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### **ORIGINAL ARTICLE**

# Bibliography on Post –Independence District Level Floristic Studies of West Bengal, India

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Abstract: The state of West Bengal has a magnificent floristic diversity and it has been explored by different scientist during the post –independence period. As a result, a number of district level floristic works were published. The present communication enlisted such 137 research articles, books and Ph.D. theses on floristic studies from different districts of West Bengal.

Key Words: Bibliography, Floristic studies, West Bengal

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## 1. INTRODUCTION

Flora is an inventory of plants of a particular area which is essential to evaluate the plant diversity and management of bio-resources' for sustainable use. It not only helps the students and field biologist to identify the plants, but also encourage the authority working on conservational aspect to protect threatened plants by proving necessary field data. That is why floristic studies have a special importance for the development of any state or country.

The state of West Bengal lies in India between 21°45′ to 27° 16′ N latitude and 85° 55′ to 89° 56′ E longitude, covering an area of 87, 676 Sq km which is about 2.70% of the total land area of the country. Actually, the state of West Bengal was formed on 15<sup>th</sup> August 1947 by partition of erstwhile Bengal Province with 14 districts. The former princely state Koch Bihar joined West Bengal as a district on 26<sup>th</sup> January 1950. The district Purulia was added to West Bengal in 1956 as per State Reorganization act. At present, there are 23 districts in West Bengal.

Before independence the flora of erstwhile Bengal province was explored by different botanists [1-5]. Prain [6] provided a comprehensive floristic account of Bengal Province but in his work, plants of Darjeeling hills were not included and plants of north Bengal were poorly represented. The state of West Bengal has a magnificent floral diversity ranging from the southern littoral mangrove forest of Sundarbans to luxuriant vegetation of the Terai-Duars region of the North Bengal culminating upwards into the temperate vegetation of the Darjeeling Himalayas coupled with the dry deciduous

vegetation of the Western districts. So many scientists had tried to explore different areas of West Bengal floristically. During post-independence era, a considerable initiative has been undertaken to make a comprehensive flora of the states. Botanical Survey of India in their district flora project explore several districts. Botany department of the different universities of the state as well as institutes were also engaged to explore the flora. In addition, scientists of foreign organizations [7-10] also made a great contribution to the floristic work of some parts of North Bengal through their own work. As a result, along with the state a number of district-level floristic works were also published. However, till now there is no such index through which students, common people, researchers and development planners can find such district level floristic works, to meet this lacuna the present work has been undertaken.

The study will help to understand what floristic work has been done at the district level of West Bengal and on the other hand will give an idea of what work is left, to be conducted in future.

### 2. MATERIALS AND METHODS

The present work is based on the survey of literature like relevant journals, books, reports, bulletins, newsletters, etc., to collect the necessary information. Websites of some taxonomic journals were searched to consult the back as well as current volumes. Sodhganga – a reservoir of Indian theses was also consulted to get the data regarding district level floristic works which were submitted in different universities of the state for doctoral degree. Interview of some resource persons were taken to know the status of floristic works of the state of West Bengal.

## 3. RESULTS AND DISCUSSION

Floristic works which cover different districts of West Bengal are listed below. Districts are arranged alphabetically and newly formed districts are considered within the parent district as they do not have sufficient data. Districts like Dinajpur, Burdwan, Medinipur and 24-Parganas are considered here in broader sense.

#### Bankura

Sanyal, M. N. 1973. A Contribution to the shrubs and woody climbers of forests of Bankura district. *Indian For* 99(3): 152-158.

Sanyal, M. N. 1974. A contribution to the sedges and grasses of Bankura district of West Bengal. *Bul Bo Soc Bengal* 28(1&2):7 5-78.

Sanyal, M. N. 1994. Flora of Bankura district, West Bengal. Bishen Singh Mahendra Pal Singh, Dehra Dun.

