

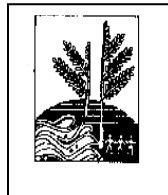
Draft for 1st hand information; comments and suggestions are welcome.

Threat Status of Plants of Conservation Concern in Orissa(India): A Compilation
(with a note on the endemic taxa)

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A note for the readers

Compilation of the threat status of plants in Orissa was first started by Miss Pallavi Priyadarshini, now an ex-employee of VASUNDHARA and then working in the capacity of a Programme Associate, in February 2005 as per the instructions of the undersigned who had faced problems while trying to assess the status of threatened plants in Orissa, due to the lack of an updated and more comprehensive compilation on the same and had therefore planned, within his official limitations, to fulfill this need. The draft made by Pallavi however remained incomplete and unedited, after her resignation, for more than seven months due to other engagements of the undersigned. I am happy that finally the tables are ready for release, though this is still a draft.

We can see in the following tabulation that the maximum number species/taxa under threat belong to the Orchidaceae family. One of its reasons may be that this family has been recently studied in detail by Dr. Sarat Mishra because of his personal likingness for the orchids, whereas other plant groups(families) have hardly received that kind of attention.

As made clear in the title itself, this is basically a compilation of the available data; however, changes have been made wherever found necessary. For instance, some species(like *Knoxia linearis*) included in the list released by the UNEP(United Nations Environmental Programme)-supported World Conservation Monitoring Centre(WCMC), UK but found excluded from the Orissa flora, have not been incorporated here. Similarly, family names have been updated also. Still, this is far from being complete. On one hand, threat status of several species have actually changed over the years, but not reflected in this tabulation due to lack of a formal recognition of the same by competent agencies. For instance, the undersigned has highlighted elsewhere how *Litsea glutinosa* and *L.monopetala* are variously threatened in different parts of the state during last 20 years, but these names have not been incorporated here due to the said reason. Similarly, the status of *Rauvolfia erpentine* now seems to be more than 'vulnerable'. On the other hand, *Persea macrantha* has been subsequently discovered at many other places like Harishankar of western Orissa and botanists no more consider its status to be 'rare' though they believe that the existence of this species is 'conservation dependent' in the state. It has also been felt that the flora in some parts of the state has either remained unexplored, or needs re-exploration. VASUNDHARA made a novel attempt to bring the floral richness of one such area, the Niyamgiri hills of south-western Orissa, to limelight by commissioning a floristic study there and the results are encouraging. Let us hope that concerned authorities would help complete a revised, unbiased and updated understanding of Orissa's plant diversity in near future. Given the rapid deforestation and destruction of natural habitats under human pressure, proper assessment of our biodiversity is an urgent need as this can help designing a strategy to save areas important from biodiversity point of view, and it is therefore quite pertinent that floristic studies in unexplored or partially explored tracts are undertaken as early as possible and threat status of various species be determined or updated. VASUNDHARA will continue its endeavour to contribute in this direction in the greater interest of the mankind.

The conservation of plants considered to be rare or endangered but having no significant use for the people are often seen as the conservationist's 'lunacy'; but who knows the otherwise obscure plant may have some valuable property to be discovered later, as it happened in case of *Nothapodytes (Mappia) foetida*? On the other hand, we suggest that the conservation strategy for threatened/rare species having absolutely no use for the mankind, can be different from that having some use. A practical approach with due importance to the ecological values can help implement the principles of sustainable development in the true sense.

Several species are but locally threatened though their overall status in the state may be considered out of danger. On the other hand, some species may be locally abundant but their overall status in the state may be threatened. Hence, attempts to generalize the threat status of plants in the state/country may not be proper always. This suggests how critical this study should be.

Understanding our limitations and lack of expertise, we took the help of Dr. Sarat Mishra to clear some of our confusions regarding the threat status(earlier claimed) of orchids, and are thankful to him for his valuable inputs. As made clear in the beginning, this is a draft and we hope to revise it with the cooperation of experts, in due course of time.

Bikash Rath

PRIMARY SOURCES OF INFORMATION

- **UNEP-WCMC 2005, http://www.wcmc.org.uk/igcmc/rl_plt/i21.html**
- **Saxena, H. and Brahmam, M. 1994,1995,1996; *The Flora of Orissa*, Vols.I-IV**
 - **Mishra, Dr.Sarat. 2004, *Orchids of Orissa***

Orissa's threatened and endemic plants at a glance

<i>Nature of conservation/threat status</i>	<i>Number of species/taxa</i>
Endemic	± 26
Endangered	± 12
Rare	± 108
Vulnerable	± 15
Near threatened	± 5
Indeterminate / Status unknown/ ‘?’	± 51

Note: The ± sign suggests that the figures are variable because some of the existing assessments are questionable, some are yet to be ascertained properly, and some more species are supposed to be added after further studies.

Family-wise description of threatened plants

Family: Acanthaceae						
Sl. No.	Scientific name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Acanthus volubilis</i>	NA	NA	?	NA	NA.(doubtful species?)
2.	<i>Justicia nilgherrensis</i>	<i>Adhatoda nilgherrensis</i>	NA	Rare	Western peninsula. Orissa -Simlipahar (Mayurbhanj)	Glabrous herb or under-shrub
3.	<i>Strobilanthes circarensis</i>	<i>Nilgirianthus circarensis</i>	NA	Rare	Hills of Vishakhapatnam Orissa -Tankanmai, Karlapat(Kalahandi) on the bank of a small perennial stream in cool moist valley at 900 m.	Small shrub
4.	<i>Strobilanthes lupulinus</i>	<i>Nilgirianthus lupulinus</i>	NA	Rare	Western peninsula, Bastar (Chhattisgarh) Orissa -Damp ravines, above 900 m. in Kasipur, (Rayagada); along stream in glen about village Medengadi near Patangi(Koraput); Meghasani, Simlipahar, gregarious along wayside in the forest	Robust herb. Floral buds yield an essential oil.
5.	<i>Strobilanthes jeyporensis</i>	<i>Phlebophyllum jeyporensis</i>	Chitrika (Poroja language)	Endangered	Northern Circars in Vishakhapatnam and Godavari districts; Bastar(Chhattisgarh) Orissa - In damp ravines; Chandragiri, Kasipur(Rayagada); Upar Ampodar (Kalahandi); Mahendragiri(Gajapati); Koraput	Shrub

Family: Aizoaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Mollugo disticha</i>	<i>Pharnacium distichum</i>	NA	Rare	East coast of Madras; South Deccan Peninsula, Sri Lanka Orissa- Bhitarkanika	Erect herb

Family: Anacardiaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Nothopegia heyneana</i>	<i>Nothopegia colebrookeana</i> <i>/heyneana</i>	NA	Rare	Orissa, Western Ghats; Tamil Nadu Orissa- Baula forest, Keonjhar; Mals of Puri	Small evergreen tree. Woods are used for posts, props, and scaffolding. Fruits eaten. Pale juice of bark becomes permanent black on drying; was used as invisible ink.

Family: Annonaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Alphonsea madrasapatana</i>	—	Ghanti	Vulnerable	Karnataka, Eastern Ghats, Vishakhapatnam, Cuddapah and N.Arcot Orissa- Shady forests; Khandagiri; Bhitarkanika	Small or medium -sized ever green tree
2.	<i>Desmos longiflorus</i>	<i>Unona longiflora</i>	NA	Indeterminate	Assam, Khasia large hills, Bangladesh Orissa- Damp forests: Puri	Large shrub or small tree
3.	<i>Polyalthia korintii</i>	<i>Guatteria korinti</i>	NA	Rare	Western peninsula from Vishakhapatnam south wards, Sri Lanka. Orissa- Common in coastal scrub jungles, in sand - bars situated along the river banks and between the creeks and channels of Mahanadi delta under the influence of occasional spring tide, usually in association with <i>Polyalthia suberosa</i> , <i>Ochna squarrosa sp.</i> . Bahakud, Hetamundai and Bhitarkanika tidal forest (Kendrapara)	
4.	<i>Polyalthia simiarum</i>	<i>Guatteria simiarum</i>	Ojhar, Monghai, Wojarh	Indeterminate	Forests of Assam and Orissa Orissa- Damp forest: Puri; Mayurbhanj; Sundargarh(Bonai); Khurda	Tall tree. Wood suitable for tool-handles, sports goods, matchboxes and splints, veneers, tea chests, and electric transmission poles. Bark yields a fibre used for ropes.

