

## An Updated Checklist of Lichens from Arunachal Pradesh, India

Ambikesh Debnath and Sanjeeva Nayaka\*

Lichenology Laboratory, CSIR-National Botanical Research Institute, Rana Pratap Marg, Lucknow, Uttar Pradesh-226001, India.  
Academy of Scientific and Innovative Research (AcSIR), Ghaziabad-201002, India.

### Publication Info

#### Article history:

Received : 01 September 2023

Accepted : 15 December 2023

DOI: 10.21756/cab.v7i2.01

#### Keywords:

Biodiversity, Eastern Himalaya, Endemism, Flora, Lichenized fungi

#### \*Corresponding author:

e-mail: nayaka.sanjeeva@gmail.com

### ABSTRACT

Arunachal Pradesh is the largest state among northeastern states in India and within the Himalaya Biodiversity Hotspot. The state represents diverse landscapes and forest with wide range of elevations. Over the years numerous studies on the lichens have been undertaken in the state and checklists were published. However, these checklists remain incomplete due to exclusion of few important publications from the region. In this communication, we present a comprehensive checklist of lichens from Arunachal Pradesh with 903 species belonging to 209 genera and 58 families. The study added 114 species to the previously known checklist of lichens from the state.

### INTRODUCTION

Arunachal Pradesh is situated within the Himalaya Biodiversity Hotspot in northeastern India (Fig. 1). The state stretches between the geo-coordinates 91°30' to 97°30' E longitude and 26°28' to 29°30' N latitude, encompassing an area of 83,743 km<sup>2</sup> which is 2.54% of the total area of India. The elevation of the state ranges from 100 m to 7,090 m above mean sea level. The first lichen exploration in Arunachal Pradesh was probably by Rolla Seshagiri Rao and Gopinath Panigrahi of the Botanical Survey of India from 1956 to 1958 (Singh et al. 2015 A), who's collections were identified by Awasthi (1961) with 42 species. Following these foundational work, the studies on lichens of the state have progressed significantly with the key contributions from Upreti (1985 A, 1985 B), Rout et al. (2004 A, 2004 B), Dubey et al. (2007), Pinokiyo et al. (2008), Dubey (2010), Khare et al. (2010), Jagadeesh Ram and Sinha (2011), Singh and Swarnalatha (2011), Upreti et al. (2013), Rana et al. (2015), Singh and Pinokiyo (2014), Singh et al. (2015 A), Bajpai et al. (2018 A), Debnath et al. (2018), Singh et al. (2018), Mishra et al. (2022 A, 2022 B, 2022 C), Bajpai et al. (2022) and Nayaka and Debnath (2023). The lichens reported prior to 2010 are included in the annotated checklist by Singh and Sinha (2010) and later ones in Sinha et al. (2018).

Dubey (2010) in her thesis, documented a total of 130 lichen taxa under 55 genera and 26 families, along with five new records for India, 105 new to Arunachal

Pradesh and 63 new to Northeast India. A part of the thesis was published as a research paper by Dubey et al. (2007), which included 94 species belonging to 20 families and 40 genera and several species remained unpublished. The specimens of these species are available at the herbarium LWG. Further, a thesis of Dubey (2010) also available on the 'Shodhganga' repository. Singh and Swarnalatha (2011) listed 61 species of Graphidaceous lichens from Arunachal Pradesh. Singh and Pinokiyo (2014) cataloged 98 species of foliicolous lichens from Arunachal Pradesh. Rana et al. (2015) enumerated lichens species collected from Joram Top in Ziro Valley of Arunachal Pradesh with 22 species of fruticose lichens under four genera. Singh et al. (2015 A) studied the microlichens of Arunachal Pradesh and reported the occurrence of 404 species spanning 105 genera and 39 families from the state of Arunachal Pradesh. Bajpai et al. (2018 A) detailed 122 species of lichens belonging to 47 genera and 24 families from five major sites of the Tawang district of Arunachal Pradesh. Debnath et al. (2018) carried out studies in the West Kameng and Tawang districts of Arunachal Pradesh and documented a total of 79 species belonging to 32 genera and 18 families. Singh et al. (2018) published a checklist of lichen from the Eastern Himalaya Biodiversity Hotspot region with 1047 species, where Arunachal Pradesh hosted 617 species. Mishra et al. (2022 A) reported 12 cetrarioid lichens from Arunachal Pradesh. Bajpai et al. (2022) enumerated a total of 789 species belonging to 185 genera and 52 families from Arunachal Pradesh, along with 93 species as new additions

## An Updated Checklist of Lichens from Arunachal Pradesh, India

to Arunachal Pradesh and three new to India. Nayaka and Debnath (2023) described a new basidiolichen species, *Cyphellostereum indicum* S. Nayaka and A. Debnath from the East Kameng district.