#### Birbhum

Basak, R. K. 1968. A note on the distribution of some plants in Birbhum district, West Bengal. *Bull Bot Surv India* 10: 254-259.

Basak, R. K. 1976. Birbhum district flora. Ph.D. Thesis, University of Calcutta

Basak, R. K. 1979. Some noteworthy plants from Birbhum district West Bengal. *Indian For* 105(6): 477-481.

Datta, B. K. & Mondal, S. 1998. A contribution to the grasses of Birbhum district, West Bengal. *J Econ Tax Bot* 22(2): 537-545.

Datta, B. K., Patra S. K. & Mondal, S. 1995. A contribution to the grasses of Birbhum district, West Bengal. *J Econ Tax Bot* 19(2): 317-322.

Dey, A. K., Mondal, S., Rahaman, C. H. & Dan, P. K. 1988. A contribution of aquatic angiosperm of Santiniketan, West Bengal. In: Sen, A. K.(Ed.) *Proceedings of the Environment Management and Planning*, Wiley Eastern Ltd. Calcutt, pp 164-174.

Guha, B. P. 1968. An account of the floristic survey of Birbhum district (West Bengal)I. Ranunculaceae to Moringaceae. *Bull Bot Soc Bengal* 22: 109-121.

Guha, B. P. 1971. Grasses and sedges of Birbhum district. Bull Bot Soc Bengal 25(1-2): 5-18.

Manna, S. 2022. Studies on some sacred groves of Birbhum district with reference to floristic diversity, vegetation structure and traditional conservation practices. *Ph. D. Thesis*, University of Calcutta.

Mukhopadhyay, C. R. 1987. Aquatic and semi-aquatic plants of Birbhum district. *J Econ Tax Bot* 9(1): 200-238.

Rahaman, C. H. & Mandal, S. 1999. Enueumeration of angiospermic climbers of Birbhum district, West Bengal. *Bull Pure & Appl Sci* 18B (1): 29-35.

#### **Burdwan (East and West)**

Banerjee, D. K. 1968. Grasses of Burdwan district, West Bengal. Bull Bot Surv India 10: 246-250

Bhattacharya, A & Mukherjee, A. 2005. A census of the plants in Orgam forest of Burdwan district, West Bengal. Indian *J Appl & Pure Biol* 20(2): 293-295.

Bhattacharya, A & Mukherjee, A. 2006. A checklist of vascular plants in Bhalki Machan forest, Burdwan, West Bengal. Indian *J Appl & Pure Biol* 21(1):44-148.

Bhattacharya, A & Mukherjee, A. 2006. A preliminary floristic survey in Gorh Jongal, Durgapur, West Bengal. Indian *J Appl & Pure Biol* 21(2): 293-298.

Bhattacharya, A & Mukherjee, A. 2006. A checklist of vascular plants in Ramnabagan wildlife sanctuary, Burdwan, West Bengal. *Ecol Environ & Conserv* 12(2): 285-287.

Bhattacharya, A. & Mukhopadhyay, R. 2004. Pteridophytic flora of the district of Burdwan, West Bengal. *Geophytology* 34(1&2): 9-14.

Bhattacharya, P. K. 2005. Bryophyte flora of Burdwan district, West Bengal. *Bull Bot Surv India* 47(1-4): 11-42.

Dutta, A. K. 1977. Flora of Burdwan district, West Bengal: Fasc I. Enumeration of species, Dicotyledons, Polypetalae. Burdwan, West Bengal.

Ghosh, N. & Barua. B. 2008. Inventory of macrophytes in coalmine pits fall in Ranigunj, district Burdwan, West Bengal. *Flora & Fauna* 14(1): 29-34.

Mondal, A. K. & Mondal, S. 1994. A contribution to the tree flora of Burdwan district, West Bengal *Int J Mendel* 11(3&4): 141-142.

Namhata, D. 1990. An enumeration of the Angiosperms in the campus of the university of Burdwan. *J Econ Tax Bot* 14(1): 41-47.

