89: 357-363, DOI: <https://doi.org/10.36094/sc.v89.2023>.
18. U. Chandra, K. Mydin, R. P. Singh, and **D. Panda** (2023). Wintering, refoliation and flowering pattern of different Hevea clones in Garo hills of Meghalaya. *Rubber Science*, 36(1): 88-95. (ISSN -2454-4841, Rubber Board).
19. **D. Panda**., Panda, A., Prajapati, H., K. Lenka (2022) Genetic variability of panicle architecture and nutritional parameters in indigenous finger millet genotypes from Koraput, Eastern Ghats of India. *Cereal Research Communications*. <https://doi.org/10.1007/s42976-022-00345-3> (**Springer**, ISSN 0133-3720, IF: 1.60).
20. B. Pradhan, **D. Panda**, S. K. Bishi, K. Chakraborty, S. K. Muthusamy, S. K. Lenka (2022). Progress and prospects of C4 trait engineering in plants. *Plant Biology (Wiley Online)*; ISSN: 1438-8677; IF: 3.9) doi:10.1111/plb.13446
21. **D. Panda**, P. K. Behera, S. Mishra and B. Mishra (2022). Differential drought tolerance responses in short-grain aromatic rice germplasms from Koraput valley of Eastern Ghats of India. *Plant Physiology Reports*. 27: 119-131. (**Springer**, ISSN 2662-253X, IF: 1,7)
22. **D. Panda**, P. K. Behera and S.S. Mishra (2021). Drought Tolerance in Rice: Focus on Recent Mechanisms and Approaches. *Rice Science* 28(2): 119-132. (**Elsevier** IF: 5.6 ISSN: 1672-6308).
23. **D. Panda** and S. K. Palita (2021). Potential of underutilized wild crops of Koraput, Odisha, India for improving nutritional security and promoting climate resilience. *Current Science*, 120(6):989-996 (IAS, IF:1.169; ISSN: 0011-3891)
24. **D. Panda**, C. Rath, P. K. Behera and S. K. Lenka (2021). Physiological introspection of leaf photochemical activity and antioxidant metabolism in selected indigenous finger millet genotypes in relation to drought stress. *Cereal Research Communications*. 49, 607–618. (**Springer**, ISSN 0133-3720, IF: 1.60)
25. **D. Panda** and J. Barik, R.K. Sarkar (2021) Recent Advances of Genetic Resources, Genes and Genetic Approaches for Flooding Tolerance in Rice. *Current Genomics*, 22(1): 42-58. (Bentham Science; ISSN:1875-5488; IF: 2.6)
26. **D. Panda** and J. Barik (2021). Flooding Tolerance in Rice: Focus on Mechanism and Approaches. *Rice Science* 28 (1):43-57 (**Elsevier** IF: 4.80, ISSN: 1672-6308).
27. S.K. Palita, R. Panigrahi, and **D. Panda** (2021) Potentiality of bat guano as organic manure for improvement of growth and photosynthetic response in crop plants. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* 91:185–193 (**Springer**, ISSN 0369-8211, IF: 0.396).
28. J. R. Pattanayak, **D. Panda**, J. K. Nayak (2021) Reproductive health related ethno-medicinal practices among the Paraja and Gadaba tribes of Koraput district, Odisha, India. *Annals Ayurvedic Medicine*, 10 (2) 109-127 ISSN: 2277-4092

29. **D. Panda**, B. Patra, P. K. Behera and J. Nayak (2021) Vegetation performance of Niger on bauxite mining soil for sustainable cultivation in overburden disposal area. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* 91:665–673. (Springer, ISSN 0369-8211, IF: 0.396).
30. **D. Panda**, N.H. Sailaja, P.K. Behera, S.K. Lenka, K. Lenka (2021) Genetic diversity of under-utilized indigenous finger millet genotypes from Koraput, India for crop improvement. *J. Plant Biochem. Biotechnol.* 30(1):99-116 (Springer; ISSN: 0971-7811; IF:1.9).
31. P. Tikadar, J. K. Nayak and **D. Panda** (2021) Qualitative Phytochemical Screening of Ethnomedicinal Plants used by Paraja Tribe of Koraput, India. *Journal of Stress Physiology & Biochemistry*, 17(1):5-12 (ISSN 1997-0838).
32. **D. Panda**, J. Barik, P. K. Behera, J. Barik and D. Dash (2021) Suitability of Brahmi (*Bacopa monnieri* L.) cultivation on fly ash-amended soil for better growth and oil content. *International J Phytoremediation*, 23:1, 72-79. (Taylors & Francis, ISSN: 1522-6514; IF: 3.7)
33. **D. Panda**, S.S. Mishra, P. K. Behera and S. K. Lenka (2021). Role of Ascorbate and Ascorbate–Glutathione Cycle for Photosynthetic Protection in Selected Indigenous Rice Landraces Under Drought Stress. *Agricultural Research*, 10(2):187–192 (Springer, ISSN: 2249-7218, IF: 1.4).
34. **D. Panda**, N. Sahu, P. K. Behera and K. Lenka (2020). Genetic variability of panicle architecture in indigenous rice landraces of Koraput region of Eastern Ghats of India for crop improvement. *Physiology and Molecular Biology of Plants*. 26:1961–1971 (Springer, ISSN: 0971-5894; IF: 3.5)
35. **D. Panda**, L. Mandal, J. Barik, B. Padhan, S. S. Bisoi. (2020). Physiological response of metal tolerance and detoxification in castor (*Ricinus communis* L.) under fly ash-amended soil. *Heliyon*, 6: e04567. (ISSN: 2405-8440, Cell Press IF: 4.0).
36. B. Padhan J. K. Nayak and **D. Panda** (2020) Natural antioxidant potential of selected underutilized wild yams (*Dioscorea* spp.) for health benefit. *J Food Science Technology*, 57: 2370–2376 doi.org/10.1007/s13197-020-04470-x. (Springer; ISSN: 0975-8402; IF:3.1)
37. B. Padhan and **D. Panda** (2020) Potential of neglected and underutilized yams (*Dioscorea* spp.) for improving nutritional security and health benefits. *Frontier in Pharmacology* 11:496. doi: 10.3389/fphar.2020.00496 (IF:5.6; ISSN: 16639812).
38. **D. Panda**, L. Mandal and J. Barik (2020) Phytoremediation potential of naturally growing weed plants grown on fly ash-amended soil for restoration of fly ash deposit *International J Phytoremediation*, 22:11, 1195-1203 (Taylors & Francis, ISSN: 1522-6514; IF: 4.003)
39. **D. Panda**, M. Biswas and B. Padhan (2020) Traditional processing associated changes in chemical parameters of wild Yam tubers from Koraput, Odisha, India. *Indian Journal of Traditional Knowledge* 19 (2), 268-276, pp (NISCAIR; ISSN:0972-5938; IF:1.091).
40. B. Padhan, M. Biswas, and **D. Panda** (2020) Nutritional, anti-nutritional and physico-functional properties of wild edible yam (*Dioscorea* spp.) tubers from Koraput, India. *Food Bioscience* 34: 100527. (Elsevier; ISSN: 2212-4292; IF: 5.2).
41. **D. Panda**, A.K. Behera B. Padhan and J. K. Nayak (2020) Chemical Profiling of Selected Plants of *Zingiberaceae* used in Ethnomedicine of Koraput, India. *Journal of Stress Physiology & Biochemistry*, 16(1):50-60 (ISSN 1997-0838).
42. **D. Panda**, S.S. Kumar B. Padhan and J. K. Nayak (2020) Phytochemical evaluation of ethnomedicinal plants used against snake bite by the tribal People of Koraput, Odisha, India. *Annals Ayurvedic Medicine*, 9 (1): 12-21. ISSN: 2277-4092
43. J. Barik, V. Kumar, S.K. Lenka, and **D. Panda** (2020). An Assessment of Variation in Morpho-physiological Traits and Genetic Diversity in Relation to Submergence Tolerance of Five Indigenous Landraces of Lowland Rice. *Rice Science* 27(1): 32-43. (Elsevier IF: 4.8) ISSN: 1672-6308.