The list of 789 species of lichens published by Bajpai et al. (2022) from Arunachal Pradesh was mostly based on the list published by Singh et al. (2018), while some of the species reported in important publications such as Kumar et al. (2021), Debnath et al. (2018) are not included. In addition, a few species mentioned in Singh and Sinha (2010), McCune et al. (2012), Singh and Swarnalatha (2011), and Das et al. (2018) were also omitted. Therefore, it is inevitable to produce an updated checklist to project the accurate number of lichens for Arunachal Pradesh. The present compilation resulted in 903 species with the addition of 114 species to the list of Bajpai et al. (2022).

### MATERIAL AND METHODS

The updated checklist of lichens from Arunachal Pradesh is prepared by compilation of the published report. The herbarium LWG of CSIR-NBRI, Lucknow, was thoroughly checked for some of the identified but unreported species from Arunachal Pradesh, especially of Dubey (2010).

The species were assigned to different families following Wijayawardene et al. (2022). The nomenclature changes were updated following the database <https://www.indexfungorum.org>. In case of recent name changes, ‘≡’ was used to indicate homotypic synonyms and “=” for heterotypic synonyms.

### RESULTS AND DISCUSSION

The updated checklist of lichens from Arunachal Pradesh includes 903 species under 209 genera and 58 families (Tables 1–3). Out of the total number, 55 are endemic to India. The present study added a total of 114 species to the previously published list by Bajpai et al. (2022). The most diversified family is Parmeliaceae (166 spp., 31 genera) followed by Graphidaceae (156 spp., 28 genera) and Pyrenulaceae (85 spp., 4 genera) (Table 1). Among the different genera, *Pyrenula* was most dominant with 66 species, followed by *Graphis* (56 spp.), *Cladonia* (40 spp.) and *Porina* (36 spp.) (Table 2). The crustose lichen shows the maximum diversity with 564 species, followed by foliose with 221 species (Fig. 2). Maximum number of lichens (68%) is reported to be corticolous, while the state shows a significant number (10%) of foliicolous lichens.