## **Darjeeling (including Kalimpong)**

Basnet, D. B. 2004. Some common weed flora in forest plantation of Darjeeling hills of West Bengal. Indian *J Environ & Ecoplan* 8(2): 533-539.

Bhujel, R. B. 1996. Studies on the Dicotyledonous flora of Darjeeling district. *Ph. D. Thesis*, North Bengal University.

Bhujel, R. B. & Das, A. P. 2002. Endemic status of the dicotyledonous flora of Darjeeling district. In: Das, A. P. (Ed) *Perspective of Plant Biodiversity*. Bishen Singh Mahendra Pal Singh, Dehra Dun. pp. 593-609.

Biswas, K. P. 1966. Plants of Darjeeling and Sikkim Himalays (Dicotyledons). Calcutta.

Das, A. P.1986. On the Floristic and palynological survey of Darjeeling and adjoining places. *Ph.D. Thesis*, University of Calcutta.

Das, A. P. 1995. Diversity of angiospermic flora of Darjeeling hills. In: Pandey, A. K. (Ed.) *Taxonomy and Biodiversity*. CBS Publishers and Distributors, New Delhi.

Das, A. P. 2000. Survey of naturalized exotics in the flora of Darjeeling district, West Bengal. India. *J Econ Tax Bot* 21: 347-351

Das, A. P. 2004. Floristic studies in Darjeeling hills. Bull Bot Surv India 46(1-4): 1-18.

Das, A. P. & Chanda, S. 1987. Flowering calendar of the Angiospermic flora of Darjeeling hills, West Bengal (India). *Trans Bose Res Inst* 50(4): 99-133.

Das, C. R. 1985. An ecotone for plants at higher altitude in Meerik, Darjeeling Himalaya. *J Econ Tax Bot* 2(3): 603-604.

Debta, M. R. & Chowdhery, H. 2009. Botany of Singalila National Park, West Bengal. *J Econ Tax Bot* 33(4): 778-785,

Debta, M. R., Sabapathy, C. M. & Chowdhery, H. J. 2007. A contribution to the flora of Singalila National Park, Darjeeling district, West Bengal . *J Econ Tax Bot* 31(3): 547-559.

Majumdar, N. Krishna, C., B. & Biswas, M. C. 1984. Vegetation of Neora and adjacent regions in Kalimpong forest division, West Bengal. *J Econ Tax Bot* 5(5): 1013-1025.

Mathew, K. M. 1966. A preliminary list of plants from Kurseong. Bull Bot Surv India 8: 158-168.

Mathew, K. M. 1969. A botanical exploration of Kurseong in Darjeeling district, West Bengal. *J Indian Bot Soc* 80: 289-295.

Mathew, K. M. 1971. Pteridophytes from Darjeeling district. Bull Bot Soc Bengal 23: 97-102.

Mathew, K. M.1981. An enumeration of the flowering plants of Kurseong, Darjeeling district, West Bengal, India. Dehra Dun.

Mehra, P. N. & Bir, S. S. 1964. Pteridophytic flora of Darjeeling and Sikkim Himalaya. *Res Bull Punjab Univ* 15: 69-181.

Mukherjee. A. 1984. The Flowering plants of Darjeeling. Atma Ram & Sons. New Delhi.

Mukhopadhyay, C. R. 1989. Taxonomic and phytogeographical studies on the flora of Mirik and its environs in Darjeeling district. *Ph. D. thesis*, University of North Bengal.

Mukhopadhyay, C. R., Ghosh, R. B. & Basu, P. K. 1989. Further contribution to the flora of Mirik: an ecotone of West Bengal. *J Econ Tax Bot* 13: 525-539.

Nirola, S. & Das, A. P. 2017. Endemic monocot flora of Darjeeling Himalaya, West Bengal, India. *Pleione* 11(1): 116-124.

Rai, P. C. 2001. Survey of the flora of Neora Valley national park in Darjeeling west Bengal India. *Ph. D. Thesis*, University of North Bengal.

