

HISTORICAL NOTES

SELECT PALM LEAF MANUSCRIPTS ON HEALTH CARE

Deepak Bhattacharya*

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Abstract

India has large number of technical manuscripts in repositories. Most of these manuscripts are located in archives, libraries and museums. The present paper is an attempt to highlight some of the manuscripts pertaining to healthcare science preserved in Orissa State museum.

1. Introduction

In the recent years, there has been greater awareness towards conservation of manuscripts materials on indo heritage. A few rare Palm Leaf manuscripts pertaining to Astronomy, Mathematics conserved in the Odisha State Museum has already been reported (Bhattacharya, 2009). Here few rare manuscripts pertaining to Health Care Sciences are presented. Some of them appears to be old for example *Cikitsāmañjarī* is supposed to composed between c.7-9th AD while *Veśaja Ratnāvalī* is about surgery. A critical study is needed to assess their value and role in health

care tradition in Orissa. Most of the manuscripts mentioned in the list are in dire state due to attack by termites and borers. Therefore their cataloguing is a necessity and relevant.

K.N. Mahapatra (1963) and *Paṇḍit Nilamaṇi Miśra* (1983) did great services in compiling catalogues of manuscripts and authors and are widely known for their pioneering work.

2. Palm-leaf manuscripts at Orissa State Museum

Details on the palm-leaf manuscripts are given in Table 1.

Table 1

Sl. no.	Author	Title	Call no.
1.	Bhāgiraṭhi Māhāpatra (Note: Sanskrit; Devnagari; Approx. 25 Folios; Moth eaten & active Borers. Brittle.)	'Vaidyaśimha' <i>Tattvabodhinī Ṭikā</i>	Ay-2
2.	Bhūvaneśvara Pāṭajośi (Note: Sanskrit; Devnagari; Approx. 25 Folios; Moth eaten & active Borers. Brittle.)	<i>Āyurveda Śāra Śaṅgraha</i>	Ay-38
3.	Bijaya Rakṣit (Note: Sanskrit; Devnagari; Approx 21Folios; Moth eaten)	<i>Madhūkośa Vyākhyā on Roga Viniścaya</i>	Ay-160
4.	Bīraśimha (Note: Sanskrit; Devnagari; Approx 21Folios; Moth eaten copy)	<i>Āyurveda</i>	Ay-435-B
5.	Cakrapāṇi Dās (Note: Sanskrit; Devnagari 3copies, App. 30Folios; Active borer. Brittle.)	<i>Abhinava Ciṅtamaṇi</i>	Ay-40,59,63.

* C/o Sri Radha Krishna, Kedar Gauri Road, Bhubaneswar - 751002. Email: oddisilab1@dataone.in

Sl. no.	Author	Title	Call no.
6.	Dina Kṛuṣṇa Dās	<i>Baidya Śāstra Boli</i>	Ay- 157,318, 213, 262, 269, 318, 447.
		(Note: Odia language & Odia script, 7 copies App. 15Fo; Moth eaten & Borers.)	
7.	Dinabandhū, 'Rājā Haricandana'	<i>Śāli Hotra</i>	Ay – 68
		(Note: Sanskrit; Devnagari; Approx. 21 folios, Horse health care)	
8.	Caṇḍeśvara	<i>Ratna Dipikā</i>	Ay – 210
		(Note: Sanskrit; Odia script; Approx. 16 folios, Moth eaten & Borers.)	
9.	Gopinātha Putra	<i>Vidaza Cintāmaṇi</i>	Ay- 165
		(Note: Odia lingua; Odia script; Folios Not recorded, Moth eaten & Borers.)	
10.	Gopinātha Śaḍaṅgi	<i>Cikitsāmañjari</i>	Ay- 162, 275, 284.
		(Note: Sanskrit lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
11.	Goviṇḍa Dāsa	<i>Veśaja Ratnāvali</i>	Ay-20
		(Note: Odia language; Odia script; Approx. Folios Not recorded, Moth eaten & Borers.)	
12.	Hari Caraṇa Śenā	<i>Parayaya Muktvāvali</i>	Ay- 30, 37, 46-B
		(Note: Sanskrit lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
13.	Harinātha	<i>Vaidya Jivana Tikā</i>	Ay- 125-A
		(Note: Sanskrit lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
14.	Jaganātha Dāsa (Kavirāj)	<i>Cikitsāmañjari</i>	Ay-136
		(Note: Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
15.	Jogi Praharāj Māhāpatta	<i>Vaidyahrudayananda</i>	Ay - 8
		(Note: Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
16.	Jogiśvara Māhāpatra	<i>Vidaza Ratamallikā</i>	Ay – 432-A
		(Note : Odia language; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
17.	Kapileśh Naṇḍa	<i>Cikitsānkūra</i>	Ay- 429
		(Note : Odia language; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
18.	Kalāhaṇḍi Nareśa	<i>Bālatantra</i>	Ay – 325
		(Note : Odia language; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.About body building and muscles (myard sciences- rare).	
19.	Kāśi Rājā	<i>Amṛtamañjari</i>	Ay- 128-C
		(Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
20.	Loknātha Vidyābhūṣaṇa	<i>Bhārat Śāra Saṅgraha</i>	Ay- 17-B
		(Note : Sanskrit language; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
21.	Malla Bhaṭṭa	<i>Dṛavyagūṇaśatśloki</i>	Ay- 235-B
		(Note: Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
22.	Mādhava Kara	<i>Asādhyā sadhya</i>	Ay - 172-B
		<i>Dṛavyagūṇa</i>	Ay - 432-B
		<i>Āūrveda Prakāśa</i>	Ay - 107
		<i>Roga Viniścaya</i>	Ay - 443
		(Note : All Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	
23.	Māṇḍhātā	<i>Śatkarma Ratna</i>	Ay – 303
		(Note : Odia language; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Special focus is on Life Style. Lovely one.)	
24.	Murāri Dās	<i>Roga Viniścaya</i>	Ay - 190
		(Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.Clinical diagnosis. Also in-vitro ! Rare.)	