44. **D. Panda**, B. Mohanty, S.S. Mishra, P.K. Behera, J. Barik (2020) Harnessing leaf photosynthetic traits and antioxidant defence for multiple stress tolerance in three premium indigenous rice landraces of Jeypore tract of Odisha, India. *Functional Plant Biology*, 47(2): 99-111 (CSIRO, IF: 3.0; ISSN: 1445-4408).
45. P. Tikadar, S. K. Palita and **D. Panda** (2020) Phytochemical profiling of selected medicinal plants used by Paraja tribe of Koraput, India. *Ecology Environment & Conservation*, 26(1): 148-154. (ISSN-0971-765X).
46. **D. Panda**, N. Sailaja, B. Padhan, K. Lenka (2020) Sprouting-Associated Changes in Nutritional and Physico-Functional Properties of Indigenous Millets from Koraput, India. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* 90: 79-86. (Springer, ISSN 0369-8211, IF: 0.396).
47. **D. Panda**, R.S. Sahoo, P.K. Behera, J. Barik and J. K. Nayak (2020) Leaf Photochemical Activity and Antioxidant Protection in Selected Hill Rice Genotypes of Koraput, India in Relation to Aluminum (Al^{3+}) Stress. *Journal of Stress Physiology & Biochemistry*, 16(2):13-21 (ISSN 1997-0838).
48. U. Chandra, R. P. Singh, M. J. Reju, K. Mydin and **D. Panda** (2020). Performance of new ortet selections of *Hevea brasiliensis* under the agro-climatic conditions of Meghalaya. *Rubber Science*, 33(2): (ISSN -2454-4841).
49. **D. Panda**, A. Ray and R.K. Sarkar (2019) Yield and photochemical activity of selected rice cultivars from Eastern India under medium depth stagnant flooding. *Photosynthetica*, 57 (4): 1084-1093. (Springer; ISSN: 0300-3604; IF:2.700).
50. **D. Panda**, T. Sahu, J. Barik, S.S. Mishra, B. Padhan, S.K. Lenka (2019) Data assessing genotypic variations in selected traditional rice landraces of Jeypore tract of Odisha, India based on photosynthetic traits, *Data in Brief*, 25 (2019) 104305 (Elsevier ISSN: 2352-3409; IF: 1.2)
51. **D. Panda**, S.S. Mishra, S.K. Mohanty, P.K. Behera, S.K. Lenka (2019) Data on genetic potentiality of folk rice (*Oryza sativa* L.) genotypes from Koraput, India in reference to drought tolerance traits, *Data in Brief*, 25 (2019) 104363 (Elsevier ISSN: 2352-3409, IF: 1.2)
52. J. Barik, **D. Panda** S. Mohanthy and S.K. Lenka (2019). Leaf photosynthesis and antioxidant response in selected traditional rice landraces of Jeypore tract of Odisha, India to submergence *Physiology and Molecular Biology of Plants* 25(4):847–863. (Springer, ISSN: 0971-5894; IF: 3. 5)
53. B. Padhan, A. K. Mukherjee, S. K. Mohanthy, S.K. Lenka, and **D. Panda** (2019). Genetic variability and inter species relationship between wild and cultivated yams (*Dioscorea* spp.) from Koraput, India based on molecular and morphological markers. *Physiology and Molecular Biology of Plants* 25(5):1225–1233. (Springer, ISSN: 0971-5894; IF: 3.5)
54. S.S. Mishra, P.K. Behera and **D. Panda** (2019). Genotypic variability for drought tolerance-related morpho-physiological traits among indigenous rice landraces of Jeypore tract of Odisha, India. *Journal of Crop Improvement* 33(2): 254–278. (Taylors & Francis, ISSN: 1542-7528; IF: 0.385)
55. J. Barik, V. Kumar, S.K. Lenka, and **D. Panda** (2019). Genetic potentiality of lowland indigenous indica rice (*Oryza sativa* L.) landraces to anaerobic germination potential. *Plant Physiology Report* 24(2):249–261. (Springer, ISSN 2662-253X; IF: 1.7)
56. S.S. Mishra, P.K. Behera, V. Kumar, S.K. Lenka, and **D. Panda** (2018). Physiological characterization and allelic diversity of selected drought tolerant traditional rice (*Oryza sativa* L.) landraces of Koraput, India. *Physiology and Molecular Biology of Plants* 24(6) 1035–1046. (Springer, ISSN: 0971-5894; IF: 3.5)
57. **D. Panda**, A. Mahakud, B. Mohanthy, S. S. Mishra and J. Barik (2018). Genotypic variation of photosynthetic gas exchange and stomatal traits in some traditional rice (*Oryza sativa* L.) landraces from