Rai, U. & Das, A. P. 2005. Inventory of tree species in the lower hills of Darjeeling district. In: Pandey, A. K., Jung, W. & Dogra, J. (eds.) *Plant Taxonomy: Advances and Relevance*. CBS Publication, New Delhi, pp 101-118.

Saha, P. 2019. Taxonomic studies on mosses of Darjeeling District with emphasis on their Anatomical details. *Ph. D. Thesis*, University of Calcutta.

Samanta, A. K. & Das, A. P. 1995. Angiospermic climbers of Darjeeling hills. In: Pandey, A. K. (Ed.) *Taxonomy and Biodiversity*. CBS publication, New Delhi, pp 139-147.

Samanta, A. K. 1998. Taxonomical and phytosociological studies on the angiospermic climbers of Darjeeling and Sikkim Himalayas. *Ph. D. Thesis*, University of North Bengal.

Yonzone, G. S. 1975. Studies on the Phanerogamic flora of Darjeeling. *Ph. D. Thesis*, University of Calcutta.

### Dinajpur (North and South)

Banerjee, R. N. & Basu, S. K. 1992. A systematic study on the Pteridophytes of West Dinajpur district, West Bengal. *J Econ Tax Bot* 16(2): 425-431.

Banerjee, R. N. & Pal, T. K. 1995. Malvaceae of West Dinajpur district. J Econ Tax Bot 19: 313-315

Kamilya, P. 2008. Survey of weed flora of Atrai river bed in Dakshin Dinajpur district of West Bengal, India. *Pleione* 2(1): 77-86.

Kamiya, P. 2011. Diversity of vascular plants in Danga forest of Balurghat in Dakshin Dinajpur district of West Bengal, India. *Pleione* 5(1): 163-180.

Mitra, S. & Mukherjee, S. K. 2009. Diversity of Aquatic and wet land plants of West Dianjpur District of West Bengal. In: Trivedi, P. C. (Ed.) *Biodiversity Impact and Assessment*. Pointer Publisher, Jodhpur, pp 169 - 184.

Mitra, S. & Mukherjee, S. K. 2012. Flora and Ethnobotany of West Dinajpur District, West Bengal, India. Bishen Singh & Mahendra Pal Singh, Dehra Dun.

Mitra S. 2015. Exotic flora of Kulik Bird Sanctuary – West Bengal, India. *International Journal of Pharmaceutical Research and Bio-Science* 4 (1): 55 – 74.

## Hoogly

Chattopadhyay. R. & Mukherjee, A. 1996. A contribution to the study of aquatic plant diversity of Hoogly district, West Bengal. *J Swamy Bot Club* 13: 27-33.

Datta, P. C. & Majumdar, N. C. 1961. Flora of Hoogly district-I. Common flowering angiosperms. *Bull Bot Soc Bengal* 15. 49-58.

Ghosh, M. 2016. Study of pteridophytic flora of Hooghly district West Bengal with reference to ecological and ethnomedicinal aspects. *Ph. D. Thesis*, Visva Bharati University.

Roy, A. & Saha, T. 2007. Floristic diversity of Dankuni canal, West Bengal. *J Econ Tax Bot* 31(2): 361-366.

Sen, S. 1971. Flora of Hoogly district, Ph, D, Thesis, University of Calcutta.

#### Howrah

Bandyopadhyay, S. & Das, M. 1997. Addition to the flora of Howrah district. *J Econ Tax Bot* 20(3): 739-741.

Bandyopadhyay, S. & Mukherjee, S. K. 2014. A contribution to the fern flora of Howrah district in West Bengal, India. *Int J Pharma Scr Meth* 4(1): 1-3.

Bennet, S. S. R. 1979. Flora of Howrah district. International Book Distributors, Dehra Dun

#### Jalpaiguri (including Alipurduar)

Banerjee, L. K. 1993. *Plant resources of Jaldapara Rhino Sanctuary*. Botanical Survey of India. Calcutta.