Sl. no.	Author	Title	Call no.
25.	Narahari Nanda (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Clinical diagnosis. Compendium type ! Rare).	<i>Nidānasāra Saṁgraha</i>	Ay- 6
26.1	Narahari Paṇḍita (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Pharmacology. Rare.)	<i>Nighaṇṭurāja</i>	Ay – 134
26.2	Narahari Paṇḍita (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Glossary type Compendium. Clinical Sc. Researcher's Hand Book (type).)	<i>Avidāna Cūḍāmaṇi</i>	Ay – 343.
27.	Nāgāna Śiddha (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Clinical Examination)	<i>Nāḍi Lakhyān</i>	Ay – 327-A
28.	Nārāyaṇ Miśra (Not recorded the details)	<i>Siddhānta Sancaya</i>	Ay – 412
29.	Nārāyaṇ Śaḍhaṅgi (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Diagnostic & Investigation in verse.)	<i>Balabodhini Tikka (niḍāna)</i>	Ay -3
30.	(Unknown) (Note: Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Pharmacology & Pharmagnosy.)	<i>Rājballava Dṛavyaguṇa</i>	Ay – 26; 41-E
31.	Nityanātha (Note: Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. No of copies. Also Sanskrit lingua in Odia script. About Extracts & Liquid Therapies.)	<i>Rasa Ratnākara</i>	Ay – 21-B;41-C; 183;349
32.	Nilāmbara Śāmāntarāya (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Description of medicinal herbs, a compendium. Verse.)	<i>Vibarṇa Tikkā</i>	Ay – 145
33.	Nilāmbara Śāmāntarāya (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Medical practitioner's ethics.)	<i>Vaidya Jivana</i>	Ay - 193
34.	Purūsottama Deva (Sri Gajapati the Emperor of mighty Kalinga c. 1468-97, unbeatable in Asian sub-continent). Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. About human hair care.)	<i>Dvirūpa Keśa</i>	Ay -125-B
35.	Rolāmbara Giri (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Medical practitioner's ethics. Number of copies.)	<i>Vaidya Jivana</i>	Ay – 45;163;193;273.
36.	Sāraṅgadhara (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Clinical practice preceded by pharmacognosy Two copies.)	<i>Sāraṅgadhara Paddhati</i>	Ay -105;972-B
37.	Śṛi Nātha (Note : Sanskrit lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. 2 copies; about war Horse care / animal health sciences.)	<i>Aśva Śāstra</i>	Ay – 34, & Or.Ms-72
38.	Suhatra (Note : Health care – details not recorded; Moth eaten & Borers. Brittle.)	<i>Hāyadipa</i>	Ay – 70
39.	Trīmalla Bhaṭṭa (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. 100 verses about medicinal herbs.)	<i>Dṛavyaguṇa Śataśloki</i>	Ay - 30-B