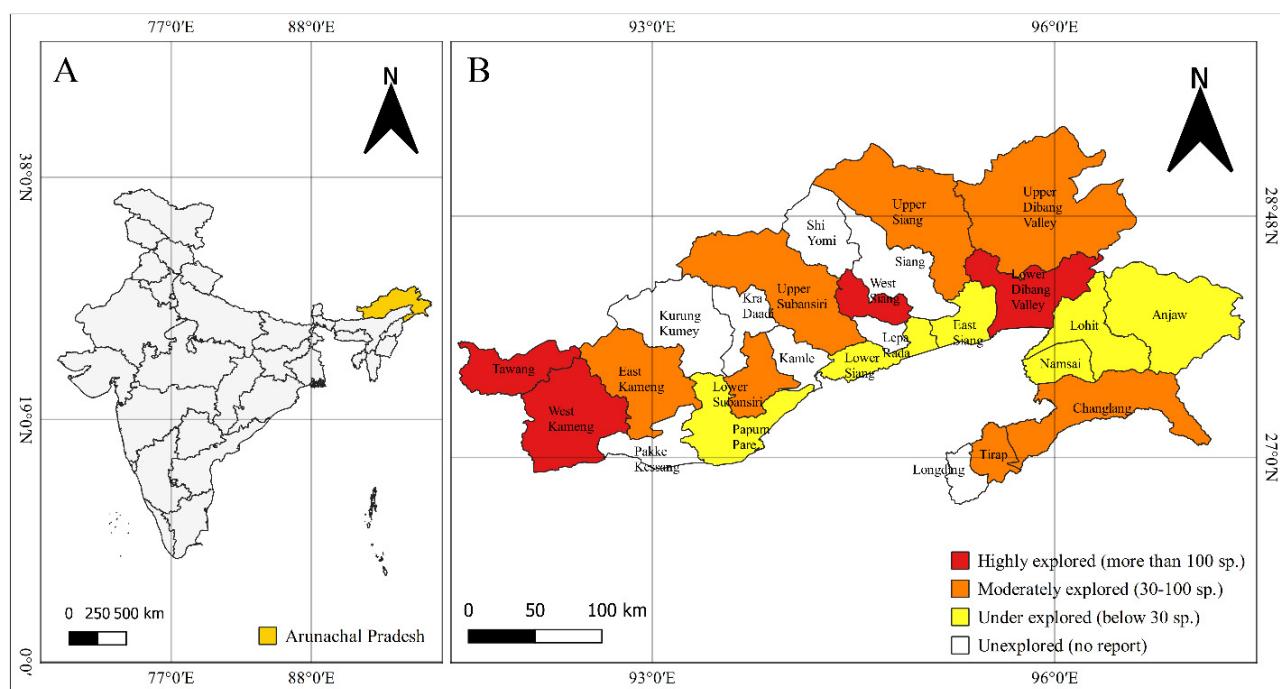


Figure 1: A) Map of India highlighting Arunachal Pradesh. B) Districts showing lichen exploration levels

## An Updated Checklist of Lichens from Arunachal Pradesh, India

Table 1: The lichen diversity at family level in Arunachal Pradesh

S. No.	Families	No. of genera	No. of species				
1	Arthoniaceae	8	32	42	Ramalinaceae	9	28
2	Arthoniales genera <i>incertae sedis</i>	1	1	43	Ramboldiaceae	1	2
3	Arthopyreniaceae	1	3	44	Rhizocarpaceae	1	1
4	Baeomycetaceae	1	2	45	Roccellaceae	4	10
5	Brigantiaeaceae	1	1	46	Sphaerophoraceae	1	3
6	Caliciaceae	9	25	47	Stereocaulaceae	2	15
7	Catillariaceae	1	1	48	Strigulaceae	5	15
8	Chrysotrichaceae	1	1	49	Teloschistaceae	8	12
9	Cladoniaceae	3	42	50	Tephromelataceae	1	1
10	Coccocarpiaceae	1	3	51	Thelenellaceae	1	1
11	Coccotremataceae	1	1	52	Thelotremataceae	1	1
12	Coenogoniaceae	1	3	53	Trapeliaceae	2	2
13	Collemataceae	2	21	54	Trichotheliaceae	4	42
14	Fuscideaceae	1	1	55	Trypetheliaceae	7	17
15	Gomphillaceae	7	12	56	Umbilicariaceae	1	3
16	Graphidaceae	28	156	57	Varicellariaceae	1	1
17	Haematommataceae	1	3	58	Verrucariaceae	6	10
18	Hygrophoraceae	1	1				
19	Hymeneliaceae	1	1				
20	Icmadophilaceae	3	3				
21	Lecanoraceae	1	28				
22	Lecideaceae	3	4				
23	Leprocaulaceae	1	1				
24	Letrouitiaceae	1	2				
25	Malmideaceae	1	1				
26	Megalosporaceae	1	3				
27	Megasperaceae	2	2				
28	Monoblastiaceae	1	3				
29	Mycosphaerellaceae	1	1				
30	Naetrocymbaceae	1	1				
31	Ochrolechiaceae	1	3				
32	Opegraphaceae	3	3				
33	Ophioparmaceae	1	1				
34	Pannariaceae	1	1				
35	Parmeliaceae	31	166				
36	Peltigeraceae	6	27				
37	Pertusariaceae	2	16				
38	Phlyctidaceae	1	2				
39	Physciaceae	7	42				
40	Pilocarpaceae	11	34				
41	Pyrenulaceae	4	85				

Table 2: Ten dominant genera of lichens from Arunachal Pradesh

S. No.	Genera	No. of Species
1	Pyrenula	66
2	Graphis	56
3	Cladonia	40
4	Porina	36
5	Usnea	29
6	Lecanora	28
7	Hypotrachyna	22
8	Allographa	20
9	Parmotrema	20
10	Heterodermia	19