Family: Annonaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
5.	<i>Uvaria eucineta</i>	—	NA	Endangered	Endemic in Orissa Orissa -Sal forests of Bhanjanagar ,Ganjam, Karchuli	Scandent shrubs
6.	<i>Uvaria hamiltonii</i>	—	Lakankuli	Rare	Uttar Pradesh, Bihar, West Bengal, Sikkim, Assam, Meghalaya, Orissa, Andhra Pradesh, Andaman & Nicobar Islands, Nepal, Myanmar, Thailand Orissa -Hill Forests -Mayurbhanj; Ganjam; Angul; Puri	Scandent shrubs
7.	<i>Uvaria macropoda</i>	—	NA	Indeterminate	Hill forests of Ganjam	<i>Doubtful Species</i>

Family: Apiaceae (Umbelliferae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Bupleurum andhricum</i>		NA	Rare	Parlakhemundi, Ganjam	<i>Doubtful species</i>
2.	<i>Ligusticum albo- alatum</i>		NA	Endangered (www.wcmc.org)		<i>Doubtful/excluded species? - Ed.</i>

Family: Apiaceae (contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
3.	<i>Peucedanum dhana</i>		NA	Rare	Madhya Pradesh, Bihar, Maharashtra Orissa- Occasional in hill forests: Ganjam; Chitra konda, Koraput; Sonabera plateau; baudh ; Very abundant in South Kalahandi	Glabrous herb. Carrot-like roots used as a tonic and febrifuse.
4.	<i>Pimpinella bracteata</i>		NA	Rare(?) ¹	Bihar & Orissa. Orissa- Common in hill forests: Simlipahar, undivided Ganjam, Pal-lahara	Stout biennial herb

Family: Apocynaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Carissa gangetica</i>	—	NA	Rare	Tamil Nadu and Orissa Orissa- Mahendragiri(Gajapati); frequent over 1200 m	Shrub
2.	<i>Cerbera odollam</i>	<i>Cerbera manghas</i>	NA	Vulnerable	Coasts of Deccan peninsula, Sri Lanka, Malaysia Orissa- Bhitarkanika	Tree. Bark purgative. Fruit narcotic, poisonous, employed for killing stray dogs and to stupefy fish. Poisonous effect is due to cereberin and odollin. Wood is a source of fine charcoal. Seeds yield oil, Odolla fat, used as an illuminant.

¹ The distribution as common in hill forests seems contradictory to this status.-Ed.

Family: Apocynaceae (contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
3.	<i>Rauvolfia serpentina</i>	<i>Ophioxylon serpentinum</i>	Patal garur, patal garuda, patal giridi, Bhuin kerua	Vulnerable	Tropical Himalaya, Assam, Deccan Peninsula, Myanmar, Sri Lanka and Malaysia Orissa: Widely scattered; mostly in moist deciduous forests of Koraput, Rayagada, Nayagarh, Gajapati and other districts	Glabrous under-shrub. The plant is reputed for its medicinal properties. The roots contain several useful alkaloids, of which reserpine with hypotensive properties are most important. Due to excessive exploitation in the past, the plant has actually become rare in several areas.

Family: Araceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Rhaphidophora hookeri</i>	—	NA	Rare	Sikkim; Assam; Manipur Orissa- Karlapat hill (Kalahandi); Scandent on tree close to waterfall in shady ravine.	Climber

Family: Araliaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Schefflera venulosa</i> var. <i>roxburghii</i>	<i>Schefflera roxburghii</i> / <i>Heptapleurum venulosum</i>	Jari	Rare	Ganjam district(undivided)	Large straggling tree or climbing shrub with long racemes. Roots are mixed with rice and eaten to cure dropsy.

Family: Arecaceae (Palmaceae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Calamus viminalis</i>		Beto, Panibeto	?	Lower Bengal,; Andaman. Myanmar, Bangladesh Orissa: Frequent in ravines and damp forests	Stout tufted shrub
2.	<i>Licuala peltata</i>		Banatala, Hontolo	Vulnerable	Sikkim, Himalay; Assam; Khasia Hills; Andaman. Bangladesh, Myanmar Orissa- Along muddy streams or swamps with moving water in the hill forests: Malaygiri, Dhenkanal; Sulia reserve, Aran forests etc; near Karlapat, Kalahandi, in ravines.	Short, rarely tall- stemmed palms.
3.	<i>Nypa fruticans</i>		Luna khajuri	Near-threatened(?) (www.wcmc.org)	Sundarbans Orissa: Planed at Dangamal(Bhitarkanika)	(The species has never been found in wild in Orissa by the botanists. Hence, including it in the threatened list seems erroneous.- Ed.)
4.	<i>Phoenix paludosa</i>		Hental	Vulnerable	Esturian shores from Bengal to Myanmar and the Andamans Orissa- Common in the tidal forests of Mahanadi & Brahmani rivers.	Soboliferous palm

Family: Asclepiadaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Calotropis gigantea</i>	_____	Arakh, Akand	Near threatened	Through the hotter part of India, Pakistan, Nepal to Sri Lanka, the Maldives Island, S. China & Malaysia Orissa- Frequent in open waste ground; islands of Chilika	Stout hoary – tomentose shrub. Bark yields a fibre which is white, silky, strong and durable; used for fishing nets and lines, bow strings, and twine. Seeds yield a fixed oil. The floss from the seeds used for stuffing mattresses, pillows, etc. Root bark said to be similar to ipecac in action. Leaves are rubbed on the skin of elephants for the treatment of Kesarayer disease.
2.	<i>Ceropegia hirsuta</i>	_____	NA	Rare	Through out India except Himalayan region Orissa- Odagaon, Ganjam; Kuthadiya hill, Ganjam; Ulibur (Kiriburu -?) Forest near Jamda, Keonjhar	Hirsute, variable climber;
3.	<i>Tylophora fasciculata</i>	_____	Sahasra-vedi	Rare	Deccan peninsula, Nepal, Sri Lanka Orissa- Hilltops: - Gandhamardhan; Manaskonda, Korapat; Nilgiri; Malaygiri, Keonjhar; Indragiri, Kalahandi; Karlapat, Kalahandi	Erect or sub-erect herb. Poisonous, used as a rat poison. Roots and leaves emetic and purgative used as substitute of Ipecacuanha. Poultice of leaves applied to unhealthy ulcers and wounds to induce granulation. Decoction of roots used as febrifuge.

Family: Asclepiadaceae(contd.)						
4.	<i>Tylophora rotundifolia</i>	—	Bag-dhamari, Gopipeta	Rare	Assam, Oudh, W. Peninsula. Orissa- Occasional in Sal forests in damp places: Dhanei & Paniganda in Ganjam; Baragad	Creeping, some what fleshy herb with prostrate. Used medicinally.

Family: Asteraceae (Compositae)						
Sl. No.	Scientific name	Synonyms	Local name	Status	Distribution	Description
1	<i>Pterocaulon redolens</i>	<i>Graphalium redolens</i> / <i>Conyza redolens</i> / <i>Pterocaulon cylindrostachyum</i>	NA	Indeterminate	Orissa, Myanmar, China, Philippines, New Caledonia, Australia, Malaya Orissa- Ghoriajhar, Gangpur, at the foot of a dump of old abandoned manganese quarry	Coarse, erect, densely woolly, strongly aromatic herb.

Family: Avicenniaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1	<i>Avicennia merina</i>	<i>Sceura merina</i>	Dhala bani	Near threatened	Coastal tracts of Asia and Africa Orissa: Tidal forests of Mahanadi and Brahmani	Small tree or large shrub.

Family: Balanophoraceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Balanophora polyandra</i>	—	NA	Endangered	Sikkim Himalaya; Khasia hills Orissa- Mahendragiri, 1200 m, a root parasite; Bhatodih, Keonjhar, 950 m, on roots of trees in deep leaf litter under shade in a wood in a damp ravine.	Glabrous fleshy herbs. Used against asthma. Aerial parts contain coniferin, which is effective in cough.

Family: Capparaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Capparis olacifolia</i>	—	NA	Rare	Tropical Himalaya from Assam to Nepal, Trinaveli (Tamil Nadu) Orissa- Mahendragiri, Kuntideolo, in moist shady ravine; Kalahanadi; Dongar Jhola, Among rocks in ravine.	Sarmentose shrub
.2.	<i>Capparis roxburghii</i>	—	Handi-phuta	Rare	Western Ghats and Carnatic Orissa- Puri: frequent in rocky jungles; Chilika, Khurda	Large woody climber.

Family: Caprifoliaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Viburnum punctatum</i>	<i>Viburnum acuminatum</i>	NA	Rare	Kumaon; Deccan in Karnataka and the hills of N.Coimbatore; W.Ghats from Karnataka to Travancore. SE. Asia Orissa- N.Circar ² , Mahendragiri, 1200m	Small evergreen tree. Wood used as a fuel in the areas of its distribution.

² Northern circar is an old terminology implying the southern districts of Orissa.

Family: Celastraceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Maytenus bailadillana</i>	<i>Gymnosporia bailadillana</i>	NA	Rare	Orissa, Madhya Pradesh, Andhra Pradesh. Orissa- Karlapat, Kalahandi	Shrub or tree up to 3 m
2.	<i>Maytenus rothiana</i>	<i>Catha rothiana</i> / <i>Celastrus rothiana</i> / <i>Gymnosporia rothiana</i> / <i>Maytenus wightianus</i>	NA	Rare	Western Peninsula Orissa- Parlakhemundi	Large shrub or small tree

Family: Chenopodiaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Salicornia brachiata</i>		NA	Rare	Sea- coasts of India, Sri Lanka, Bangladesh Orissa- Frequent in saline marshes & ground covered by the tides: margins of Chilika	Erect decumbent, branched herb or under-shrub. Ash of the plant , called sajji or barilla, was formerly used in soap and glass making. Leaves and young shoots eaten after pickling; Shoots also sometimes used for as a pot herb. Herb used as a camel fodder.

Family: Cycadaceae						
Sl. No.	Scientific Name	Synonyms	Local name	Status	Distribution	Description
1.	<i>Cycas circinalis</i> var. <i>orixensis</i>		Arguna, Oruguna, Oruna, Rengua, Bhoru	Vulnerable	Orissa- Fairly frequent in forests throughout the state on various geological formations. It is especially abundant in hills with abundant rainfall: Hills of Puri; Angul; Satkosia, Mayurbhanj, Keonjhar; Ganjam; Chandaka, Bhubaneswar. Its northern limit appears to a be line joining Sambalpur with Keonjhar.	Gum-yielding tree. A sago, similar that obtainable from the palms, is extracted from the trunk from about 7- year old plants (before fruiting). Seeds also yield starch used in food at times of scarcity ; toxic principle can be removed by repeatedly washing the ground floor. Juice of tender leaves given for flatulence.