- Koraput, India for crop improvement. *Physiology and Molecular Biology of Plants* 24(5):973–983. (Springer, ISSN: 0971-5894; IF: 3.5)
58. B. Padhan, N. K. Dhal, M. Biswas and **D. Panda (2018)**. Evaluation of mineral bioavailability and heavy metal content in indigenous food plant wild yams (*Dioscorea* spp.) from Koraput, India. *J Food Sci Technol*. 55(11):4681-4686. (Springer; IF: 3.1)
 59. **D. Panda**, L. Mandal, B. Padhan, S. S. Mishra and J. Barik (2018). Improvement of Growth, Photosynthesis and Antioxidant Defense in Rice (*Oryza sativa* L.) Grown in Fly Ash-Amended Soil. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* 89 (3): 853-860. (Springer, ISSN 0369-8211, IF: 0.396)
 60. **D. Panda**, Dibyajyoti Panda, B. Padhan and M. Biswas (2018). Growth and physiological response of lemongrass (*Cymbopogon citratus* (D.C.) Stapf.) under different levels of fly ash-amended soil. *International J Phytoremediation*, 20(6):538-544. (Taylors & Francis, ISSN: 1522-6514; IF: 4.003)
 61. B. Padhan and **D. Panda (2018)**. Variation of photosynthetic characteristics and yield in wild and cultivated species of yams (*Dioscorea* spp.) from Koraput, India *Photosynthetica* 56 (4): 1010-1018. (Springer; ISSN: 0300-3604; IF:2.70)
 62. **D. Panda**, D. N. Rao, K. K. Das and R. K. Sarkar (2017). Role of starch hydrolytic enzymes and phosphatases in relation to under water seedling establishment in rice. *Indian J Plant Physiology* 22 (3) 279-286. (Springer, ISSN 2662-253X)
 63. S.S. Mishra and **D. Panda (2017)**. Leaf Traits and Antioxidant Defense for Drought Tolerance During Early Growth Stage in Some Popular Traditional Rice Landraces from Koraput, India. *Rice Science*, 24(4): 207-217. (IF: 4.8, ISSN: 1672-6308).
 64. S.S. Bisoi, S.S. Mishra, J. Barik and **D. Panda (2017)**. Effects of different treatments of fly ash and mining soil on growth and antioxidant protection of Indian wild rice. *International J Phytoremediation*, 19(5):446-452. (IF: 4.003; ISSN: 1549-7879).
 65. A. Ray, **D. Panda** and R. K. Sarkar (2017) Can rice cultivar with submergence tolerant quantitative trait locus (SUB1) manage submergence stress better during reproductive stage? *Archives of Agronomy and Soil Science*, 63(7): 998-1008. (IF: 2.4; ISSN: 0365-0340).
 66. **D. Panda**, S. Bag and S.K. Palita. (2016) Impact of Industrial effluent on Seed Germination and Seedling Vigour of Rice (*Oryza sativa* L) and its sustainable use in agriculture. *Environment and Ecology*, 34(1): 155-159. (ISSN 0970-0420).
 67. U. Chandra, R. P. Singh, M. J. Reju, **D. Panda**, P. Khoyamthem, G. Das and K. Mydin (2015). Early growth performance of certain *Hevea* clones from on farm trials in Garo hills of Meghalaya. *Rubber Science*, 28(3): 275-280. (ISSN -2454-4841)
 68. **D. Panda**, S. Pradhan, J. K. Nayak, and S.K. Palita. (2014) Medicinal weed diversity and ethno medicinal weeds used by tribal's of Koraput, India. *Ecology Environment & Conservation*, 20(2): 35-38. (ISSN-0971-765X).
 69. **D. Panda** and R. K. Sarkar. (2014) Mechanism associated with nonstructural carbohydrate accumulation in submergence tolerant rice (*Oryza sativa* L.) cultivars. *Journal of Plant Interactions*, 9:1, 62-68 (IF:3.2; ISSN: 1742-9153)
 70. **D. Panda** and R. K. Sarkar. (2013) Characterization of Leaf Gas Exchange and Anti-oxidant Defense of Rice (*Oryza sativa* L.) Cultivars Differing in Submergence Tolerance Owing to Complete Submergence and Consequent Re-aeration. *Agricultural Research*, 2(4) 301-308 (ISSN: 2249-7218, IF:1.4)
 71. **D. Panda** and R. K. Sarkar. (2013) Natural leaf senescence: probed by chlorophyll fluorescence, CO₂ photosynthetic rate and antioxidant enzyme activities during grain filling in different rice cultivars. *Physiology and Molecular Biology of Plants*, 19(1): 43-51 (Springer; ISSN: 0971-5894; IF: 3.5)

72. **D. Panda** and R. K. Sarkar. (2013) Structural Carbohydrate and lignifications associated with submergence tolerance in rice (*O. Sativa*). *J Stress Physiology Biochemistry*, 2: 95-107, ISSN 1997-0838.
73. **D. Panda** and R. K. Sarkar. (2012) Leaf photosynthetic activity and antioxidant defence associated with *Sub 1 QTL* in rice subjected to submergence and subsequent re-aeration. *Rice Science*. 19 (2) 108-116. (IF: 4.8; ISSN: 1672-6308)
74. **D. Panda** and R. K. Sarkar. (2012) Role of non-structural carbohydrate and its catabolism associated with *Sub 1 QTL* in rice subjected to complete submergence. *Experimental agriculture*. 48: 502-512. (Cambridge University press; IF:1.6; ISSN: 0014-4797)
75. **D. Panda** and R. K. Sarkar. (2012) Structural and functional alternation of PS II in rice under Submergence. *J Stress Physiology Biochemistry*, 1: 95-107 (ISSN 1997-0838).
76. **D. Panda** and R.K. Sarkar. (2011) Improvement of photosynthesis by *Sub 1 QTL* in rice under Submergence: Probed by chlorophyll a fluorescence OJIP transients. *J Stress Physiol. Biochem*, 3:250-259. (ISSN 1997-0838)
77. **D. Panda** (2011). Diurnal variation in gas exchange and chlorophyll fluorescence in rice leaves: The Cause for mid day depression of photosynthesis. *J Stress Physiol. Biochem*. 4:75-86. (ISSN 1997-0838)
78. R. K Sarkar and **D. Panda** (2009). Distinction and characterisation of submergence tolerant and sensitive rice cultivars probed by the fluorescence OJIP rise kinetics. *Functional Plant Biology*, 36: 222-233. (IF: 3.0; ISSN: 1445-4408)
79. K. K. Das, **D. Panda**, R. K. Sarkar, J. N. Reddy and A. M. Ismail (2009) Submergence tolerance in relation to variable condition of flood water in rice. *Environmental and Experimental Botany*. 63(3): 425-434. (IF: 5.7; ISSN: 0098-8472)
80. R. K Sarkar, **D. Panda**, J. N. Reddy, SSC. Patnaik, DJ. Mackill and A. M. Ismail (2009) Performance of submergence tolerance rice genotypes carrying the *Sub 1* quantitative trait locus under stressed and non stressed natural field condition. *Indian J. Agricultural Sciences*. 79 (11): 876-83 (ISSN: 0019-5022 IF: 0.374).
81. **D. Panda**, S.G. Sharma and R.K. Sarkar. (2008) Chlorophyll fluorescence parameters, CO₂ photosynthetic rate and regeneration capacity as a result of complete submergence and subsequent re-emergence in rice (*Oryza sativa* L.). *Aquatic Botany*. 88: 127-133. (IF: 1.8 ; ISSN: 0304-3770).
82. **D. Panda**, S.G. Sharma and R.K. Sarkar. (2008) Fast chlorophyll fluorescence transient as selection tools for submergence tolerance in rice. *Indian J. Agricultural Sciences*. 78 (11): 933-939 (ISSN: 0019-5022 IF: 0.374).
83. **D. Panda**, S.G. Sharma and R.K. Sarkar (2007). Chlorophyll fluorescence transient analysis and its association with submergence tolerance in rice (*Oryza sativa*). *Indian J. Agricultural Sciences*. 77 (6): 344-348. (ISSN: 0019-5022 IF: 0.374).
84. P. K. Das, **D. Panda**, N. K. Dhal, N. C. Rout, S. D. Muduli and K. S. Rao (2007). Quantitative assessment of true mangroves presents at Bhitarkanika National Park, Orissa, India. *Ecology Environment & Conservation*, 13(2): 403-408. (SSN: 0971-765X).
85. **D. Panda**, D. N. Rao, S. G. Sharma, R.J. Strasser and R.K. Sarkar (2006). Submergence effects on rice genotypes during seedling stage: probing of submergence driven changes of PS 2 by Chlorophyll a fluorescence induction O-J-I-P transient. *Photosynthetica*. 44(1): 69-75. (IF:2.7; ISSN: 0300-3604).