Biswas, R., Chowdhury, A. & Das, A. P. 2012. Macrophytic flora of Gossaihat Beel, Jalpaiguri forest division. West Bengal, India I Magnoliopsida. *Pleione* 6(1): 217-237.

Chowdhury, A, Mukherjee, R. & Das, A. P. 2014. Macrophytic flora of Gossaihat Beel, Jalpaiguri forest division. West Bengal, India II. Pteridophyta and Liliopsida. *Pleione* 8(2): 293-310.

Datta, S., Naik, K., Deai, A., Almeida, S. M. & Das, A. P. 2002. Aquatic macrophytes of Apalchand reserve in the Jalpaiguri district of West Bengal. In: Das, A. P.(Ed.) *Perspective of Pant Biodiversity*. Bishen Singh Mahendra Pal Singh, Dehra Dun. pp 53-65.

Ghosh, R. B. & Ghosh, A. K. 1978. Some addition to the flora of Buxa division of Jalpaiguri district of West Bengal. *Bull Bot Soc Bengal* 31(1&2): 78-83.

Krishna, G. 2015. Vascular plant diversity of Buxa national park West Bengal India with special reference to its conservation strategies. Ph. D. Thesis, University of Calcutta.

Ranjan, V. & Kumar, A. 2015. Floristic diversity in Gorumara National Park, West Bengal. *J Non-timb For Produc* 22(2): 97-102.

Safui, B., Chandra, S. & Bhattacharya, A. 1985. Some addition to the flora of Jalpaiguri district, West Bengal. *J Econ Tax Bot* 7(1): 1-4.

Sarkar, A. K. & Dey, M. 2021. A preliminary investigation on mural flora of Jalpaiguri district of Indian state West Bengal. *Indian For* 147(3): 330-339.

Sikdar, J. K. 1981. Studies on the vegetation and flora of Jalpaiguri, West Bengal. *Ph. D. Thesis*, University of Calcutta.

Sikdar, J. K. 1984. A sketch on the sedge and grass flora of Jalpaiguri district, West Bengal. *J Bombay Natural Hist* Soc 81(2): 346-353.

Sikdar, J. K. 1984. Contribution to the flora of Baikunthapur forest division, Jalpaiguri district. West Bengal. *J Econ Tax Bot* 5(3): 505-532.

Sikdar, J. K. 1985. Contribution towards the botany of Wildlife Sanctuaries of Jalpaiguri district, West Bengal. Bull Bot Soc Bengal 39 (1&2): 5-:22.

Sikdar, J. K., Basu S. K. & Samanta, D. N. 1983. A sketch on the Pteridophytic flora of Jalpaiguri district, West Bengal. *J Econ Tax Bot* 4(3): 667-684.

Sikdar, J. K. & Rao, R. S. 1984. Further contribution to the flora of Buxa forest division, Jalpaiguri district (West Bengal). *J Bombay Nat Hist Soc* 81: 123-148.

Sikdar, J. K. & Samanta, D. N. 1984. Herbaceous flora of Jalpaiguri district, West Bengal: a check list. *J Econ Tax Bot* 4(2): 525-538.

#### **Koch Bihar**

Aditya N. R. & Ghosh, R. B. 1989. Further contribution to the flora of Coochbehar district, West Bengal. *J Econ Tax Bot* 13(2): 437-453.

Bandyopadhyay, S. Floristic and Ethnobotanical studies of the district Koch Bihar, West Bengal. *Ph. D. Thesis*, University of Kalyani.

Bandyopadhyay, S. & Mukherjee, S. K. 2005. Diversity of aquatic and wetland vascular plants of Koch Bihar district, West Bengal. In: Pandey *et.al.* (Eds.) *Plant Taxonomy: Advances and Relevance*. Dehradun. pp. 223-244.