Family: Cyperaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1	<i>Scleria psilorrhiza</i>	—	NA	Endangered		

Family: Euphorbiaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Alchornea mollis</i>		Tabhari	Rare	Central and eastern Himalaya, in hot valleys; Sikkim; Assam; Orissa- Bhanjanagar; Barakamada, Similipal; under shade in moist valley at the head of Kosai river in Rebna forest , Keonjhar, 400-450m; also in the Ret valley, 600 m, Kalahandi; Medeng-gadi, near Patangi, Koraput; near Janchua, Kalahandi, along the bank of stream.	Small tree or shrub
2.	<i>Drypetes assamica</i>	<i>Cyclostemon assamica</i>	NA	Rare	Sikkim Terai; Assam; Khasia hills; Bihar Orissa- Mahendragiri, Ganjam, 135m; Southern range, Puri	Small evergreen tree. A general utility timber of Assam.
3.	<i>Homonioia intermedia</i>		NA	Indeter- -minate	Orissa- Likarpara, Angul near Mahanadi	Shrub with many erect branches.
4.	<i>Pachystylidium hirsutum</i>	<i>Tragia hirsuta</i> / <i>Tragia gagei</i>	NA	Indeter- -minate	Bailadilla, Bastar, Madhya Pradesh; Bihar and Orissa. Siam, Indo-China, Laos, Java, Philippines. Orissa- Mals ³ of Puri	Slender twining herb with brown slightly pilose branches

³ Mals of Puri usually referred to the hill forests of Banapur, now in the Khurdha district.

Family: Fabaceae (Papilionaceae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Atylosia cajanifolia</i>	<i>Cantharospermum cajanifolium</i>	Bana-kandulo, Kanduli	Rare	Orissa; Bastar (Chhattisgarh); Andhra Pradesh; Tamil Nadu & Meghalaya Orissa- Hills of southern Orissa; Kalahandi	Erect perennial shrub
2.	<i>Eleiotis sororia</i>	<i>Hedysarum sororium</i>	NA	Rare	Plains of Bundelkhand, Peninsular India, Sri Lanka Orissa- Dry mixed forest in the west of Orissa in Bolangir & Khariar.	Procumbent herb
3.	<i>Indigofera aspalathoides</i>	_____	NA	Rare	South India, Sri Lanka. Orissa- Sandy sea-shore: Gopalpur; Ganjam; Hukitola island, Cuttack; Chilika, littoral jungles	Stiff, much branched, silvery hoary under-shrub. Decoction of leaves and flowers and tender shoots applied in cancerous affections and in leprosy.
4.	<i>Indigofera wightii</i>	_____	NA	Rare	Peninsular India. Sri Lanka. Orissa- Slopes of Kodinga Mali in Kasipur(Rayagada)	Small, silvery, pubescent shrub.
5.	<i>Mucuna minima</i>	_____	NA	Indeterminate	Orissa- Lara Sara, Sambalpur	Slender climber
6.	<i>Psoralia corylifolia</i>	_____	Bakuchi	Rare	Through out India, Pakistan, Sri Lanka, Myanmar, China, Arabia, Somali Orissa- Bhubaneswar- Khurda road: waste land near cultivated areas.	Coarse herb. The seeds are used as a remedy to leucoderma.
7.	<i>Sophora glauca</i>	<i>Edwardsia maderaspatana</i>	NA	Rare	South India. Nepal, West China	Shrub

Family: Fabaceae (contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
8.	<i>Sophora wightii</i>	—	NA	Rare		<i>Doubtful species.</i>
9.	<i>Tephrosia roxburghiana</i>	—	NA	Rare	Andhra Pradesh; Deccan Orissa- Mahendragiri, 1200m in grassy places.	Slender under-shrub

Family: Flacourtiaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Homalium nepalense</i>		Kakhara, Kakhada, Dhanimari	Rare	Bihar & Orissa. Nepal. Orissa- Frequent in mixed forests in rocky valleys.	Small medium sized tree

Family: Gesneriaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Chirita hamosa</i>	<i>Didymocarpus pygmaeus</i>	Alamnara	Rare	Central India; Bihar; Khasia Hills; W. Deccan, Peninsula Orissa- On moist, often moss- clad rocks & hill sides in moist and shady situations: Nrusinghnath & Harishankar in Gandhamardhan; Mahendragiri & Serango in Ganjam; Phurlijharan, Kalahandi; Sonabera	Small annual hairy herb
2.	<i>Aeschyanthus parasiticus</i>	<i>Incarvillea parasitica</i> / <i>Aeschynanthus grandiflorus</i> / <i>Trichosporum grandiflorum</i>	NA	Rare	Khasia hills Orissa- Clinging on tree trunk and rocky hill sides in damp valleys: Similipal, Rebna forests, Keonjhar	Epiphytic subshrub or scrambling on rocks & steep hillsides; in damp valleys.

Family: Gnetaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Gnetum ula</i>	<i>G. funiculare</i> / <i>G.scandens</i>	Lolari, Galio, Mirig- lendi	Vulnerable	Peninsular India; Madhya Pradesh; Andaman. Myanmar Orissa- Occasional in evergreen or semi-evergreen forests: Similipal, Mayurbhanj; Keonjhar; Bonai; Mahendragiri; Ganjam; Hills of Puri.	Large dichotomously branched woody climbers. The hard seeds are broken and the cotyledons eaten after frying.

Family: Guttiferae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Garcinia cowa</i>	<i>Garcinia roxburghii</i>	Rajkusuma Sarbana	Rare	Bengal, Bihar, Assam, Andamans Orissa: Mayurbhanj; Athmallik; Mals of Puri; Bonai; Pal-lahra	Erect tree yielding a useful gum-resin. Bark yields a dye; leaves eaten as vegetable; fruits edible.
2.	<i>Garcinia spicata</i>			Indeterminate		Fruits edible; gum-resin useful.
3.	<i>Hypericum gaitii</i>	—	NA	Rare	Bihar(undivided) and Orissa Orissa: Similipal- in open grasslands close to streams; Malaygiri, Pal-lahra	Much branched pretty shrub

Family: Icacinaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Natsiatum herpeticum</i>	—	NA	Rare	North eastern region Orissa: Mahendragiri(Gajapati); Meghasani, Similipal	Climber. Leaves and tender shoots edible.

Family: Lamiaceae(Labiatae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Leucas clarkei</i>	—	Enga dhurup arak (Santhali)	Rare	Undivided Bihar Orissa: Sirsumuli(undivided Ganjam); Biswanathpur(Kalahandi); Mundkati, Barapahar(Sambalpur)	Slender annual herb. Leaves edible.

Family: Lauraceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Neocinnamomum caudatum</i>	<i>Cinnamomum caudatum</i>	NA	Rare	Central & Eastern Himalaya; Sikkim. Myanmar, Yunan Orissa- Occasional in cooler valleys in mixed forests: Simlipahar; Mahendragiri; Bholapadar valley, Koraput; Patangi, Koraput	Small tree
2.	<i>Persea macrantha</i>	<i>Machilus macrantha</i> / <i>Machilus glaucescens</i>	NA	Rare	Deccan peninsula; Bihar. Sri Lanka Orissa- Evergreen forests near ravines; Bonai; Mandibisi(Rayagada), 950 m in deep shady ravine.	Moderate to large tree; bark much preferred in agarbatti industry as a source of binding material, but has medicinal uses also.

Family: Liliaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Dipcadi montanum</i>	<i>Uropetalum montanum</i>	NA	Rare	From Western Coast of Deccan up to Orissa in the east, 1160-1300 m; and rarely in the west Himalaya at an altitude of 2000 m; Central India; Himachal Pradesh; Maharashtra. Orissa- Khandual Mali; Kalahandi; Champabandh Mali near Gunpur, abundant on flat summit on laterite.	Bulbous scapigerous herbs.
2	<i>Gloriosa superba</i>		Agnisikha Laha-langalia	Vulnerable	Through out tropical India, up to 1500 m. tropical and S.Africa, Madagascar, India to Indo- China, Malaysia Orissa- Sporadic in open forests and scrubs: Bhubaneswar; Ghantasila, Rambha, Manaskonda, Koraput; Dhenkanal; Mahendragiri and Parasurampur, Ganjam(undivided); tidal scrubs, Cuttack.	Pretty climbing or usually scrambling, glabrous herb. Tuber poisonous, but have several medicinal applications.

Family: Lobeliaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Lobelia alsinoides</i>	<i>L.trigona / L. griffithi / L. terminalis / L.microcarpa</i>	Painmali (O)	Rare	Through out the greater part of India, up to 1200m. Sri Lanka, Myanmar, China, Malaysia Orissa: Mahendragiri and Paniganda in Ganjam; Simlipahar; Talcher; Sambalpur; Bhubaneswar	Small annual glabrous herb. Leaves used as pot -herb.