86. D. Mishra, **D. Panda**, and R. K. Sarkar (2006). Changes of antioxidant enzymes in endosperms Subjected to complete submergence in rice cultivars differing in anaerobic seedling tolerance. *Plant Archives*. 6(1): 89-91. (ISSN:0972-5210)
87. **D. Panda** (2022) Sprouting of Millet Enhances Nutrient Bioavailability and Better for Human Health. *Adivasi Journal* 62(1):16-18. (ISSN: 2277-7245)
88. **D. Panda**, K. Sethy, B. Padhan, L. Mandal, and M. Biswas, (2019). Physiological Response of Black Gram [*Vigna mungo* (L.) Hepper] Grown on Fly Ash-Amended Soil: Growth, Photosynthesis, and Antioxidant Défense. *International Journal of Plant and Environment*, 5(2): 103-110. (ISSN: 2454-1117)
89. S. K. Palita, K. Patra, **D. Panda** (2016) Plants used in Ethnomedicine of Paraja Tribe of Koraput, Odisha, India. *Adivasi Journal* 56 (1):17-25. (ISSN: 2277-7245)
90. P. Tikadar, S. K. Palita and **D. Panda** (2017) Phytochemical analysis of medicinal plants used for treatment of dysentery and diarrhoea by the Paraja Tribe of Koraput, Odisha, India. *International Journal of Herbal Medicine*. 5(2): 01-04 (ISSN: 2321-2187)
91. S. S. Kumar, B. Padhan, S. K. Palita and **D. Panda** (2016) Plants used against snakebite by tribal people of Koraput district of Odisha, India. *Journal of Medicinal Plants Studies*. 4(6): 38-42. (ISSN 2320-3862)
92. **D. Panda**, S.S. Mishra, S.S. Bisoi and J. Barik (2016). Antioxidant Response of Indian wild rice under chromium stress for Phytoremediation. *J Environmental Science and Pollution Research*, 2(1): 137-140. (ISSN: 2455-0272).
93. B. Padhan and **D. Panda**. (2016) Wild Tuber Species Diversity and its Ethno-medicinal use by Tribal People of Koraput District of Odisha, India. *J Natural Product and Resources*, 2(1): 33-36. (ISSN: 2455-0299)
94. U. Chandra, M. J. Reju, R. P. Singh, G. Das, **D. Panda** and K. K. Mydin (2016). Studies on the Evaluation of the Half-sib Progenies to Identify the Prepotency of the Mother Clones of *Hevea brasiliensis* in Meghalaya. *International Journal of Bio-resource and Stress Management*, 7(5):1063-1067.
95. **D. Panda**, S. Panigrahi and S. S. Bisoi. (2015) Quantitative evaluation of naturally colonized plant species on Fly Ash deposit for sustainable phytorestation. *European Journal of Environmental Ecology*. 2(4):179-185. (ISSN – 2393-9672)
96. B. Padhan and **D. Panda**. (2015) Wild Edible Plant Diversity and its Ethno-medicinal use by Indigenous Tribes of Koraput, Odisha, India. *Research Journal of Agriculture and Forestry Sciences*, 3:1-10. (ISSN 2320-6063)
97. S. S. Bisoi and **D. Panda**. (2015) Ethno-Medicinal Plants Present In Sacred Groves of Koraput District of Odisha, India. *Acta Biomedica Scientia*. 2(2): 39-42.(ISSN - 2348 – 2168)
98. **D. Panda**, S S. Rathinayak and S K. Palita (2015) Crop Weeds and Its Uses In The Treatment of Common Ailments In Koraput District of Odisha, India. *American Journal of Biological and Pharmaceutical Research*. 2(1): 20-23. (ISSN - 2348-2184)
99. **D Panda** and B. S. Mounika (2015) Seed germination potential and seedling vigour of indigenous rice (*oryza sativa* L.) Landraces of Koraput, Odisha (India). *European Journal of Environmental Ecology*. 2(1): 20-23. (ISSN – 2393-9672)

100. **D. Panda**, S. S. Bisoi and S. K. Palita. (2014) Floral diversity conservation through sacred groves in Koraput district of Orissa, India: A case study. *Int. Res. J. Environment Science*, 3(9):1-5. (ISSN 2319-1414)
101. **D. Panda** and P. Tikadar. (2014) Effect of fly ash incorporation in soil on germination and seedling characteristics of rice (*Oryza sativa* L.). *Biolife*, 2 (3): 800-807. (ISSN- 2320-4257)
102. **D. Panda** and D. Dash. (2012) Possible Phytoremediation of Chlor-alkali Waste by Using *Sesbania aculeata*. Pers” In *International Journal of Ecosystem*, 2(5): 88-92 (ISSN: 2165-8889).
103. **D. Panda** and R. K Sarkar. (2011) Non-structural carbohydrate metabolism associated with Submergence tolerance in rice. *Genetics and Plant Physiol.* 1(3-4): 155-162. (ISSN 1314-6394)
104. A. B. Das, S. Samal, B. Behera, **D. Panda** and P. Mohanty (2011) Salt tolerance and management of mangroves: Assessment of salt tolerance limit of *Bruguiera parviflora* and *Bruguiera gymnorhiza* seedlings after NaCl shock. *Genetics and Plant Physiol.* 1(3-4): 105-118. (ISSN 1314-6394)
105. B. Baliyarsingh, **D. Panda**, K. K. Das and R. K. Sarkar (2007). Activity of enzymatic antioxidant defense system in submerged rice seedlings. *J. Plant Biology*, 34(3): 1-6.(ISSN-1435-8603)
106. **D. Panda**, P. K. Das, N. K. Dhal and N. C. Rout (2006). Chlorophyll fluorescence Parameters and leaf chlorophyll content in mangrove species grown in different salinity. *Gen. Appl. Plant Physiol.* 32(3-4) 175-180. (ISSN 1314-6394)
107. **D. Panda**, S. G. Sharma and R.K. Sarkar (2005): Changes of Chlorophyll fluorescence and CO₂-Photo-assimilation rate rice cultivars during submergence and subsequent reaeration. *Plant Science Research.* 27(1&2): 76-80. (ISSN: 0972-8546)
108. P. K. Das, **D. Panda**, N. K. Dhal and N. C. Rout (2005) Impact of salinity on the mangroves of Bhitarkanika. *Plant science Research.* 27(1&2): 33-37. (ISSN: 0972-8546)
109. R. K Sarkar, **D. Panda**, D. N. Rao and S. G. Sharma (2004). Chlorophyll fluorescence Parameters as indicators of submergence tolerance in rice. *International Rice Research Notes.* 29(1):66-68. (ISSN 0117-4185)
110. K. K. Das, **D. Panda**, M. Nagaraju, S. G. Sharma and R. K. Sarkar. (2004) Antioxidant enzymes and aldehyde releasing capacity of rice cultivars (*Oryza sativa* L.) as determinants of anaerobic seedling establishment capacity. *Bulgarian J. Plant Physiol.* 30(1-2): 34-44. (ISSN 1314-6394)