Sl. no.	Author	Title	Call no.
40.	Utpaleśvara (Not recoded, moth eaten with active borers, brittle.)	<i>Ūtpaleśvara Sārasaṅgraha</i>	Ay – 109
41.	Ūpeṇḍra Bhaḍja (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Verse. Srti Bhanja is the top most poet author of the Odia literary world. A diction genius, and peerless master of metaphors = Upendra Bhanja)	<i>Āyūrveda</i>	Ay - 435-B.
42.	Viśvanāth Śena (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Same as Charak & Susruta.)	<i>Ay Śāra Saṅgraha</i>	Ay-186;222;283;300
43.	Viśvanāth Śena (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Compatible clinical medicine and (synergic) Nutrition – Rare. 3 copies.)	<i>Pathya Pathy Viniścaya</i>	Ay -16;154;295-B
44.	Viśvanāth Śena (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. His own school / methods of treatment. Pioneering.)	<i>Viśvanātha Cikitsa</i>	Ay - 102
45.	Viśvanāth Śena (Note : Sanskrit lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle.)	<i>Cikitsārnava</i>	Ay – 326
46.	Vaidya Śwāmikara (Note : Odia lingua; Odia script; Approx. Folios Not recorded, Moth eaten & Borers. Brittle. Determination of pathology by observing the (Frank/occult) blood. Determination of pathology by observing gastric emits (enduced & normal).)	<i>Rakta Pitta Nidāna</i>	Ay – 367

3. Discussion

It is noted that Brahmins, *Karanas*, *Kastries*, *Purohitas* and ascetics have been the authors and scribes of these manuscripts. Some of the manuscripts are very old. The manuscript in the Sl. no. 3 talks about syrups while the mss. at Sl. no. 31 is about liquid extracts. Pharmacist's and clinician's ethics are mentioned in Sl. no. 6; 13; 33; 35. Regional indigenous/independent schools are noted at Sl. no. 37 & 44. Surgery (invasive medicine) is noted at Sl. no. 11 and avian medicines in Sl. no. 10 & 14. The author of Sl. 18 is the king of Kalāhandi (a tributary state of the erstwhile Gajapati empire of mighty Kalinga) and he also wrote a rare treatise on cosmetology. It indeed has a cure for alopecia, considered incurable by modern science. Combating chronic diseases are noted in Sl. no. 22-i while clinical diagnosis in Sl. no. 22, 24, 25. The famous Nighaṅṭu (formulator/formulary) is noted at Sl. no. 26-i. About pulse and its examination is in Sl.

no. 27. Paediatric medicine is noted at Sl. no. 29. Pharmacies cum pharmacognosy cum pharmacology sciences are noticeable in Sl. no. 21; 30; 39 – which all are ancient 'hand books of pharmaceutical basis of the therapeutics. At Sl. no. 34 the author is the famous emperor Gajapati Śri Purūsottama Deva (c.15th A.D) and he captions his work as "Dual Hair Types" (albeit also dyeing). The Mss. at Sl. no. 37 is all about equine sciences (veterinary medicine). Convalescence period food is noted at Sl. no. 43. Blood and sputum evidence based determination of the pathology is noted at Sl. no. 46.

The authors of these manuscripts are pan India apart from local. The lingual is in Śāṅskrit and Oḍiā and scripts in Devanagari and Oḍiā (vernacular). Although the collection is peerless, yet the list is not exhaustive. The 'discussions' are so meager that it reflects upon the abilities of the present author and more work remains to be done. Scholars are invited to explore these works which

are mankind's heritage, not merely Indian. Multi-disciplinary group study specially by young minds will be an advantage.

Note: In Orissa the palm leaves (*Brasus Flabelifera alais* Tala ghacha in Odia lingua) for manuscript purposes are selected carefully from top central apex members (sky pointing) from among the old and aging trees. Some of them from leaves specially are also treated to hearth smoke (called Ooaa ?). This neutralizes ethylene gas that may remain trapped, also permatises the cellulose-carbon bond. Such selected thick leaves does not shrink. They are also heavier. New ones go in to making hand fans, are also lighter. The age old folio leaves are clatherin and hence get to be loaded with carbon. Depletion of carbon being slow – inflicts long life and also carbon thwarts micro-biological and fungal infestations. The black soot carbon ink adds life apart from being compatible both on phyto-chemistry basis and also in the visual spectrum. The age old palm leaf folios can be sterilized by exposing them to Gamma

irradiation in the range of 10-25kilo gray (GOI technology licensed private units are in operation)-for standard periods. Re-carbonation can best-safe be done by 'gassification'; while immersing in or rinsing with Carbon Tetrachloride will also be very good (however, CT is a strong hepato carcinogen).

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