Family: Mimosaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Acacia donaldii</i>		Gar khair, Burkeli	Indeterminate	West Bengal, Madhya Pradesh Orissa- Sambalpur, especially on the quartzites and shales of Barapahar Range.	Small tree.
2.	<i>Albizia orissensis</i>		NA	?	Orissa; Andhra Pradesh Orissa- On way to Panasa	Tree
3.	<i>Albizia thomsonii</i>		NA	Indeterminate	Orissa, Madhya Pradesh, Tamil Nadu, Maharashtra Orissa- Angul, Dhenkanal, Lanjigarh	Large tree

Family: Malpighiaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Aspidopterys tomentosa</i>	<i>A. hutchinsonii</i>	NA	Rare	Orissa: Bhanjam Hills, Mayurbhanj	Stout climber

Family: Malvaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Hibiscus platanifolius</i>	<i>Pavonia platanifolia/ Hibiscus collinus</i>	NA	Indeterminate	West Bengal, Orissa, Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka, Kerala; Nepal, Sri Lanka Orissa- Hills of Orissa; Mals of Puri	Small tree or shrub

Family: Melastomataceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>O. rostrata</i>	<i>Osbeckia stellata</i> ⁴	NA	Rare	Himalaya; West Bengal; Assam; Sikkim; Meghalaya; Bihar. Bangladesh, Myanmar, Bhutan, Nepal, China, Laos, South Vietnam Orissa - Near water courses: Simlipahar; Bonai; Barubandha; Near Patangi, Koraput	Erect perennial herb.
2.	<i>Osbeckia stellata</i>		NA	Indeterminate(?) (www.wcmc.org)	The variety <i>O.crinita</i> has been found in Mahedragiri (Gajapati) and Rustuguda valley(Rayagada)	(Not known if <i>O. crinita</i> has been referred to here. –Ed.)

Family: Meliaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Aglaia cucullata</i>	<i>Amoora cucullata</i>	Mansita	Rare	Lower Bengal, Andamans. Nepal Orissa - Tidal forests of Bhitarkanika: Dangmal	Small glabrous tree.Woods used for posts and as fuels.
2.	<i>Aglaia haslettiana</i>		NA	Indeterminate	Endemic to Orissa. Semi evergreen forest near streams: Puri and Angul; Silangpara to Berbara, near road.	Evergreen tree

⁴ *O. rostrata* is a variety of *O. stellata*. The latter has another variety *O. crinita*.

Family: Meliaceae (contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
3.	<i>Toona ciliata</i>	<i>Cedrela brevipetiolulata</i>	NA	?	Orissa, Endemic Orissa- Mals ⁵ of Orissa	Small Tree
5.	<i>Chukrasia tabularis</i>		NA	Rare	West Peninsula, Sri Lanka, Bangladesh, China, Malaysia Orissa- Kauns, Sukinda(Jajpur) in a valley between Tumka &Mahigiri hills; also largely planted.	Tall tree. Wood highly preferred for furniture-making and paneling, etc.
6.	<i>Xylocarpus gangeticus</i>	<i>Carapa moluccensis</i>	Pitamari	Rare	Tidal forests of west Bengal, Orissa, Andamans and Malaya Orissa: Bhitarkanika	Tree. Fruit-paste applied on boils; timber used in yoke-making, etc.

Family: Menispermaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Parabaena sagittata</i>		NA	Rare	N.E. India, Andaman Islands, Nepal, Yunan, Indo- China. Orissa- Climbing among shrubs and bushes in Rastuguda valley along rocky ravine in shady situation, 900-1050 m; Kashipur	Slender climber
2.	<i>Tinospora sinensis</i>	<i>Campylus sinensis</i> / <i>Tinospora tomentosa</i> / <i>T. malabarica</i>	NA	Rare	Bengal, western Peninsula, Sikkim, Khasia Hills, Bihar and Orissa. Bangladesh. Orissa- Paniganda, Ganjam; Mayurbhanj	Large climber; used in the same way as <i>T. cordifolia</i> (guluchi).

⁵ Hill forests

Family: Nyctaginaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Boerhavia crispa</i>		NA	Indeterminate		

Family: Orchidaceae ⁶						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Acanthephippium bicolor</i>		NA	Rare	Orissa, Tamil Nadu, Kerala, Karnataka; Sri Lanka Orissa: Similipal forest	Terrestrial herb
2.	<i>Acanthephippium sylhetense</i>		NA	Rare	Sikkim; Khasia hills; Arunachal Pradesh; Assam. Bangladesh Orissa-Similipal	Terrestrial herb. Ornamental.
3.	<i>Aerides maculosa</i>	<i>Saccolabium speciosum</i>	NA	Vulnerable	Maharashtra; Bihar; Deccan Peninsula. Orissa- Epiphyte in forests: Similipal; Koraput; Gandhmardhan; Banamali hill, Kalahandi	Epiphytic herbs. Ornamental.
4.	<i>Aerides ringens</i>	<i>Saccolabium ringens</i> / <i>S.paniculatum</i> / <i>Aerides radicata</i> / <i>A. linearis</i> / <i>Saccolabium rubrum</i>	NA	Rare	Deccan Peninsula; Maharashtra. Sri Lanka Orissa- Govindpalli Ghat, Koraput	Epiphytic herbs

⁶ The threat status given for this family is usually according to Mishra(2004) unless otherwise specified. Underlined status implies to WCMC categorization.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
5.	<i>Bulbophyllum careyanum</i>	<i>Anisopetalum careyanum</i>	NA	<u>Rare</u>	Sikkim; Bihar; Khasia Hills. Nepal, Bhutan, Myanmar, Thailand Orissa- Epiphyte in forests : Chunghat, Sundargarh	Epiphytic herb with thick rhizome bearing ovoid pseudobulbs at intervals
6.	<i>Bulbophyllum guttulatum</i>	<i>Cirrhopetalum guttulatum</i>	NA	Rare and Endangered	North eastern states, Nepal, Bhutan, Myanmar Orissa: Koraput dist.(undivided): Kutia hills	Epiphyte. Ornamental.
7.	<i>Bulbophyllum macraei</i>	<i>Cirrhopetalum macraei</i>	NA	Rare	Orissa, Arunachal Pradesh, Japan, Sri Lanka Orissa: Similipal forest	Epiphyte. Ornamental.
8.	<i>Bulbophyllum polyrhizum</i>		NA	___? (Mishra found it be frequent on Meghasani hills, Mayurbhanj, but occasional at Mahendragiri and Panchpatmali)	Sikkim; Dehradun. Nepal , Myanmar. Orissa- Meghasani hill, Similipal, scarce in semi evergreen forest, in partly open condition; Singaraju, Ganjam,; Deomali; Koraput.	Epiphytic herb with rhizome branching thread - like, naked; pseudobulbs.
9.	<i>Bulbophyllum triste</i>		NA	Rare	North eastern states, West Bengal, Orissa,Nepal, Myanmar Orissa: Similipal forest	Epiphyte

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
10	<i>Calanthe triplicata</i>	<i>Orchis triplicata</i>	NA	Rare	North-eastern region, S. India, Orissa; Bhutan, Myanmar, Thailand, Malaysia, etc. Orissa: Bandriabasa, Similipal forest	Terrestrial leafy herb. Ornamental.
11	<i>Cirrhopetalum panigrahianum</i>	<i>Bulbophyllum panigrahianum</i>	NA	Vulnerable	Endemic to Orissa. Found in Rebena forest(Keonjhar) and Similipal forest(Mayurbhanj)	Epiphytic, rhizomatous plant
12	<i>Cleisostoma appendiculatum</i>	<i>Aerides appendiculata</i> / <i>Sarcanthus apendiculatus</i>	NA	? (Mishra found it to be frequent at some places and occasional at other places)	Sikkim, Assam, Mysore. Myanmar. Orissa- Similipal: occasional in semi evergreen to moist deciduous forests usually by streamside; epiphytic or lithophytic under shade; Rebena forest, Keonjhar: occasional in forests.	Epiphytes. Ornamental.
13	<i>Cottonia peduncularis</i>	<i>Vanda peduncularis</i>	NA	Rare	Tamil Nadu, Kerala, Karnataka, Maharashtra, Orissa; Sri Lanka Orissa: Govindpalli ghat(Koraput)	Epiphytes. Ornamental.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
14	<i>Crepidium mackinonii</i>	<i>Malaxis mackinonii</i>	Gandamala	Rare (Mishra found it to be locally abundant at Brahmanigram, but occasional at some other sites.)	NW Himalaya; Upper Gangetic plain; West Bengal; Chhattisgarh, Maharashtra; Gujarat; Jharkhand Orissa- Occasional in moist & shady places in forest: Chandiput and Paniganda, Gajapati; Niyamgiri, Kalahandi; Brahmanigam, Kandhmal; Redhakhol, Sambalpur	Small terrestrial herb
15	<i>Crepidium purpureum</i>	<i>Malaxis purpurea</i>	NA	Rare and vulnerable	Uttaranchal, Sikkim, Orissa, Tamil Nadu; Nepal, Thailand, Sri Lanka, etc. Orissa: Bhanjabasa, Similipal forest	Terrestrial herb
16	<i>Cymbidium bicolor</i>		NA	Rare	Uttaranchal, Sikkim, West Bengal, Arunachal Pradesh, Orissa, south India, Andamans; Nepal, Bangladesh, China, etc. Orissa: Similipal forest	Epiphyte. Ornamental.
17	<i>Dendrobium amoenum</i>		NA		West Bengal ; Sikkim; Andhra Pradesh; Garhwal. Bhutan, Bangladesh, Myanmar	Epiphytes. Excluded species
18	<i>Dendrobium cathcartii</i>		NA	Rare	Sikkim Himalaya, upto 1200 m; Khasia hills. Orissa- Mayurbhanj	Epiphyte with slender, erect stems.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
19	<i>Dendrobium crepidatum</i>		NA	? (Mishra found it to be frequent at some places and scarce, or occasional at other places.)	Dehradun, Assam, Khasia Hills, Madhya Pradesh, Bihar, Sikkim, Maharashtra, South India. Myanmar, Thailand, Laos Orissa- Jenabil, Similipal; Latapat, Koraput; Badarma, Sambalpur(undivided); Rebna Forest, Keonjhar; Malaygiri; Bonai	Epiphytes. Ornamental.
20	<i>Dendrobium fimbriatum</i>		NA	Status unknown	North-eastern region, Chhattisgarh, Jharkhand, West Bengal, Orissa; Nepal, Bhutan, Bangladesh, etc. Orissa: Based on the collection of Dr. Parsuram Mishra, Mooney mentioned its occurrence in the Bissam Cuttack area(Rayagada district), but the plant has not been doubtlessly relocated there or elsewhere in the state since then.	Epiphytes. Ornamental.
21	<i>Dendrobium jerdonianum</i>		NA	?		Doubtful Species
22	<i>Dendrobium macrostachyum</i>		NA	? (Mishra found it to be frequent at some places and scarce, or occasional at other places.)	Bihar: Madhya Pradesh; Peninsular India. Sri Lanka. Orissa- frequent epiphyte in moist deciduous forests.	Epiphytes