Book Published

1. Tillering Behavior of Rice Plant, By P. K. Mohapatra, R. K. Sarkar, Debabrata Panda, E. Kariali, Springer, Singapore, 2025, ISBN 978-981-97-5234-8.
2. Wild Plants for Tribal Food and Medicine by Debabrata Panda and S. Padhi, Indu Book Services Pvt. Ltd. New Delhi, 2024, ISBN 978-93-6729-471-0
3. Wild Yam: An Indigenous Neglected Food Plant by Debabrata Panda and B. Padhan. SSDN PUBLISHERS, New Delhi, 2021, ISBN: 978-93-9279-801-6
4. Traditional Rice Landraces for Flooding Tolerance by Debabrata Panda and J. Barik, Lambert Academy Publisher, Germany, 2022. ISBN: 978-620549242-0
5. Phytoremediation of Fly ash deposit by weed plants by Debabrata Panda and L. Mandal. Lambert Academy Publisher, Germany, 2022. ISBN: 978-620420342-3
6. Submergence tolerance in rice by Debabrata Panda. Lambert Academy Publisher, Germany, 2011. ISBN: 978-3845421216

7. Physiology of Sub1 QTL in rice by Debabrata Panda & S. Mohanty. Lambert Academy Publisher, Germany, 2011. ISBN: 978-3846512814
8. Ascorbate peroxidase and ascorbate regeneration system in rice under submergence. By Debabrata Panda. Lambert Academy Publisher, Germany, 2011. ISBN:978-3847318651
9. Photosynthesis in rice with Sub 1 QTL. by Debabrata Panda. Lambert Academy Publisher, Germany, 2012. ISBN: 978-3848440900
10. Screening of Submergence tolerance in rice by Debabrata Panda. Lambert Academy Publisher, Germany, 2012. ISBN: 978-3659300127

Book Chapter

1. **D. Panda**, S.K. Padhi, M. Nanda, J.K. Nayak, (2025). Toxic and Antinutritional Substances in Traditional Food Plants. In: Prasad, M.N.V et al. (eds) Biotoxins. Springer, Singapore. ISBN: 978-3-031-75308-4, https://doi.org/10.1007/978-3-031-75309-1_12.
2. **D. Panda**, P.K. Behera, J. Barik, (2024). Anaerobic Germination in Rice. In: Sakagami, JI., Nakazono, M. (eds) Responses of Plants to Soil Flooding. Springer, Singapore. ISBN: 978-981-99-9111-2 https://doi.org/10.1007/978-981-99-9112-9_10.
3. **D. Panda**, P.K. Behera, S.K. Padhi, J.K. Nayak (2024) Proteomic Responses of Plants to Nutritional Stress. In Plant Proteomics, CRC Press, ISBN:9781003350453.
4. **D. Panda**, P.K. Behera, S.K. Padhi, A. Panda, J.K. Nayak (2023) Neglected and Underutilized Food Plants of India. In Neglected Plant Foods of South Asia, pp 101-118. Springer Nature Switzerland. ISBN: 978-3-031-37077-9, https://doi.org/10.1007/978-3-031-37077-9_5.
5. **D. Panda**, A. Panda, P.K. Behera, S.K. Padhi, J.K. Nayak. (2023) The Role of Transcriptomics Technology in Understanding Abiotic Stress Tolerance in Finger Millets. In: Transcriptome Analysis and Why it Matters. Ed: S. Mishra, Nova Science Publishers, ISBN: 979-8-89113-098-2.
6. **D. Panda**, P.K. Behera, J.K. Nayak (2023) Role of Cobalt in Plant Growth and Tolerance Against Different Environmental Stress. In Biology and Biotechnology of Environmental Stress Tolerance in Plants: Trace Elements in Environmental Stress Tolerance, 2, pp. 305–323 Apple Academic Press ISBN 978100334620, DOI: [10.1201/9781003346203-11](https://doi.org/10.1201/9781003346203-11)
7. **D. Panda**, P.K. Behera, J. Barik. (2022) Improving Submergence Tolerance in Rice: Recent Progress and Future Perspectives. Response of Field Crops to Abiotic Stress, CRC Press, Boca Raton ISBN: 9781003258063
8. **D. Panda**, P.K. Behera, A. Panda, J.K. Nayak. (2022) Advancement in Omics Technologies for Enhancing Abiotic Stress Tolerance in Finger Millet. In: Roychoudhury, A., Aftab, T., Acharya, K. (eds) Omics Approach to Manage Abiotic Stress in Cereals. Springer, Singapore. ISBN 978-981-19-0140-9.
9. **D. Panda** and S. K. Palita (2022) Koraput: a Land of plant Biodiversity and livelihood resources for tribal food and nutrition security. In Proceedings of Odisha Environment Congress PP: 90-96 ISBN 978-81-920841-6-5.