Bandyopadhyay, S., Bose, A., Nandi, S., Chakraborty, T., Bandyopadhyay, S. & Mondal, M. S. 2006. On the occurrence of *Psilotum nudum* (L.) P. Beauv. (Psilotaceae) in Koch Bihar, West Bengal. *ENVIS News Letter* 11(1&2): 7.

Bandyopadhyay, S. & Mukherjee, S. K. 2008. Trees and Shrubs of Koch Bihar district, West Bengal. In: Trivedi, P.C. (Ed.) *Biodiversity-Impact & Assessment*. Jaipur. pp. 185-192.

Bandyopadhyay, S. & Mukherjee, S. K. 2010. Diversity of climbing plants in Koch Bihar district of West Bengal, India. *Pleione* 4(1): 82-89.

Bandyopadhyay, S. & Mukherjee, S. K. 2017. A sketch of the Monocot flora of Koch Bihar district, West Bengal. *J Econ Tax Bot* 40(4): 99-104.

Bandyopadhyay, S. 2017. A systemic census on the sedges of Koch Bihar district, West Bengal. *Indian J Applied & Pure Bio* 32(2): 181-188.

Bandyopadhyay, S. 2018. A contribution to the vascular epiphytes, parasites and carnivorous plants of Koch Bihar district, West Bengal. *Indian J Applied & Pure Bio* 33(1): 83-90.

Bandyopadhyay, S. & Mukherjee, S. K. 2019. Grasses of Koch Bihar district, West Bengal. In: Agnihotri, P. & Khurajan, J. S. (Eds.) *Angiosperm Systematics: Recent trend and emerging issues*. Dehra Dun. pp. 305-328.

Banerjee, B. C. 1992. Addition to the flora of Coochbehar district (West Bengal). *J Econ Tax Bot* 16(1): 177-183.

Biswas, K. C. 1956. Pteridophytes of Cooch Behar. J Bombay Nat Hist Soc 53(3): 493-496.

Biswas., Das, A. P. & Paul, T. K. 2013. Floristic diversity of Rasik Beel and its adjoining areas in Cooch Behar district of West Bengal. *Pleione* 7(2): 501-507.

Das, C. R., Sikdar, J. K., Ghosh, R. B. & Naskar, A. K. 1982. A preliminary census on the flora of Cooch Behar district (West Bengal). *J Econ Tax Bot* 3(1): 93-111.

#### Kolkata

Datta, S. C. & Majumdar, N. C. 1966. Flora of Calcutta and vicinity. Bull Bot Soc Bengal 20: 16-120.

Dutta, N. M. & Ganguly, A. K. 1967. Contribution to the flora of Calcutta and neighbourhood I. Commonly occurring herbs and shrubs. Calcutta.

Majumdar, N. C. 1965. Aquatic and semiaquatic flora of Calcutta and adjoining localities. *Bull Bot Soc Bengal* 19:10-17.

Paria, N. D. 1977. A contribution to the flora of Ballygunge Science College Campus. *Bull Bot Soc Bengal* 31(1&2): 62-73.

#### Malda

Acharya, A., Das, M. & Das, A. P. 1999. On the crop field weeds in the district of Malda in West Bengal, India. *Sci. & Cult* 65(5&6): 167-168.

Krishna, B., & Dutta, R. 1983. A precursory study on the vegetation of Malda district, West Bengal. *Indian J Forest* 6: 137-144.

Mondal, B. C.1992. Studies on the flora of Malda district West Bengal. *Ph. D. Thesis*, University of Calcutta.

# Medinipur (East and West including Jhargram)

Das, D. & Ghosh, R. B. 1999. Mangroves and other phanerogams growing at Nayachar, Haldia, Medinipur, West Bengal. *Environ & Ecol* 17(3): 725-727.

Datta, P. C. & Maiti, R. K. 1963. Paddy field weeds of Midnapore district. Indian Agric 7: 147-165.

Dey, D. K. & Pati, B. R. 1999. Contribution to the grass flora of Midnapore district of West Bengal. *J Econ Tax Bot* 23(3): 723-725.