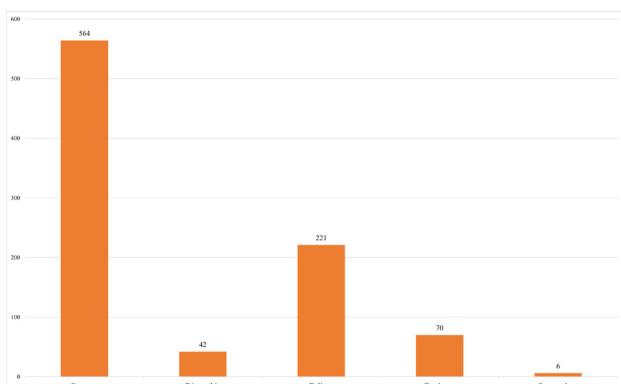


Figure 2: Different growth forms of lichens in Arunachal Pradesh

An Updated Checklist of Lichens from Arunachal Pradesh, India

Table 3: Checklist of lichens from Arunachal Pradesh

S. No.	Name	Habitat	Growth form	Status	References
Arthoniaceae					
1	<i>Arthonia antillarum</i> (Fée) Nyl.	C	Cr		Pinokiyo et al. 2008, Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
2	<i>A. collectiva</i> Stirt.	C	Cr		Dubey 2010, Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
3	<i>A. palmulacea</i> (Müll. Arg.) R. Sant.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
4	<i>A. radiata</i> (Pers.) Ach.	C	Cr		Bajpai et al. 2022
5	<i>A. recedens</i> Stirt.	F	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
6	<i>A. subgyrosa</i> Nyl.	C	Cr		Dubey 2010, Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
7	<i>A. trilocularis</i> Müll. Arg.	F	Cr		Singh et al. 2015 A, Bajpai et al. 2022
8	<i>Arthothelium abnorme</i> (Ach.) Müll. Arg.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
9	<i>A. albescens</i> Patw. & Makhija	C	Cr		Bajpai et al. 2022
10	<i>A. chiodectoides</i> (Nyl.) Zahlbr.	C	Cr	EN	Singh and Sinha 2010, Bajpai et al. 2018 A, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
11	<i>A. confertum</i> (A.L. Sm.) Makhija & Patw.	C	Cr		Bajpai et al 2022
12	<i>A. subsessale</i> (Nyl.) Makhija & Patw.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
13	<i>Coniocarpon cinnabarinum</i> DC. ≡ <i>Arthonia cinnabrina</i> (DC.) Wallr; = <i>Arthonia tumidula</i> (Ach.) Ach.	C	Cr		Singh et al. 2015 A, Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
14	<i>Cryptothecia effusa</i> (Müll. Arg.) R. Sant. #	C	Cr		Singh et al. 2015 A
15	<i>C. faveolata</i> Makhija & Patw.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
16	<i>C. lunulata</i> (Zahlbr.) Makhija & Patw.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
17	<i>C. polymorpha</i> Makhija & Patw. #	C	Cr		Singh and Sinha 2010
18	<i>C. punctulata</i> Makhija & Patw.	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
19	<i>C. scripta</i> G. Thor	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
20	<i>C. verruculifera</i> Jagad. Ram, G.P. Sinha & Kr.P. Singh	C	Cr		Bajpai et al. 2022
21	<i>Herpothallon cinereum</i> G. Thor	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
22	<i>H. echinatum</i> Aptroot, Lücking & Will-Wolf	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
23	<i>H. isidiatum</i> Jagad. Ram & G.P. Sinha	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
24	<i>H. japonicum</i> (Zahlbr.) G. Thor	C	Cr		Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
25	<i>H. minutum</i> Jagad. Ram	C	Cr		Bajpai et al. 2022
26	<i>H. philippinum</i> (Vain.) Aptroot & Lücking	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