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
23	<i>Dendrobium peguanum</i>	<i>D. pygmaeum</i>	NA	Rare	Sikkim,; West Bengal; Bihar; Maharashtra; Karnataka; Western Ghats, Myanmar Orissa- Jamuani, Similipal, Scarce in moist deciduous forest, in open situations; Koira forest, Sundargarh; Matili forest, Malkangiri	Small, densely tufted epiphyte with short pseudobulbs.
24	<i>Dendrobium regium</i>		NA	? (scarce in most areas of observation, as per Mishra)	Orissa, Bihar & Madhya Pradesh Orissa- Rebena forest, Keonjhar; Kutia hills, Koraput; Sankarda & Bailakara, Rayagada; frequent in south Similipal.	Epiphytes. Ornamental.
25	<i>Dendrobium transparens</i>		NA	? (Mishra found it to be frequent at some places and scarce, or occasional at other places.)	Tropical Himlaya; Assam; Khasia hills; Sikkim; West Bengal; Bihar; Madhya Pradesh; Maharashtra; karnataka. Bhutan, Myanmar, Bangladesh Orissa- Similipal, Common epiphyte in open forests; Malayagiri.Koraput; Singaraju, Ganjam; Kalahandi; Rebna forest, Keonjhar.	Epiphytes. Ornamental.
26	<i>Didymoplexis pallens</i>		NA	Rare	S. India, Sikkim, Assam, Arunachal Pradesh, West Bengal, Orissa; Myanmar, Phillipines, etc. Orissa: Kulada and Gopinathpur, Ganjam	Terrestrial leafless herb
27	<i>Diploprora championi</i>		NA	Rare	North-eastern region, Karnataka, Andamans, Orissa; Bhutan, Myanmar, China, etc. Orissa: Similipal forest	Epiphyte

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
28	<i>Eria bambusifolia</i>		NA	Rare	Khasia hills; Sikkim. Thailand Orissa- Rare epiphyte in forests under moist conditions: Meghasani, Similipal; Mahendragiri; Ganjam; Koraput	Epiphytic herbs. Ornamental.
29	<i>Eria lasiopetala</i>	<i>Eria pubescens</i>	NA	Rare	Orissa, West Bengal, Chhattisgarh, north-eastern region; Nepal, Bangladesh, Myanmar, etc. Orissa: Mahendragiri hills	Small epiphyte. Ornamental.
30	<i>Eria meghasaniensis</i>		NA	Rare and vulnerable	India(Orissa) Orissa: Meghasani and Khairiburu hills, Similipal	Epiphytes endemic to Orissa
31	<i>Eulophia explanata</i>		NA	Indeterminate	NW India; Bihar; Pilibhit, N.Oudh; Garhwal. Nepal Orissa- Kalahandi; Similipal; N.Chirbeda, Sundergarh; Balimela; Chitrakonda, Koraput(undivided)	Glabrous terrestrial herbs. Ornamental.
32	<i>Eulophia herbacea</i>		NA	?	Garhwal; Kumaon; Dehradun; Mussoorie; W. Bengal; Gujrat; Konkan; Kanara; Mysore Orissa- Gandhamardhan hills, Bolangir (Not recorded from Orissa in the recent past)	Glabrous terrestrial herb; Tubers a source of salep(tonic).
33	<i>Eulophia ochreatea</i>		NA	Rare	Deccan Peninsula; Maharashtra; Gujrat Orissa- Gandhamardhan hills, Bolangir	Glabrous terrestrial herb endemic to India
34	<i>Flickingeria macraei</i>		NA	Rare	Orissa, West Bengal, Sikkim, Meghalay, Mizoram, S. India, Maharastra; Sri Lanka, Myanmar Orissa: Similipal forest	Epiphyte; ornamental.; has uses as a tonic, stimulant, aphrodisiac, etc.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
35	<i>Gastrochilus acaulis</i>	<i>Cleisostoma acaulis</i>	NA	Vulnerable	Orissa, Tamil Nadu, Kerala, Karnataka; Sri Lanka Orissa- Mahendragiri	Epiphyte
36	<i>Goodyera hispida</i>		NA	Rare	Orissa, Sikkim, Meghalay, Arunachal Pradesh; Thailand, Malaysia Orissa: Similipal forest	Terrestrial leafy herbs. Ornamental.
37	<i>Goodyera procera</i>	<i>Neotia procera</i>	NA	? (scarce or occasional at observed places, as per Mishra)	Tropical Himalaya; Khasia hills; Sikkim; Arunachal Pradesh; Nagaland; West Bengal; Bihar; Peninsular India. Bhutan, Nepal, Myanmar, China, Taiwan, Thailand, Laos, Vietnam, Japan, Philipines, Indonesia, Malaysia, Sri Lanka, Java Orissa- On moss covered rocks or loose boulders in streams or on banks of perennial streams in dense evergreen or semi evergreen forests: Bonai, Sundergarh; Similipal; Malaygiri hills	Terrestrial leafy herbs
38	<i>Goodyera thailandica</i>		NA	Rare	Orissa; Thailand Orissa: Similipal forest; Khajuridihi forest(Sundargarh)	Terrestrial leafy herbs
39	<i>Habenaria crassifolia</i>	<i>Platanthera brachyphylla</i>	NA	Status unknown	Western Ghats, Deccan Orissa- Mahendragiri hills	Terrestrial herb
40	<i>Habenaria diphylla</i>		NA	Rare	S. India, Uttaranchal, Sikkim, Jharkhand, Chhattisgarh, Maharastra; Nepal, China, Myanmar(etc.) Orissa: Revena hills, Keonjhar	Terrestrial herb

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
41	<i>Habenaria gibsoni</i> var. <i>gibsoni</i>		NA	Rare	Orissa, Maharastra Orissa- Revena forest, Keonjhar	Terrestrial herb endemic to India
42	<i>Habenaria gibsoni</i> var. <i>foetida</i>		NA	Rare (but frequent in Redhakhol and Chirbeda area-Mishra)	Orissa, Chhattisgarh, M.P., Maharastra, Gujarat Orissa: Revena forest, Kjr; Lulong, Mayurbhanj; Chirbeda, Sundargarh; Redhakhol, Sambalpur	Terrestrial herb
43	<i>Habenaria grandifloriformis</i>	<i>H. grandiflora</i>	NA	Rare	S. India, Assam, Chhattisgarh, Gujarat(etc.) Orissa: Karlapat, Kalahandi; Mahendragiri, Gajapati;Panchpatmali and Patangi, Koraput	Small herb endemic to India. Ornamental.
44	<i>Habenaria longicorniculata</i>	<i>H. longicalcarata</i>	NA	Rare	Central and south India, Orissa, Sri Lanka Orissa: Parlakhemundi, Gajapati; Kaumaska, Kalahandi; Revena forest, Keonjhar; Patangi, Koraput	Terrestrial herbs. Ornamental.
45	<i>Habenaria marginata</i>		NA	? (Mishra found it to be abundant at some places and scarce, or occasional at other places.)	Kashmir; Himachal Pradesh; Uttar Pradesh; Madhya Pradesh ; West Bengal; Andhra Pradesh; Tamil Nadu; Karnataka; Goa; Rajasthan; Nepal; Myanmar; Thailand Orissa- In open grass lands and forests: Malaygiri foot hills, Dhenkanal,; Nilgiri forests, Baleswar; Semiliguda, Koraput; Tensa, Sundergarh (etc.)	Herb. Ornamental.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
46	<i>Habenaria panigrahiana</i>		NA	Endangered	Orissa, Tamilnadu Orissa- Mohana, Mahendragiri (Gajapati); Sunki ghat(Koraput). Occasional on foothills, under light cover in rocky - loamy soil.	Terrestrial herb endemic to India
47	<i>Habenaria panigrahiana</i> var. <i>parviloba</i>		NA	Endangered	Bhanjanagar, Orissa	Identified by S.Mishra and endemic to Orissa. The taxon however could not be relocated during subsequent visits to the referred site.
48	<i>Habenaria pelorioides</i>		NA	Rare	Orissa, Chhattisgarh, Manipur, Jharkhand, Kerala, A.P., Myanmar Orissa: Bamanghati and Gudgudia, Mayurbhanj; Gadapur, Kandhamal; Mohana-Chandragiri, Gajapati	Terrestrial herb
49	<i>Liparis deflexa</i>	<i>L.prazeri</i>	NA	Rare	S.India, Uttaranchal, Sikkim, Nepal, Myanmar Orissa: Toda forest, Sundargarh	Terrestrial herbs
50	<i>Liparis elliptica</i>		NA	Rare	North eastern states, S. India, W.B., Orissa, Nepal, Sri Lanka(etc.) Orissa: Similipal forest	Epiphyte