10. A. Panda, **D. Panda**. (2022) Potentiality of indigenous finger millet genotypes of Koraput, Odisha to drought tolerance. In Proceedings of Odisha Environment Congress PP: 81-86 ISBN 978-81-920841-6-5.
11. P.K. Behera, **D. Panda**. (2022) Potentiality of traditional aromatic rice landraces of Koraput for multiple stress tolerance. In Proceedings of Odisha Environment Congress PP: 76-81 ISBN 978-81-920841-6-5.
12. S Padhi, **D. Panda**. (2022) Potentiality of traditional Niger accessions of Koraput district of South Odisha to drought tolerance. In Proceedings of Odisha Environment Congress PP: 86-90 ISBN 978-81-920841-6-5.
13. **D. Panda**, S.S. Mishra, P.K. Behera (2021) Glutathione transport and compartmentation during abiotic stress conditions. In Transporters and Plant Osmotic Stress: Roychoudhury A. et al (eds): ISBN 978-0-12-817958-1, Academic Press (Elsevier).
14. P.K. Behera and **D. Panda** (2021) Growth and Phytoremediation potential of wild rice under chromium. (Eds. M. Madhu et al.) ISBN: 978-93-88892-81-0. International Books and Periodical Supply Service, India.
15. S. K. Palita and **D. Panda** (2021). Biodiversity Conservation, Environmental Challenges and Sustainable Livelihood “*In Biodiversity Conservation and Livelihood Management*” (Ed. H. Thatoi and P.R. Debata) Astral International Pvt. Ltd. ISBN 978-93-90435-13-5.
16. P. Tikadar and **D. Panda** (2020) Medicinal Plants used for the Treatment of Different Diseases by Paraja Tribes of Koraput District of Odisha, India (Ed. P. S. Singh) ISBN: 978-93-90420-05-6. AkiNik Publications.
17. **D. Panda**, S.S. Mishra, P.K. Behera (2020) Improvement of Rice Quality: The New Revolution. In: Roychoudhury A. (eds) Rice Research for Quality Improvement: Genomics and Genetic Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-4120-9_5. ISBN:978-981-15-4119-3
18. S. K. Palita and **D. Panda** (2019). Water management, climate change and biodiversity. In **Water Resource Management** (Ed. A. Kateja) ISBN: 978-81-316-0990-3. Rawat Publications, India.
19. R.K. Sarkar, K. Chakraborty, K. Chattopadhyay, S. Ray, **D. Panda** and A.M. Ismail (2018) Responses of rice to Individual and combined Stresses of flooding and Salinity. In Advances in Rice Research for Abiotic Stress Tolerance (Eds. Hasanuzzaman M; Fujita M; Nahar K.) ISBN: 978-0-12-814332-2. (Elsevier).
20. S. S. Mishra, R. C. Ray, C. M. Rosell and **D. Panda** (2017). Microbial Enzyme in food application history of Progress. In **Microbial Enzyme Technology in Food Applications**, R.C. Ray and Christina M. Rossell (eds.) ISBN 978-1-4987-4983-1. CRC-Press. (Taylors & Francis).
21. B. Padhan and **D. Panda**. (2015). Ethno-medicinal survey of under-utilized tuber species of Koraput district of Odisha, India. In **Odisha Environmental Congress**, Bhubaneswar (Eds. A. Behera et al.) PP: 113-122. ISBN: 978-81-920841-8-9

22. S. S. Mishra, J. Barik, and **D. Panda. (2015).** Growth and Antioxidant Response under Chromium stress: Screening of Indian Wild Rice for Phytoremediation. *In Odisha Environmental Congress*, Bhubaneswar (Eds. A. Behera et al.) PP: 235-239. ISBN: 978-81-920841-8-9
23. D. Panda, S. G. Sharma and R.K. Sarkar (2008). Chlorophyll fluorescence: An easy tool for identification of submergence tolerant rice cultivar. In: *Environmental Biotechnology and Biodiversity Conservation* (ed. Das, M.), Daya Publication, New Delhi, Pp56-66. ISBN: 978-81-7035-535-9.
24. D. Panda and B. Padhan (2018) Potentiality of indigenous food plant wild yams (*Dioscorea* sp) from Koraput, India for mass consumption and domestication. In: *Proceedings of 43rd Annual Conference of Orissa Botanical Society*, Bhubaneswar, Odisha. pp 130. ISBN: 978-93-87850-09-5.
25. N.H. Sailaja and D. Panda (2018) Effect of sprouting on nutritional and physioco-functional properties of indigenous millets from Koraput, India. In: *Proceedings of 43rd Annual Conference of Orissa Botanical Society*, Bhubaneswar, Odisha. pp 130-131. ISBN: 978-93-87850-09-5.
26. P.K. Behera and D. Panda (2018) Physiological and biochemical responses of Indian wild rice under hexavalent chromium stress for sustainable phytoremediation. In: *Proceedings of 43rd Annual Conference of Orissa Botanical Society*, Bhubaneswar, Odisha. pp 113-114. ISBN: 978-9387850-09-5.
27. D. Panda (2019) Genetic potentiality of traditional rice landraces from Jeypore tract of Odisha for sustainable rice production under drought condition. In: *proceedings of Annual conference Farmers first for conserving soil and water resources in eastern region*. PP- 99-100. ISBN: 978-935951-001-5
28. B. Padhan and D. Panda (2019) Potentiality of wild yams (*Dioscorea* spp.) of Koraput, India for future food security of tribal communities. In: *proceedings of Annual conference on Farmers first for conserving soil and water resources in eastern region*. P- 98. ISBN: 978-935951-001-5
29. J. Barik and D. Panda (2019) Genetic potentiality of lowland indigenous rice landraces from Koraput, India to flooding stress tolerance. In: *proceedings of Annual conference on Farmers first for conserving soil and water resources in eastern region*. P 101. ISBN: 978-935951-001-5
30. N.H. Sailaja and D. Panda (2019) Sprouting associated changes on nutritional and physic functional properties in different millets of Koraput. In: *proceedings of Annual Conference on Farmers first for conserving soil and water resources in Eastern region*. P 102. ISBN: 978-935951-001-5
31. P.K. Behera and D. Panda (2019) Growth and phytoremediation potential of wild rice under chromium. In: *Proceedings of Annual Conference on Farmers First for conserving soil and water resources in the Eastern region*. P 103. ISBN: 978-935951-001-5

Popular article

1. D. Panda, S. K. Palita and P. Behera (2021) Potential plants for eco-restoration of fly ash deposits. *Surakhya Kabach.* 25:42-44
2. D. Panda, S.S. Mishra and Prafulla Behera (2016). Sustainable Phytoremediation of Metal Contaminated Barren Lands. *Surakhya Kabach.* 21:67-70.

3. D. Panda, P. Tikadar and S. Bagh (2015) Sustainable use of Industrial effluents and fly ash in agriculture: A case study. Surakhya Kabach. 20:84-87.
4. D. Panda (2002). Signal Transduction. Parijatak. 31(3): 6-8 Utkal university, Orissa.
5. D. Panda (2001). Electron Transport and ATP synthesis in plants. Parijatak. 30(3): 6-8 Utkal university.

PhD Thesis Guided

1. Physiological and molecular characterization of indigenous Rice (*Oryza sativa* L.) landraces of Koraput in relation to drought tolerance” by Swati Sakambari Mishra Awarded- 12.04. 2019.
2. Biochemical and molecular profiling of wild Dioscorea species of Koraput region, Odisha by Bandana Padhan Awarded- 13.08.2019.
3. Physiological and molecular profiling of indigenous lowland rice (*Oryza sativa* L.) landraces of Koraput in relation to flooding tolerance by Jijansa Barik- Awarded- 29.10. 2019.
4. Genetic Diversity of Indigenous Aromatic Rice Landraces from Koraput, India Based on Quality Traits and Multiple Stress Tolerance by Prafulla K. Behera Awarded- 2024.
5. Profiling of Indigenous Finger millet Genotypes from Koraput, India in Relation to Drought Tolerance by Alokika Panda from 2019- continuing.