27	<i>H. sticticum</i> Jagad. Ram & G.P. Sinha	C	Cr	EN	Singh et al. 2015 A, TAM Jagadeesh Ram and Sinha 2011, Sinha et al. 2018, Bajpai et al. 2022
28	<i>Myriostigma candidum</i> Kremp. ≡ <i>Cryptothecia candida</i> (Kremp.) R. Sant.	C, F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
29	<i>M. filicinum</i> (Ellis & Everch.) Frisch & G. Thor #	C	Cr		Das et al. 2018
30	<i>Synarthonia inconspicua</i> (Stirt.) Van den Broeck & Ertz ≡ <i>Arthonia inconspicua</i> Stirt.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
31	<i>Tylophoron moderatum</i> Nyl.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
32	<i>T. nidulans</i> Stirt.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
	<b>Arthoniales genera incertae sedis</b>				
33	<i>Bactrospora myriadea</i> (Fée) Egea & Torrente	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
	<b>Arthopyreniaceae</b>				
34	<i>Arthopyrenia analelta</i> (Ach.) A. Massal.	C	Cr		Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
35	<i>A. claviformis</i> (Stirt.) D. Hawksw.	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
36	<i>A. grisea</i> (Schleich. ex Schaer.) Körb.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
	<b>Baeomycetaceae</b>				
37	<i>Baeomyces carneus</i> Flörke	T	Sq		Upreti et al. 2013, Sinha et al. 2018, Bajpai et al. 2022
38	<i>B. pachypus</i> Nyl	T	Sq		Bajpai et al. 2018 A, Bajpai et al. 2022
	<b>Brigantiaeaceae</b>				
39	<i>Brigantiae leucoxantha</i> (Spreng.) R. Sant. & Hafellner ≡ <i>Lopadium</i> <i>leucoxanthum</i> (Spreng.) Zahlbr.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
	<b>Caliciaceae</b>				
40	<i>Acolium inquinans</i> (Sm.) A. Massal. ≡ <i>Cyphelium inquinans</i> (Sm.) Trevis.	C	Cr		Singh et al. 2015 A, Singh and Singh 2014, Sinha et al. 2018, Bajpai et al. 2022
41	<i>Acroschyphus sphaerophoroides</i> Lév.	T	Fr		Debnath et al. 2018, Bajpai et al. 2022
42	<i>Amandinea montana</i> (H. Magn.) Marbach	C	Cr		Bajpai et al. 2018 A, Bajpai et al. 2022
43	<i>Baculifera remensa</i> (Stirt.) Marbach	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
44	<i>Buellia aethalea</i> (Ach.) Th. Fr.	S	Cr		Singh et al. 2015 A, Bajpai et al. 2022
45	<i>B. curatellae</i> Malme ≡ <i>Hafellia</i> <i>curatellae</i> (Malme) Marbach	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
46	<i>B. disciformis</i> (Fr.) Mudd	C	Cr		Bajpai et al. 2022
47	<i>B. leptocline</i> (Flot.) A. Massal	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
48	<i>B. morehensis</i> Kr.P. Singh & S.R. Singh	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
49	<i>B. posthabita</i> (Nyl.) Zahlbr.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

50	<i>B. subnexa</i> Vain. ≡ <i>Hafellia subnexa</i> Marbach	C	Cr		Bajpai et al. 2018 A, Bajpai et al. 2022
51	<i>B. substigmea</i> S.R. Singh & D.D. Awasthi	S	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
52	<i>Calicium indicum</i> Tibell	C	Cr	EN	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
53	<i>C. lenticulare</i> Ach. = <i>Calicium subquercinum</i> Asahina #	C	Cr		Dubey 2010
54	<i>Diplotomma alboatrum</i> (Hoffm.) Flot. ≡ <i>Buellia alboatra</i> (Hoffm.) Th. Fr.	S	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
55	<i>D. pharcidium</i> (Ach.) M. Choisy ≡ <i>Buellia pharcidia</i> (Ach.) Malme	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
56	<i>Dirinaria aegialita</i> (Afzel. ex Ach.) B.J. Moore	C	Fo		Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
57	<i>D. confluens</i> (Fr.) D.D. Awasthi	C	Fo		Bajpai et al. 2022
58	<i>D. confusa</i> D.D. Awasthi	C	Fo		Bajpai et al. 2022
59	<i>D. consimilis</i> (Stirt.) D.D. Awasthi	C	Fo		Bajpai et al. 2022
60	<i>D. picta</i> (Sw.) Clem. & Shear	C	Fo		Bajpai et al. 2022
61	<i>Pyxine coeces</i> (Sw.) Nyl. #	C	Fo		Dubey 2010
62	<i>P. cognata</i> Stirt.	C	Fo	EN	Bajpai et al. 2022
63	<i>P. philippina</i> Vain.	C	Fo		Bajpai et al. 2022
64	<i>P. sorediata</i> (Ach.) Mont.	C	Fo		Bajpai et al. 2022
	<b>Catillariaceae</b>				
65	<i>Catillaria versicolor</i> G. Pant & D.D. Awasth	C	Cr		Bajpai et al. 2022
	<b>Chrysotrichaceae</b>				
66	<i>Chrysotrichia candelaris</i> (L.) J.R. Laundon	C	Cr		Singh et al. 2015 A, Debnath et al. 2018, Bajpai et al. 2022
	<b>Cladoniaceae</b>				
67	<i>Cladonia aggregata</i> (Sw.) Nyl.	T	Di		Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
68	<i>Cladonia amaurocraea</i> (Florke) Schaer	T	Di		Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
69	<i>C. awasthiana</i> Ahti & Upreti	T	Di	EN	Singh and Sinha 2010, Bajpai et al. 2022
70	<i>C. borbonica</i> Nyl.	T	Di		Singh and Sinha 2010, Bajpai et al. 2022
71	<i>C. cartilaginea</i> Müll. Arg.	T	Di		Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022
72	<i>C. ceratophyllina</i> (Nyl.) Vain.	T	Di		Singh and Sinha 2010, Bajpai et al. 2022
73	<i>C. cervicornis</i> (Ach.) Flot. = <i>Cladonia verticillata</i> (Hoffm.) Schaer.	T	Di		Rana et al. 2015, Bajpai et al. 2022
74	<i>C. chlorophaea</i> (Flörke ex Sommerf.) Spreng.	C	Di		Bajpai et al. 2018 A, Bajpai et al. 2022
75	<i>C. coccifera</i> (L.) Willd.	T	Di		Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
76	<i>C. coniocraea</i> (Flörke) Spreng.	T	Di		Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