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
51	<i>Liparis espeevijii</i>		NA	Endangered	Endemic to Orissa and found at Kendughat in the Revena forest(Keonjhar)	Epiphyte
52	<i>Liparis nervosa</i>	<i>Malaxis nevosa</i>	NA	?	Temperate & Sub-tropical Himalaya; Khasia Hills; Sikkim; West Bengal, Central and South India. Nepal, Sri Lanka, Myanmar, Japan, Java, China, Siam Orissa- 'Rare' in forests on moist places, often along streams : Similipal; Brahmanigam, Phulbani; Paniganda, Ganjam	Epiphyte. Earlier, its was supposed to be the same as <i>L.paradoxa</i> , a terrestrial orchid. However, Mishra has confirmed that <i>L. nervosa</i> is different from <i>L. paradoxa</i> though there is an alliance between the two. He has not included any of them under the threat categories, but while the former group is said to be scarce, <i>L.paradoxa</i> has been found to be rather wide-spread .
53	<i>Liparis viridiflora</i>	<i>Malaxis viridiflora</i> / <i>Liparis longipes</i>	NA	?(Mishra found it locally abundant in parts of Similipal but scarce in Kutia hills.)	Sikkim; Meghalaya; Assam ; Uttaranchal; Nilgiris. Sri Lanka, Myanmar, China, Malaysia, Taiwan, Indonesia. Orissa- Epiphytic in moist forests: Megahsani, Similipal; Kutia hills, Koraput.	Epiphytes or lithophytes

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
54	<i>Luisia brachystychys</i>	<i>Luisia indivisa</i>	NA	Rare	W.B., Orissa, North eastern states; Myanmar, Thailand Orissa: Revena forest, KJR; Machhkandana ghat, Mayurbhanj	Epiphytes. Ornamental.
55	<i>Luisia filiformis</i>		NA	?	Arunachal Pradesh; Bihar; Mizoram. Bangladesh	Tufted epiphytic without pseudobulbs. Ornamental. Excluded species
56	<i>Luisia zeylanica</i>	<i>Cymbidium tenuifolium</i> / <i>Luisia teretifolia</i>	NA	? (Mishra found it to be scarce or occasional at all sites except in Sundargarh district.)	Sikkim, West Bengal, S. India, Uttaranchal, Sri Lanka, Nepal Orissa: Barehipani(Similipal); Champamula, Dhenkanal; Revena forest, Keonjhar; Bailakara, Rayagada; Karo, Sundargarh	Epiphytic herb. Ornamental.
57	<i>Mastigion ornattissimum</i>	<i>Cirrhopetalum ornattissimum</i>	NA	Status unknown	Jharkhand, Arunachal Pradesh, Orissa Orissa: Athamallik	Epiphyte. Mishra's descriptions of this species are based not on his field experiences, but on Mooney's observations. Ornamental.
58	<i>Mastigion putidum</i>	<i>Cirrhopetalum putidum</i>	NA	Rare	Jharkhand, Sikkim, Orissa; Philippines, Indonesia Orissa: Kalta-Koira, Toda-Topadihi (Sundargarh)	Epiphyte. Ornamental.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
59	<i>Nervilia scottii</i>	<i>Pogonia scottii</i>	NA	Rare	Tropical Himalaya; Garhwal; Kumaon; Sikkim; West Bengal; Bihar; Gujrat; Maharashtra; Karnatak; Kerala; Tamil Nadu. Malaya, Java, Myanmar, Bangladesh, Thailand, Samoa Orissa- Daringibadi area(Kandhamal)	Small herb. Earlier supposed to be the same as <i>N. aragoana</i> , which was dismissed later. <i>N. aragoana</i> has been found at several places though occasionally often.
60	<i>Nervilia crociformis</i>	<i>Nervilia prainiana</i>	NA	<u>Rare</u> (Mishra found it to be occasional at several places, and frequent or locally abundant in some areas.)	Sikkim, Manipur, Peninsular India, Maharashtra: Nepal Orissa- Similipal, frequent in forests; Brahmanigam, Kandhamal; Paniganda, Gajapati; Gandhamardhan, Bolangir; Gopalpur, Kalahandi	Tuberous herb
61	<i>Nervilia gammieana</i> ⁷	<i>Pogonia gammieana</i>	NA	Rare	Sikkim, Uttaranchal, Arunachal Pradesh, West Bengal, Orissa; Pakistan, Nepal Orissa- On humus-rich soil under light shade. Paniganda, Gajapati; Brahmanigam, Kandhamal	Tuberous herb

⁷ mentioned in Saxena and Brahmam(1995) as *N. grammieana*.

Family: Orchidaceae (contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
62	<i>Nervilia infundi bulifolia</i>		NA	? (Mishra found it to be occasional or scarce at four sites, and locally abundant at two sites.)	Orissa, Karnataka, Maharashtra, Arunachal Pradesh; Thailand Orissa-Similipal forest,; Simonbadi & Brahmanigam, Kandhamal; Paniganda, Gajapati; Rishia dam, Baleswar	Perennial tuberous herb
63	<i>Oberonia gammiei</i>		NA	Rare	West Bengal, Orissa; Myanmar, Thailand, Laos, Vietnam Orissa: Similipal forest	Epiphyte. Ornamental.
64	<i>Oberonia proudlockii</i>		NA	Rare	Orissa, Tamil Nadu, Kerala, Karnataka Orissa: Similipal forest	Epiphyte. . Ornamental. Endemic to India.
65	<i>Oberonia recurva</i>		NA	? (www.wcmc.org)		Doubtful species
66	<i>Oberonia pyrulifera</i>		NA	Rare	North eastern India, Orissa; Bhutan, China, Thailand Orissa: Similipal forest	. Ornamental epiphyte

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
67	<i>Pachystoma pubescens</i>	<i>Pachystoma senile</i>	NA	Status unknown [only some past records of Monney suggest that it occurred (occurs?) in the state]	India: north-east, southern states, U.P., Chhattisgarh, W.B., Bihar, Jharkhand, Orissa; Thailand, China, Bhutan, Bangladesh, etc. Orissa: Sunabeda sanctuary(Nuapara); Gunupur(Kalahandi)	Slender terrestrial herb
68	<i>Papilionanthe teres</i>	<i>Dendrobium teres/ Vanda teres</i>	NA	Rare	India: north-east, southern states, W.B., Andamans, Orissa; Thailand, China, Bhutan, Bangladesh, etc. Orissa: Takaba forest, Anugul; Andari ghat(Kasigeda nala), Koraput; Govindpali ghat(Saptadhara nala), Malkangiri	Tall epiphyte
69	<i>Pecteilis gigantea</i>	<i>Orchis gigantea</i>	NA	Vulnerable	India: north-east, southern states, U.P., Chhattisgarh, Gujarat., Bihar, Jharkhand, Maharastra, Orissa; Thailand, China, Bhutan, Bangladesh, etc. Orissa: Simonbadi, Kandhamal; Sunabeda plateau, Nuapara; Jakam-Kiapadar, Kalahandi; Similipal forest	Tall, robust terrestrial herb. Ornamental. Used as one of the sources of one of the ingredients(<i>riddhi/briddhi</i>) astabarga, famous group in Indian medicine.
70	<i>Pecteilis henryi</i>		NA	Endangered	Himachal Pradesh, Manipur, Orissa; China, Myanmar, Thailand Orissa: Semiliguda, Koraput	Terrestrial herb. Ornamental.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
71	<i>Peristylus parishii</i>	<i>Habenaria parishii</i>	NA	Rare	Chhattisgarh, Orissa, Sikkim, Meghalay, Arunachal Pradesh, Andhra Pradesh, Andamans; Myanmar, Thailand, etc. Orissa: Similipal forest	Herb
72	<i>Phaius tankervilleae</i>	<i>Phaius wallichii</i>	NA	Rare	Jharkhand, Orissa, north-eastern states; south-east Asia, Cuba, Jamaica, etc. Orissa: Deoghati and Baunighati, Sundargarh	Large robust plant
73	<i>Polystachya concreta</i>	<i>Epidendrum concretum</i> / <i>Polystachya flavescens</i>	NA	Rare and vulnerable	Western Ghats , Andhra Pradesh, Arunachal Pradesh, Thailand, Laos, etc. Orissa- Mahendragiri, Gajapati; Kakrigumma, Koraput	Tufted epiphytes
74	<i>Pomatocalpa decipiens</i>	<i>Cleisostoma decipiens</i>	NA	Rare	Orissa; Sri Lanka Orissa: Kapilas hills, Dhenkanal; Barabara forest, Khurdha	Epiphyte

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
75	<i>Smitinandia micrantha</i>	<i>Saccolabium micranthum</i> / <i>Ascocentrum micranthum</i> / <i>Cleisostoma micranthum</i>	NA	<u>Rare</u> ⁸ (www.wcmc.org)	Dehra Dun; Kumaon; Sikkim; Khasia Hills; Assam; Nagaland. Bhutan, Bangladesh. Orissa - Frequent in Similipal(Mayurbhanj) and Rebena forest(Keonjhar); locally abundant at Podadihi, Badarama forest, Debagarh; occasional or scarce at other sites of Sundargarh, Baleswar, Dhenkanal, Kandhamal and Koraput districts	Small epiphytic herb
76	<i>Tainia hookeriana</i>	<i>Ania hookeriana</i>	NA	Vulnerable	Sikkim, Arunachal Pradesh, West Bengal, Orissa Orissa : Jenabil, Similipal forest; Tamajhari nala, Malyagiri hills(Dhenkanal)	Terrestrial herb. Ornamental.
77	<i>Tropidia angulosa</i>	<i>Cnemidia angulosa</i>	NA	<u>Rare</u>	Meghalaya, Assam, Sikkim, Chhattisgarh, Andhra Pradesh, West Bengal, Kerala, Karnataka, Orissa, Tripura; Myanmar; China; Malaysia; Bangladesh; Indonesia Orissa : Similipal forest: abundant and frequent on upper slopes of Pakaldiha nala and occasional else-where	Terrestrial leafy herbs
78	<i>Zeuxine affinis</i>	<i>Etaeria affinis</i>	NA	Rare	Meghalaya, Assam, Sikkim, West Bengal, Nagaland, Orissa,; Myanmar; Thailand, etc. Orissa : Similipal forest	Terrestrial slender, leafy herbs

⁸ Status underlined would imply that the WCMC categorization is questionable. For instance, in this particular case the species has been found by Mishra (2004) to be occasional at some places and frequent at other places of the state and he has not included it under the 'rare' category.