MPhil Thesis Guided

1. Growth and Antioxidant Response of Indian Wild Rice exposed to Fly ash and Mining Soil by Sidhanta S. Bisoi (Awarded-2015).
2. Ethno-medicinal and Phytochemical Assessment of Plants Used against Snake Bite by Tribal people of Koraput, Southern Odisha (India) by Saswat S. Kumar (Awarded-2015).
3. Phytochemical screening and antioxidant profiling of selected medicinal plants of Zingiberaceae used in ethnomedicine in Koraput, Odisha by Akhaya Kumar Behera (Awarded- 2017).
4. Physiological and biochemical responses of Indian wild rice to chromium stress for sustainable phytoremediation. Prafulla Kumar Behera (Awarded- 2017).
5. Profiling of nutritional and anti-nutritional factors in selected wild Dioscorea species of Koraput, Odisha, India. Meghali Biswas- Awarded- 2018.
6. Evaluation of growth and metal accumulation potential of selected native plant species under different levels of fly ash for sustainable phytoremediation. Lopamudra Mandal- Awarded- 2018
7. Physiological and Biochemical Characterization of Traditional rice landraces of Koraput, India in relation to multiple stress tolerance. Biswajit Mohanty- Awarded- 2018.
8. Characterization of genetic diversity of indigenous finger millet genotypes of Koraput India. N. Hema Sailaja Awarded- 2019.
9. Morpho-physiological and nutritional profiling of indigenous pigmented rice landraces of Koraput, India. Kalpna Rani- Awarded- 2023.

Seminar/Workshop Organized

1. Organized the International Conference on Millets as Future Food for Sustainable Planet from 10-12 January 2025 at CUO, Koraput, as Convener & Organizing Secretary.
2. Organized the International Conference on Recent advances in Biodiversity and Agriculture for Sustainable Future from 19-20 April 2024 at CUO, Koraput, as Convener & Organizing Secretary.
3. Organized a Seminar on Biodiversity Conservation initiatives in Koraput region during 28rd -29th March 2015 at CUO, Koraput as Joint-Convener.
4. Organized a National Seminar on Climate Change and Biodiversity during 23rd -24th November 2013 at CUO, Koraput as Co-Convener.

National Print and Electronic Media Highlighted the Research

Research News on Wild Yams of Koraput

1. <https://timesofindia.indiatimes.com/city/bhubaneswar/wild-yams-can-help-check-hunger-malnutrition-study-in-researchers-of-central-university-of-disha/articleshow/93670215.cms>
2. https://101reporters.com/article/Environment/Wild_yams_provide_health_and_wealth_to_Odisha_tribals
3. <https://timesofindia.indiatimes.com/city/bhubaneswar/wild-yams-alternative-food-to-alleviate-hunger-malnutrition/articleshow/93667812.cms>
4. <https://www.thebetterindia.com/258335/odisha-tribals-koraput-wild-fruit-yam-crops-solve-india-nutrition/>
5. <http://vigyanprasar.gov.in/isw/Koraputs-wild-crops-possess-immense-potential-for-nutritional-security-&-health-benefits.html>
6. <https://vigyanprasar.gov.in/wp-content/uploads/Vigyan-Samachar-CSIR-News-2-07-July-21.pdf>
7. <https://www.hastakshepnews.com/koraputs-wild-crops-possess-immense-potential-for-nutritional-security-health-benefits/>
8. <https://www.magzter.com/news/954/2474/072021/e1osq>
9. <https://digitpatrox.com/professor-shares-how-odishas-wild-yams-are-better-in-nutrition-than-farmed-fruits/>
10. <https://republicnewsindia.com/koraputs-wild-crops-possess-immense-potential-for-nutritional-security-health-benefits/>
11. <https://delhipostnews.com/koraputs-wild-crops-possess-immense-potential-for-nutritional-security/>
12. <https://www.organiser.org/Encyc/2021/7/8/Koraput-s-Wild-Crops-Possess-Immense-Potential-for-Nutritional-Security-Health-Benefits.amp.html>
13. <https://indusscrolls.com/koraputs-wild-crops-possess-immense-potential-for-nutritional-security-health-benefits/>
14. <https://www.facebook.com/Farmfruz/posts/dr-debabrata-panda-did-his-research-on-agro-biodiversity-underutilised-plant-spe/1541760769510314/>
15. <https://fnn-reporter.com/professor-shares-how-odishas-wild-yams-are-better-in-nutrition-than-farmed-fruits/>

16. <https://lifestyle.rdtimes.in/koraputs-wild-crops-possess-immense-potential-for-nutritional-security-health-benefits/>
17. <https://www.orissapost.com/startup-mooted-for-marketing-of-edible-wild-roots/>
18. http://storiesodisha.com/In_Koraput_tribals_improving_nutrition_through_Wild_Yam.php
19. <https://odishatv.in/news/miscellaneous/wild-yams-provide-health-and-wealth-to-odisha-tribals-186490>
20. <https://webnewsify.com/webnewsify-wild-yams-provide-health-and-wealth-to-odisha-tribals/>
21. <https://english.ajitweekly.com/2022/09/27/wild-yams-provide-health-and-wealth-to-odisha-tribals/>
22. <https://kalingatv.com/state/odisha-tribals-earn-health-and-wealth-from-wild-yams/>
23. <https://lagatar24.com/wild-yams-provide-health-and-wealth-to-odisha-tribals/123144/>
24. <https://jantaserishta.com/local/odisha/wild-yams-provide-health-and-wealth-to-odisha-tribals-1605563>
25. https://ianslive.in/news/wild_yams_provide_health_and_wealth_to_odisha_tribals-907426/NATION/1
26. <https://www.socialnews.xyz/2022/09/27/wild-yams-provide-health-and-wealth-to-odisha-tribals/>
27. <https://odishatv.in/news/miscellaneous/wild-yams-provide-health-and-wealth-to-odisha-tribals-186490>
28. <https://www.orissapost.com/wild-yams-provide-health-and-wealth-to-tribals/>
29. <https://jantaserishta.com/local/odisha/wild-yams-provide-health-and-wealth-to-odisha-tribals-1605563>
30. <https://tinyurl.com/ywc3b6l6>
31. <https://timesofindia.indiatimes.com/city/bhubaneswar/koraput-varsity-team-makes-savouries-and-cookies-from-wild-yam/articleshow/104330187.cms?from=mdr>
32. http://storiesodisha.com/cookies_from_forest_yam_kanda.php
33. <https://www.gaonconnection.com/lead-stories/wild-yams-snacks-odisha-nutrients-odisha-cuttack-52843>
34. <https://theindiantribal.com/2023/10/31/odisha-scientists-discover-immense-multipurpose-potential-in-wild-flowers-used-by-tribals/>