77	<i>C. corniculata</i> Ahti & Kashiw.	T	Di	Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022	
78	<i>C. corymbescens</i> (Nyl.) Nyl.	T	Di	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
79	<i>C. crispata</i> (Ach.) Flot.	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
80	<i>C. delavayi</i> Abbayes	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022	
81	<i>C. didyma</i> (Fée) Vain	T	Di	Bajpai et al. 2018 A, Bajpai et al. 2022	
82	<i>C. fenestralis</i> Nuno	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
83	<i>C. fruticulosa</i> Kremp.	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
84	<i>C. furcata</i> (Huds.) Schrad.	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022	
85	<i>C. indica</i> Ahti & Upreti	T	Di	EN	Singh and Sinha 2010, Bajpai et al. 2022
86	<i>C. kurokawai</i> Ahti & S. Stenroos	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
87	<i>C. laii</i> S. Stenroos	T/M	Di	Bajpai et al. 2018 A, Bajpai et al. 2022	
88	<i>C. luteoalba</i> A. Wilson & Wheldon	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
89	<i>C. macilenta</i> Hoffm.	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
90	<i>C. macroceras</i> (Delise) Hav.	M	Di	Bajpai et al. 2018 A, Bajpai et al. 2022	
91	<i>C. macroptera</i> Räsänen	T	Di	Bajpai et al. 2022	
92	<i>C. mauritiana</i> Ahti & J.C. David	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
93	<i>C. nitida</i> Ahti	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022	
94	<i>C. pocillum</i> (Ach.) O.J. Rich.	T/S	Di	Bajpai et al. 2022	
95	<i>C. pyxidata</i> (L.) Hoffm.	T	Di	Debnath et al. 2018, Bajpai et al. 2022	
96	<i>C. ramulosa</i> (With.) J.R. Laundon	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
97	<i>C. rangiferina</i> (L.) Weber ex F.H. Wigg.	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
98	<i>C. rei</i> Schaer	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022	
99	<i>C. scabriuscula</i> (Delise) Nyl.	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
100	<i>C. singhii</i> Ahti & P.K. Dixit	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
101	<i>C. squamosa</i> Hoffm.	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
102	<i>C. stellaris</i> (Opiz) Pouzar & Vězda	M	Di	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022	
103	<i>C. subconistea</i> Asahina	T	Di	Bajpai et al. 2022	
104	<i>C. submultiformis</i> Asahina	T	Di	Singh and Sinha 2010, Bajpai et al. 2022	
105	<i>C. subradiata</i> (Vain.) Sandst	T	Di	Bajpai et al. 2018 A, Rana et al. 2015, Bajpai et al. 2022	
106	<i>C. subulata</i> (L.) Weber ex F.H. Wigg.	T	Di	Rana et al. 2015, Bajpai et al. 2022	
107	<i>C. yunnana</i> (Vain.) Abbayes	T	Di	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
108	<i>Gymnoderma coccocarpum</i> Nyl. <b>Coccocarpiaceae</b>	C/T	Sq	Singh and Sinha 2010, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