Family: Orchidaceae(contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
79	<i>Zeuxine gracilis</i>	<i>Psychechilos gracile</i>	NA	Rare	Meghalay, Orissa, Tamil Nadu, Karnataka, Kerala; China, Indonesia, Malaysia Orissa: Rebana forest, Keonjhar	Terrestrial slender, leafy herbs. Used as tonic.
80	<i>Zeuxine lindleyana</i>		NA	Status unknown	Arunachal Pradesh, Orissa Orissa: Udaygiri in south Orissa (not clear if it is R.Udaygiri or G.Udaygiri since no recent collection has been reported)	Terrestrial slender, leafy herbs
81	<i>Zeuxine nervosa</i>	<i>Etaeria nervosa</i>	NA	Rare	Sikkim, Assam, Nagaland, Meghalay, West Bengal, Orissa; Bhutan, Nepal, Bangladesh, China, Taiwan, etc. Orissa: Similipal forest, Mayurbhanj; Koiria forest, Sundargarh	Terrestrial slender, leafy herbs

Family: Piperaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Peperomia blanda</i>	<i>P. arabica</i> / <i>P. dindygulensis</i> / <i>P. heyneana</i> / <i>P. wightiana</i>	NA	Rare	Deccan peninsula. Widely distributed through out the old world tropics, ranging from Africa, South and South –East Asia, to Australia and Polynesia; absent from America. Orissa- Mahendragiri	Ascending or erect, Succulent, Pubescent herb

Family: Pittosporaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Pittosporum wightii</i>	<i>P. floribundum</i> / <i>P. napaulensis</i>	Debo-sundha, Deson	Rare	Peninsular India. Orissa- Occasional in hill forests; Mahendragiri; Koinpur; Deomlai; Kalahandi	Small to moderate-sized tree. Bark and roots possess several medicinal properties(like, as expectorant in chronic bronchitis).

Family: Poaceae (Gramineae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Dimeria mooneyi</i>		NA	Indeterminate	Endemic to Orissa Orissa- Sunabera in clefts and crevices of massive quartzite outcrops; near Raisili village, not far from Lakmipur, Koraput	Annual grass
2.	<i>Dimeria orissae</i>		NA	?	Orissa; Tamil Nadu Orissa- Sub gregarious in Sal forest under shade, and on the thin soil caps of the hills in Koraput district; Mahalkotta forest, Patangi, Koraput	Annual grass
3.	<i>Oropetium villosulum</i>		NA	Rare	Orissa; Central India; Maharashtra; Karnataka Orissa- Sunabera, on sandy soil	Small annual grass.
4.	<i>Oryza jeyporensis</i>		NA	Indeterminate	Orissa Orissa- Jeypore, Koraput	Annual grass
5.	<i>Themeda mooneyi</i>		NA	?	Endemic in Orissa Orissa- Koraput, gregarious on granite cliffs	Perennial, Slender, erect grass;

Family: Poaceae (contd.)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
6.	<i>Themeda saxicola</i>		NA	?	Endemic in Orissa Orissa- Koraput, in shallow pockets of soil overlying granite gneiss.	Perennial slender grass;
7.	<i>Tripogon roxburghianus</i>	<i>Lepturus roxburghianus</i>	NA	Rare	Southern and Western India, Maharashtra; Madras Orissa- On the summit of Jantiabandhmali, Karlapat, Kalahandi. Gregarious on very shallow soil over using laterite around margin of dew ponds, which probably contained water till December.	Small perennial grass.

Family: Podostemaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Podostemon wallichii</i>		NA	Rare (www.wcmc.org)		<i>Doubtful species</i>
2.	<i>Dalzellia zeylanica</i>	<i>Lawia zeylanica</i> / <i>Terniola zeylanica</i>	NA	Indeterminate	Maharashtra, Karnataka Orissa- On wet rocks in the rivers of Angul.	Small lichen like or moss like herb.

Family: Rhizophoraceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Cassipourea ceylanica</i>	<i>Anstrutheria ceylanica</i> / <i>Weihea ceylanica</i>	NA	Endangered	South India, extending North West to Chilika lake. Sri Lanka. Orissa - Rocky margins of Chilika lake: Ghantasila; Barkuda	Erect much branched shrub
2.	<i>Ceriops decandra</i>	<i>Bruguiera decandra</i> / <i>Ceriops roxburghiana</i>	Gorani, Gartah	Vulnerable	West Bengal, Andhra Pradesh. Bangladesh, Sri Lanka, Myanmar, Thailand, Cambodia, Vietnam, Malaysia, New Guinea Orissa - Common in tidal forests of Mahanadi & Brahmani: Hukitola; Balramgudi; Jambu; Bhitarkanika	Tall evergreen shrub or small tree with numerous pneumatophores.
3.	<i>Kandelia candel</i>	<i>Rhizophora candel</i> / <i>Kandelia rheedii</i>	Gaulia, Rasunia. Bhara	Near threatened	West Bengal, E.&W. Coasts, Sri Lanka, Bangladesh, Myanmar, Thailand, Vietnam, Malaysia, China, Indonesia, S.Japan Orissa - Tidal forests of Mahanadi & Brahmani: Bhitarkanika	Small spreading tree with thick twigs. Bark useful in diabetes.

Family: Rosaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Prunus pygeoides</i>	<i>P. andersonii</i> / <i>Pygeum lucidum</i> / <i>P. mooneyi</i>	NA	Rare	Madhya Pradesh, Bihar, Orissa, Andhra Pradesh, China Orissa : Mahendragiri: in moist valleys	Tree up to 10 m

Family: Rubiaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Lasianthus truncatus</i>		NA	Indeterminate	Eastern Ghats of Orissa and Andhra Pradesh. Orissa- Mahendragiri	Shrub
2.	<i>Neanotis tubulosa</i>	<i>Oldenlandia tubulosa</i> / <i>Neanotis quadrilocularis</i>	NA	Rare	Peninsular India, Sri Lanka. Orissa- Mahendragiri, 100m, In open grassland under partial shade	Annual, slender herb
3.	<i>Ophiorrhiza trichocarpos</i>	<i>O. hispidula</i>	NA	Rare	Andaman & Nicobar. Bangladesh, Myanmar, Java, Malayasia Orissa- Mahendragiri: occasional in forest under- growth	Herb
5.	<i>Pavetta brevifolia</i>		NA	Rare	Nilgiri hills Orissa- Mahendragiri	Shrub
6.	<i>Psychotria adenophylla</i>		Cheliantua	Rare	Khasia hills; Andaman & Nicobar. Myanmar, Bangladesh Orissa- Occasional in forests: Similipal, Mayurbhanj; Barunei hills, Khurda; Angul forest; Ranpur	Shrub
7.	<i>Psychotria monticola</i>	<i>P. fulva</i>	NA	Rare	Assam & Khasia hills, up to 1200 m; Manipur. Myanmar. Orissa- In moist forests: Mahendragiri, 1200m; Similipal	Large shrub
8.	<i>Wendlandia gamblei</i>		NA	?	Orissa & Andhra Pradesh Orissa- Mahendragiri	Small evergreen tree.

Family: Rutaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Tetradium glabrifolium</i>	<i>Boymia glabrifolia</i> / <i>Euodia glabrifolia</i> / <i>Evodia meliaefolia</i>	Ankhihora	Indeterminate	Eastern Himalaya, Sikkim, Assam. Bhutan, Myanmar, Indo-China, S. China to Taiwan, S. Japan and South to W. Malaysia, Sumatra, and the Philippines Orissa- Bonai	Large tree. Wood is termite-resistant and used for making looms, cigar boxes, etc.
2.	<i>Paramignya scandens</i>	<i>P. griffithii</i> / <i>Citrus scandens</i>	NA	Rare	Eastern Ghats, Assam. Myanmar Orissa- Hill forests of Orissa- Daringbadi, Koraput; Sukinda, Cuttack.	Woody climber
3.	<i>Zanthoxylum armatum</i>	<i>Z. alatum</i>	Ranbel, Tundopoda	?	Himalayas, up to 2000 m; Eastern Ghats. Pakistan, Japan, Taiwan, Philippines Orissa- Hill valleys: Mahendragiri ; Maliput near Patangi, Koraput; Kodinga & Kasipur, Rayagada; Deomali, Koraput.	Strong aromatic shrub or small tree. Fruits, bark and seeds possess several medicinal properties. Strong wood is used in making walking sticks.