Kamilya, P. & Paria, N. D. 1994. Chilkigarh (Midnapore)-a vegetation pocket. *J Natl Bot Soc* 48(1-2): 41-68.

Maji, S. Studies on the flora of Midnapore district, West Bengal. *Ph. D. Thesis*, University of Calcutta.

Maji, S. & Sikdar, J. K. 1983. Sedges and grasses of Midnapore district. *Econ Tax Bot* 4: 233-254.

Rao, T. A., Mukherjee, A. K. & Banerjee, L. K. 1970. Vascular Plants of the coastal Midnapore district, West Bengal. *Indian For* 96: 668-677.

Samanta, A. 2020. Angiospermic climbing plants diversity in Jhargram district, West Bengal with their flowering –fruiting periods. *Asian Resonance* 9(4): 90-97.

#### Murshidabad

Bandyopadhyay, S. 2017. Further contribution to the flora of Murshidabad district, West Bengal. *Indian J Landscape system & Eco Stud* 40(1): 108-114.

Guha Bakshi, D. N. 1982. Grasses of Murshidabad district in West Bengal. *J Econ Tax Bot* 3(1): 77-91.

Guha Bakshi, D. N. 1984. Flora of Murshidabad district, West Bengal, India. Scientific Publishers, Jodhpur.

#### Nadia

Bala, G. & Mukherjee, A. 2007. A census of wetland macrophytes of Nadia district, West Bengal. *Environ & Ecology* 25(2): 287-290.

Das, A. P. & Lahiri, A. K. 1990. Angiospermic flora of Bethuadahari Reserve Forest, Nadia(India). *Indian For* 116(11): 871-881.

Das, S. R. 1968. Flora of Nadia district. Ph. D. Thesis. University of Kalyani.

Mitra, S. & Mukherjee, S. K. 2017. Seasonal Variation and the diversity of the Weeds of Nadia District, West Bengal, India. In: Medhi, P. & Ray, H. (Eds.) *Compendium of Botanical Research in Eastern India – A Felicitation Volume of Prof. S. K. Borthakur*. EBH Publisher India, Guwahati, pp. 233 – 263.

Mitra, S. 2020. Taxonomic census of bryophytes of Nadia district of West Bengal, India. *The Journal of Plant Science Research* 36(1 & 2): 376 -385.

#### Purulia

Das, D. 1999. Contribution to the mural flora of Purulia district, West Bengal Indian. *J Appl Pure Biol* 14(2): 17-26.

Das, D & Ghosh, R. B. 1999. Addition to the flora of Purulia district, West Bengal. *Indian J Pure Biol* 14(1): 83-85.

Mallick, K. C. 1996. A contribution to the flora of Purulia district, West Bengal. *Bull Bot Surv India* 8(1): 45-49.

Mandal, S., Mondal, D. & Palit, D. 2003. A preliminary survey of wetland plants in Purulia district, West Bengal. Indian *J Appl Pure Biol* 18(2): 247-252.

Pal, T. K. 2003. Botanical observation on the Purulia pumped storage hydral power project area Bagmundi hills, Purulia district, West Bengal. *Bull Bot Surv India* 45(1-4): 121-142.

# 24-Parganas (North and South)

Chattopadhyay, S. P. & Mal, T. K. 1998. Angiospermic flora of Lower Long sand island of Sundarbans, West Bengal (India). *J Econ Tax Bot* 20(2): 457-489.

Ghosh, A., Mukherjee, S., Sen, N., Dasgupta M. & Naskar, K. R. 2003. Floral diversity of mangroves and mangrove associated species in the Indian Sundarbans with special reference to distribution and abundance. *J Indian Soc Coast Agric Res* 21(1): 53-59.

Mahapatra, A. K. & Chakraborty, R. K. 1977. A survey of the aquatic flora of Sagar Island and their economic aspects. *J Sci Club* 31(2): 66-83.