109	<i>Coccocarpia erythroxyli</i> (Spreng.) Swinscow & Krog	C/S/T/ M	Fo	Singh and Sinha 2010, Dubey 2010, Debnath et al. 2018, Bajpai et al. 2022	
110	<i>C. palmicola</i> (Spreng.) Arv. & D.J. Galloway	C/S/T	Fo	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Debnath et al. 2018, Bajpai et al. 2022	
111	<i>C. pellita</i> (Ach.) Müll. Arg.	C/S/T	Fo	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
<b>Coccotremataceae</b>					
112	<i>Coccotrema cucurbitula</i> (Mont.) Müll. Arg.	C	Cr	Singh et al. 2015 A, Singh and Singh, 2012, Sinha et al. 2018, Bajpai et al. 2022	
<b>Coenogoniaceae</b>					
113	<i>Coenogonium luteum</i> (Dicks.) Kalb & Lücking	C/F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
114	<i>C. subluteum</i> (Rehm) Kalb & Lücking	C/F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
115	<i>C. zonatum</i> (Müll. Arg.) Kalb & Lücking	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
<b>Collemataceae</b>					
116	<i>Collema nigrescens</i> (Huds.) DC.	C/T	Fo	Bajpai et al. 2022	
117	<i>C. pulcellum</i> Ach.	C/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
118	<i>C. subnigrescens</i> Degel.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
119	<i>C. texanum</i> Tuck.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
120	<i>Leptogium arisanense</i> Asahina	C/T/M	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
121	<i>L. askotense</i> D.D. Awasthi	C/S/T	Fo	EN	Singh and Sinha 2010, Bajpai et al. 2022
122	<i>L. austroamericanum</i> (Malme) C.W. Dodge	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
123	<i>L. azureum</i> (Sw.) Mont.	C/S	Fo	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
124	<i>L. burgessii</i> (L.) Mont.	C/M	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
125	<i>L. burnetiae</i> C.W. Dodge	C/T	Fo	Bajpai et al. 2022	
126	<i>L. burnetiae</i> var. <i>hirsutum</i> (Sierk) P.M. Jørg.	C/S/T	Fo	Bajpai et al. 2022	
127	<i>L. cyanescens</i> (Ach.) Körb.	C/S/T	Fo	Singh and Sinha 2010, Dubey 2010, Debnath et al. 2018, Bajpai et al. 2022	
128	<i>L. delavayi</i> Hue	C/T/M	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022	
129	<i>L. denticulatum</i> Nyl.	C/S/T/ M	Fo	Singh and Sinha 2010, Dubey 2010, Debnath et al. 2018, Bajpai et al. 2022	
130	<i>L. fallax</i> Müll. Arg.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
131	<i>L. javanicum</i> Mont.	C/S	Fo	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
132	<i>L. moluccanum</i> (Pers.) Vain.	C/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
133	<i>L. pedicellatum</i> P.M. Jørg.	C/M	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
134	<i>L. pseudopapillosum</i> P.M. Jørg	M	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
135	<i>L. trichophorum</i> Müll. Arg.	C/T/M	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

136	<i>L. ulvaceum</i> (Pers.) Vain.	C	Fo		Singh and Sinha 2010, Bajpai et al. 2022
<b>Fuscideaceae</b>					
137	<i>Maronea manipurensis</i> H. Magn.	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Gomphillaceae</b>					
138	<i>Aderkomyces albostrigosus</i> (R. Sant.) Lücking, Sérus. & Vězda	C/F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
139	<i>Asterothyrium decipiens</i> (Rehm) R. Sant.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
140	<i>A. rotuliforme</i> (Müll. Arg.) Sérus.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
141	<i>Aulaxina quadrangula</i> (Stirt.) R. Sant.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
142	<i>A. uniseptata</i> R. Sant.	F	Cr		Singh et al. 2015 A, Bajpai et al. 2022
143	<i>Bullatina aspidota</i> (Vain.) Vězda & Poelt = <i>Calenia aspidota</i> (Vain.) Vězda	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
144	<i>Echinoplaca argentea</i> (Mont.) R. Sant.	C	Cr		Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
145	<i>E. epiphylla</i> Fée	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
146	<i>E. pellicula</i> (Müll. Arg.) R. Sant.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
147	<i>Gyalectidium filicinum</i> Müll. Arg.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
148	<i>Tricharia santessonii</i> D. Hawksw.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
149	<i>T. vainioi</i> R. Sant.	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Graphidaceae</b>					
150	<i>Allographa acharii</i> (Fée) Lücking & Kalb ≡ <i>Graphis acharii</i> Fée	C	Cr		Singh and Sinha 2010, Bajpai et al. 2022
151	<i>A. celata</i> (Stirt.) Lücking & Kalb ≡ <i>Graphis celata</i> Stirt.	C	Cr		Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
152	<i>A. cleistoblephara</i> (Nyl.) Lücking & Kalb ≡ <i>Graphis cleistoblephara</i> Nyl.	C	Cr		Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
153	<i>A. contortuplicata</i> (Müll. Arg.) Lücking & Kalb ≡ <i>Graphis contortuplicata</i> Müll. Arg.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
154	<i>A. daintreensis</i> (A.W. Archer) Lücking & Kalb ≡ <i>Graphis daintreensis</i> (A.W. Archer) A.W. Archer	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018, Bajpai et al. 2022
155	<i>A. farinulenta</i> (Müll. Arg.) Lücking & Kalb ≡ <i>Graphis farinulenta</i> Müll. Arg.	C	Cr		Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
156	<i>A. fujianensis</i> (Z.F. Jia & J.C. Wei) Lücking & Kalb ≡ <i>Graphis fujianensis</i> Z.F. Jia & J.C. Wei	C	Cr		Bajpai et al. 2022
157	<i>A. hossei</i> (Vain.) Lücking & Kalb ≡ <i>Graphis hossei</i> Vain.	C	Cr		Singh and Sinha 2010, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