Family: Scrophulariaceae						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Melasma thomsonii</i>	<i>Alectra thomsonii</i>	Krushna jubaraj	Rare	Bihar, N.Circars Orissa- Gandhamardhan, in forest undergrowth; Harishankar, Bolangir; Satyamba; Gandhamardhan; Sunabera; Lanjigarh, Kalahandi; N.Circars	Erect stiff, almost leafless herb. Parasites on tree roots.

Family: Sonneratiaceae						
Sl. No.	Scientific Name	Synonym	Local Name	Status	Distribution	Description
1.	<i>Sonneratia alba</i>		Urava, Dora	Near threatened	Orissa, Andamans. N. Madagascar, Tropical. E. Africa, SE. continental Asia to N. Australia (etc.) Orissa: Tidal forests: Bhitarkanika, Jambu	Tree; twigs swollen at the nodes . Fruits and leaves edible. Wood used in ship-building and interior decoration work.
2.	<i>Sonneratia griffithii</i>		NA	Indeterminate	Orissa, Andamans, Bangladesh, Myanmar(etc.) Orissa -Mangrove forests: Bhitarkanika; Gahirmatha, Thakurdian	Tree

Family: Roxburghiaceae(Stemonaceae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Stemona tuberosa</i>	<i>Roxburghia gloriosoides</i>	Koelaka-nd, Kelya kanda	Endangered	Bengal; Assam; N.Circars. Bangladesh, China Orissa -Mahendragiri: occasional in open forests; Dudhari and Maliput, Koraput(undivided)	Twiner. Leaves similar to those of <i>Dioscorea</i> . Tuberos roots have some medicinal properties and are used in the treatment of cough.

Family: Vitaceae (Ampelidaceae)						
Sl. No.	Scientific Name	Synonyms	Local Name	Status	Distribution	Description
1.	<i>Leea aequata</i>	<i>L.hirta</i>	NA	Indete-rminate	Bombay, Karnataka, Madras, Central Provinces, Bihar, Orissa, Bengal, Uttar Pradesh, Assam, Sikkim, Andamans. Bhutan, Nepal, Bangladesh, Myanmar, Thailand, Cambodia, Laos, N. & S. Vietnam, Malaysia Orissa- Hills of Orissa	Large erect shrub or subarborescent plant. Stem yields an essential oil having anti-tubercular properties. Roots astringent; leaves and twigs have antiseptic properties.

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Annexure-1

A note on the endemic taxa of Orissa

Brahmam(2003) has enumerated 26 taxa as endemic to Orissa. However, few of his enlisted species have subsequently been found to be available in the wild in one or more other Indian states. For instance, *Habenaria panigrahiana* has been found not only in Orissa, but also in Tamilnadu. The following table therefore attempts to present a revised list of the endemic plants of Orissa. As evident therefrom, 5 of these taxa belong to the Poaceae family and 4 to the Orchidaceae family. *Heritiera kanikensis*, a mangrove species reported by Majumdar & Banerjee to be endemic to Orissa and Bhitarkanika in particular, is however not accepted by most taxonomists due to absence of adequate scientific evidences.

Sl. No.	Scientific Name	Local Name	Family	Status	Distribution	Description
1	<i>Aglaia haslettiana</i>	NA	Meliaceae	Indeterminate	Semi ever green forest near streams: Mals of Puri(undivided) and Angul; Silangpara to Berbara, near road.	Evergreen tree
2	<i>Aspidopterys tomentosa</i> var. <i>hutchinsonii</i>	NA	Malpighiaceae	Indeterminate	Bhanjam hills, Mayurbhanj	Stout climber
3	<i>Cirrhoperalum panigrahianum</i>	NA	Orchidaceae	Vulnerable	Rebena forest(Keonjhar) and Similipal forest(Mayurbhanj)	Epiphyte
4	<i>Combretum albidum</i> var. <i>cooperi</i>	NA	Combretaceae	NA	Kalahandi(?)	Climber
5	<i>Cycas circinalis</i> var. <i>orixensis</i>	Arguna	Cycadaceae	Vulnerable	Mayurbhanj, Keonjhar, Ganjam, Angul, Khurdha, etc.	Tree
6	<i>Dimeria mahendragiriensis</i>	NA	Poaceae	NA	Mahendragiri, Gajapati	Perennial herb
7	<i>Dimeria mooneyi</i>	NA	Poaceae	Indeterminate	Sonabera; near Raisili village, Koraput	Annual herb
8	<i>Diospyros ebenum</i> var. <i>acuminata</i>	Kendu	Ebenaceae	NA	Puri, Angul, Khandapara, Athmallik	Small tree
9	<i>Eria meghasaniensis</i>	NA	Orchidaceae	Vulnerable	Similipal forest	Epiphyte

10	<i>Eriolaena hookeriana</i> var. <i>viridis</i>	Bonta, Bonohandi	Sterculiaceae	NA	Exact place not reported (vide Saxena and Brahmam)	Shrub or small tree
11	<i>Eusteralis griffithii</i>	NA	Lamiaceae	NA	Ganjam, Angul, Sambalpur	Herb
12	<i>Flacourtia indica</i> var. <i>innocua</i>	NA	Flacourtiaceae	NA	Puri, Khandagiri	Shrub or small tree
13	<i>Gardenia gummifera</i> var. <i>gummiferoides</i>	NA	Rubiaceae	NA	Sambalpur	Small tree
14	<i>Habenaria panigrahiana</i> var. <i>parviloba</i>	NA	Orchidaceae	Endangered	Bhanjanagar, Ganjam	Terrestrial herb
15	<i>Hedyotis graminifolia</i> subsp. <i>arenaria</i>	NA	Rubiaceae	NA	Balukhand, Chilika	Herb
16	<i>Homonoia intermedia</i>	NA	Euphorbiaceae	Indeterminate	Tikarpara, Angul	Shrub with many erect branches.
17	<i>Liparis espeeijii</i>	NA	Orchidaceae	Endangered	Kendughat, Revena forest, Keonjhar	Epiphyte
18	<i>Mucuna minima</i>	NA	Fabaceae (Papilionaceae)	Indeterminate	Lara Sara, Sambalpur	Slender climber
19	<i>Oryza jeyporensis</i>	NA	Poaceae (Gramineae)	Indeterminate	Jeypore, Koraput	Annual grass
20	<i>Rhynchosia hainesiana</i>	NA	Fabaceae	NA	Angul	Shrubby plant
	<i>Schefflera venulosa</i> var. <i>roxburghii</i>	NA	Araliaceae	NA	Ganjam	Large shrub
21	<i>Selaginella nairii</i>	NA	Selaginellaceae	NA	Jeypore	Herbaceous plant
22	<i>Tephrosia purpuria</i> var. <i>maritima</i>	NA	Fabaceae	NA	Chandipur coast, Baleswar	Undershrub
23	<i>Themeda mooneyi</i>	NA	Poaceae	NA	Koraput	Slender grass
24	<i>Themeda saxicola</i>	NA	Poaceae	NA	Koraput	Slender grass
25	<i>Toona ciliate</i> var. <i>brevipetiolulata</i>	NA	Meliaceae	NA	Hill forests of Orissa	Small tree
26	<i>Uvaria eucincta</i>	NA	Annonaceae	Indeterminate	Sal forests of Bhanjanagar, Ganjam	Scandent shrubs

It is to be noted that doubtful species have been excluded from this list. Also excluded are those species endemic to India and not Orissa, but found in Orissa.

Annexure-2

Socio-economic assessment of the plants of conservation concern

An analysis of the preceding tables would indicate that out of about 200 plant species under threat, only about 36 species(18%) are known to have some significant use for the local people and 30 more species(orchids) can be introduced(from the wild) to the people as ornamental plants. Out of the 36 species/taxa mentioned earlier, 12 have non-medicinal use, 14 have medicinal use, and 10 have both medicinal and non-medicinal uses. This clearly suggests that a botanist's concern may not always be related to the local traditional practices; and where this holds true, the strategy for conservation should be very specific.

Because, growing population pressure and other civil- as well as military developmental needs has in turn made the creation of pure conservation areas(that are completely free from unwanted anthropogenic interventions) quite difficult owing to the scarcity of land and various stakes involved in the other natural resources available thereon. Wherever any such area has been forcefully created, it has led to conflicts of various kinds for years particularly because displacement of land is essentially associated with a displacement in the livelihood and socio-religious customs of the communities whereas rehabilitation is done basically with respect to the land and partly the livelihood. Rehabilitation has hardly been a total process in itself, not to speak of the irregularities in the existing systems of rehabilitation. Under such circumstances, a bold approach to conservation no more seems fit for today's world; rather, a delicate and integral approach is necessary to ensure a sustainable conservation. This can be done through an active, sincere and dignified participation of the local communities. Socio-economic assessment of the biodiversity is an important tool to ensure this, although many conservationists tend to ignore this aspect. Besides other things, such an assessment helps to design specific strategies for specific elements of conservation concern in the concerned eco-system, and simultaneously it can help to properly design the rehabilitation/compensation strategy for the affected communities. Earlier, this assessment seemed to have rather been partially taken care of, and even in such cases its application in the rehabilitation/compensation strategy has often not been done satisfactorily. It is ironical that despite the severe detrimental impacts of such flaws on the conservation of biodiversity, many conservationists are yet to pay due attention to the same.