Majumdar, R. B. 1956. Studies on the grasses of 24-Parganas. Bull Bot Soc Bengal 10: 1-114.

Majumdar, R. B. 1962. Weed flora of the district 24-Parganas, West Bengal. *Indian Agric* 6(1&2): 189-213.

Mitra, R. L. 1973. Taxonomic studies on the flora of Tollygunge and surrounding regions in 24 Parganas district, West Bengal. *M. Sc Thesis*, University of Bombay.

Naskar, K. R. 1981. Floristic studies on the district 24-Parganas, West Bengal with special reference to the mangrove vegetation of Sundarbans. *Ph.D. Thesis*, University of Calcutta.

Naskar, K. R. 1990. Aquatic and semi-aquatic plants of the Lower Gangetic Delta. Daya Publishing House, New Delhi.

Naskar, K. R. 1993. *Plant wealth of the lower Gangetic delta, an eco-taxonomic approach.* 2 Vols. Daya Publishing House, New Delhi.

Sarkar, R. K. 2022. Diversity and adaptive ecology of mangrove plants of Sundarban, West Bengal, India. *Ph. D. Thesis*, Visva Bharati University.

The present study recorded 137 floristic works from different districts of West Bengal. It is noted that the districts of North Bengal due to their rich vegetation explored more than the South Bengal districts. The district of Darjeeling including Kalimpong is much explored which is evident from the number of publications (27) followed by Jalpaiguri (16) and Koch Bihar (14). Among the districts of South Bengal, the maximum publication noted from Birbhum and Burdwan district (11 in number). The districts of Hooghly, Nadia, Malda and Purulia are under explored as noticeable by a few publications. District flora of almost all districts of the state were completed but four district floras were published till date, viz. Bankura, Howrah, Murshidabad and West Dinajpur (presently Uttar and Dakshin Dinajpur) and the rest remain unpublished as Ph.D. theses.

## 4. CONCLUSION

District level floristic work plays a very important role not only for compilation of state flora but also provides information about usable plant recourses and conservational aspects. The present study reveals that though a good number of district level floristic works were published but most of them are stray publications which cannot provide a comprehensive idea about the plant wealth of a particular district. Except for four districts most of the district floras remain unpublished. So, it is an

urgent need to publish the unpublished district floras after thorough revision as most of such works are more than two decades old and the floristic composition of an area is continuously changing. It is also noted there is a vast scope to work with the lower group of plants in district level as a very few works has been done in this regard.

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# 6. REFERENCES

- 1. Benthal, A. P., "Trees of Calcutta and its neighbourhood", Calcutta, (1946).
- 2. Biswas, K. P., "Flora of the Salt Lake, Calcutta", J. Dept Sci Univ Calcutta, vol 8,(1927), pp 1-48.
- 3. Clarke, C. B., "Botanical notes from Darjeeling to Tonglu and Sandukphoo", J Linn Soc Lond, vol 21, (1885), pp 384-391.
- 4. Cowan, A. M. and Cowan, J. M., "The trees of Northern Bengal including shrubs, woody climbers, bamboos, palms and tree ferns being a revision of the list by Gamble", Calcutta, (1929.
- 5. Hooker, J. D., "Notes, chiefly botanical, made during an excursion from Darjeeling to Tonglu", J Asit Soc Bengal, vol 18, pp 419-449.
- 6. Prain, D., "Bengal plants", vol 1-II, Calcutta, (1903).
- 7. Grierson, A. J. C. and Long, D. J.," Flora of Bhutan", vol 1-II, Edinburgh, (1983-1999).
- 8. Hara, H., "The flora of eastern Himalaya", Report I-II, Tokyo.(1966, 1971).
- 9. Noltie, H. J.," Flora of Bhutan", vol 3, Edinburgh, (1994-2000).

10. Ohashi, H., "The flora of eastern Himalaya", Report III, Tokyo (1975).

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