Research News on traditional Rice of Koraput

1. <http://vigyanprasar.gov.in/isw/Stress-resilient-native-rice-varieties-discovered-in-koraput-valley.html>
2. <https://timesofindia.indiatimes.com/city/bhubaneswar/study-finds-koraputs-rice-varieties-climate-resilient/articleshow/95990414.cms>
3. <https://orato.world/2022/09/24/scientist-in-india-addresses-climate-change-food-insecurity-with-ancient-rice-types/>
4. <https://prameyaepaper.com/m/770121/6390e335cd03e>
5. http://storiesodisha.com/Empowering_tribal_women_through_Kalajeera_rice_cultivation.php
6. <https://krishijagran.com/agriculture-world/odisha-university-study-traditional-rice-strains-in-koraput-tolerant-to-drought-stress/>
7. <https://www.etvbharat.com/oriya/odisha/state/koraput/demand-for-gi-tag-for-koraput-kalajeera/or20230101124047445445112>
8. http://storiesodisha.com/Climate_resilient_rice_variety.php

9. <https://www.orissapost.com/koraput-kalajeera-rice-to-get-gi-tag/>
10. <https://www.prameyaepaper.com/preview/97697/441131/BHUBANESWAR/20231019/24>

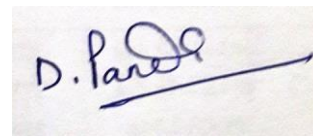
Millets of Koraput

1. <http://vigyanprasar.gov.in/isw/New-understanding-of-grain-ragi-found-in-tribal-areas-of-odisha-hindi.html>
2. <https://timesofindia.indiatimes.com/city/bhubaneswar/ragi-varieties-grown-by-tribal-farmers-in-koraput-show-drought-tolerance-study/articleshow/102708369.cms?from=mdr>
3. <https://www.newindianexpress.com/states/odisha/2023/feb/09/central-university-of-odisharesearcher-finds-nutritionally-rich-finger-millets-in-koraput-2545807.html>
4. <https://timesofindia.indiatimes.com/city/bhubaneswar/scientists-find-high-yielding-nutritious-ragi-in-koraput/articleshow/97674310.cms>
5. <https://timesofindia.indiatimes.com/education/news/researchers-find-high-yielding-nutrition-rich-ragi-varieties-from-koraput/articleshow/97225094.cms>
6. <https://odishabarta.com/cuo-researcher-identified-high-yielding-and-nutrition-rich-ragi-from-koraput-valley-of-eastern-ghats/>
7. <https://argusnews.in/article/odisha/achievements-in-the-field-of-mandia-research>
8. <https://www.etvbharat.com/oriya/odisha/state/koraput/millet-food-demand-increasing-day-by-day-due-to-its-health-benifits/or20230108215050415415206?fbclid=IwAR2KNCXCJ-R9yyb1H0JfVoB8r1mifv0IqzIR3JQLIUwcvE16B8FaQUN2n8I>
9. <https://www.101reporters.com/article/health/Millets vs Malnutrition Reviving the super crop via nutrientrich meals at Odishas anganwadis>
10. <https://www.news18.com/news/india/millets-vs-malnutrition-reviving-the-super-crop-via-nutrient-rich-meals-at-odishas-anganwadis-5675611.html>
11. <https://daijiworld.com/news/newsDisplay?newsID=985275>
12. <https://argusnews.in/article/odisha/millets-vs-malnutrition-reviving-the-super-crop-via-nutrient-rich-meals-at-odishas-anganwadis>
13. <https://www.businesslend.com/news/millets-vs-malnutrition-reviving-the-super-crop-via-nutrient-rich-meals-at-odishas-anganwadis/>
14. <https://en.trend.az/world/other/3629329.html>
15. <https://www.prokerala.com/news/articles/a1331358.html>
16. <https://sexinews.com/reviving-super-crop-through-nutrient-rich-food-in-anganwadi-of-odisha-sexi-news/>
17. http://storiesodisha.com/Mandia_empowers_women_in_remote_villages.php
18. <https://www.thelocalreport.in/researchers-find-high-yielding-nutrition-rich-ragi-varieties-from-koraput-times-of-india/>
19. <https://www.slurp.com/article/koraputs-finger-millet-variants-bada-bhalu-and-ladu-are-in-news-here-is-why-1674843109895>
20. <https://v3newsindia.in/new-variety-of-nutritious-ragi-found-in-tribal-area-of-odisha/>
21. <https://www.navyugsandesh.com/new-variety-of-nutritious-ragi-found-in-tribal-area-of-odisha/>
22. <https://jantaserishta.com/local/odisha/new-variety-of-nutritious-ragi-found-in-tribal-area-of-odisha-2065242>
23. <https://singraulimirror.in/news/new-variety-of-nutritious-ragi-found-in-tribal-area-of-odisha>

24. <https://www.gaonconnection.com/kheti-kisani/ragi-finger-millet-nutrition-high-yield-millet-mission-year-of-millet-central-university-of-odisha-51742?infinitemscroll=1>
25. <https://milletadvisor.com/odishas-millet-landraces-in-the-seed-system/>
26. <https://theindiantribal.com/2023/08/19/variety-agriculture-super-food-tribal-farming-better-drought-resilient-millet-genotypes-unearthed-in-odishas-tribal-heartland/>
27. <https://milletadvisor.com/climate-resilient-native-finger-millet-landraces/>
28. <https://odishabarta.com/researchers-finds-stress-tolerant-native-ragi-from-koraput-valley/>
29. <https://thesakala.in/koraput-millet-survives-in-drought-environment/>
30. <https://odia.krishijagran.com/others/koraput-mandia-survives-in-drought-environment/>
31. <https://www.dharitri.com/traditional-mandia-of-koraput-is-more-productive-and-nutritious/>
32. <https://orissadiary.com/central-university-of-odisha-researchers-findsstress-tolerant-ragi-from-koraput/>
33. <https://www.etvbharat.com/oriya/odisha/state/koraput/odisha-central-university-research-millet-survives-in-drought-situation/or20230904205325750750469>

Odisha TV Channels

1. <https://fb.watch/ip1Nntkl-4/?mibextid=LROOuL>
2. https://youtu.be/gt_sR2B4J4E
3. <https://fb.watch/hOcTMG9G0u/?mibextid=RUbZ1f>
4. <https://www.etvbharat.com/oriya/odisha/state/koraput/agriculture-secretary-and-koraput-collector-visits-millet-farming/or20221211133628426426758>
5. <https://www.etvbharat.com/oriya/odisha/state/koraput/demand-for-gi-tag-for-koraput-kalajeera/or20230101124047445445112>
6. https://youtu.be/Hy0mkj_v4UI
7. <https://fb.watch/9W-9-J0OwQ/>
8. <https://youtu.be/xgUsS1zcwBs>
9. <https://youtu.be/230wDjgo5RI>
10. <https://www.facebook.com/26Jan195o/videos/959522871666537>
11. <https://fb.watch/hOcTMG9G0u/?mibextid=RUbZ1f>
12. <https://youtu.be/5LOwotHm6wY>
13. https://www.youtube.com/watch?v=RSE_lfw57RM
14. https://www.youtube.com/watch?v=OkbQs98oq_4



(Dr. Debabrata Panda)