158	<i>A. illinata</i> (Eschw.) Lücking & Kalb ≡ <i>Graphis illinata</i> Eschw. #	C	Cr	Singh and Sinha 2010
159	<i>A. marginata</i> (Raddi) Lücking & Kalb ≡ <i>Graphis marginata</i> Raddi	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
160	<i>A. nuda</i> (H. Magn.) Lücking & Kalb ≡ <i>Graphis nuda</i> (H. Magn.) Staiger & Lücking,	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
161	<i>A. pachygrapha</i> (Nyl.) Lücking & Kalb ≡ <i>Diorygma pachygraphum</i> (Nyl.) Kalb, Staiger & Elix	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
162	<i>A. pavoniana</i> (Fée) Lücking & Kalb ≡ <i>Graphis pavoniana</i> Fée	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
163	<i>A. rhizicola</i> (Fée) Lücking & Kalb = <i>Graphis assimilis</i> Nyl. #	C	Cr	Dubey 2010
164	<i>A. rimulosa</i> (Mont.) Lücking & Kalb ≡ <i>Graphis rimulosa</i> (Mont.) Trevis.	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022
165	<i>A. striatula</i> (Ach.) Lücking & Kalb ≡ <i>Graphis striatula</i> (Ach.) Spreng.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018, Bajpai et al. 2022
166	<i>A. subassimilis</i> (Müll. Arg.) Lücking & Kalb ≡ <i>Graphis subassimilis</i> Müll. Arg.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
167	<i>A. subdisserpens</i> (Nyl.) Lücking & Kalb ≡ <i>Graphis subdisserpens</i> Nyl.	C	Cr	Bajpai et al. 2022
168	<i>A. subelmeri</i> (A.W. Archer) Lücking & Kalb ≡ <i>Graphis subelmeri</i> (A.W. Archer) A.W. Archer	C	Cr	Bajpai et al. 2022
169	<i>A. upduna</i> Lücking & Kalb ≡ <i>Hemithecium isidiatum</i> Upreti & U. Dubey	C	Cr	Singh et al. 2015 A, Upreti et al. 2011, Sinha et al. 2018, Bajpai et al. 2022
170	<i>Astrochapsa pseudophlyctis</i> (Nyl.) Parnmen, Lücking & Lumbsch ≡ <i>Chapsa pseudophlyctis</i> (Nyl.) Frisch	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
171	<i>Carbacanthographis marcescens</i> (Fée) Staiger & Kalb	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
172	<i>Chroodiscus australiensis</i> Vězda & Lumbsch	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022
173	<i>C. coccineus</i> (Leight.) Müll. Arg	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
174	<i>C. mirificus</i> (Kremp.) R. Sant.	F	Cr	Singh and Sinha 2010, Bajpai et al. 2022
175	<i>Diorygma aeolum</i> (Stirt.) Pushpi Singh & Kr.P. Singh	C	Cr	Bajpai et al. 2022
176	<i>D. hieroglyphicum</i> (Pers.) Staiger & Kalb	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
177	<i>D. junghuhnii</i> (Mont. & Bosch) Kalb, Staiger & Elix	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
178	<i>D. longilirellum</i> B.O. Sharma & Makhija	C	Cr	EN Singh et al. 2015 A, Bajpai et al. 2022
179	<i>D. macgregorii</i> (Vain.) Kalb, Staiger & Elix	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
180	<i>D. megasporum</i> Kalb, Staiger & Elix #	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011

An Updated Checklist of Lichens from Arunachal Pradesh, India

181	<i>D. pruinoseum</i> (Eschw.) Kalb, Staiger & Elix	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
182	<i>D. radiatum</i> (D.D. Awasthi & S.R. Singh) Kr.P. Singh & Swarnal.	C	Cr	EN	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
183	<i>D. soozanum</i> (Zahlbr.) M. Nakan. & Kashiw.	C	Cr		Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
184	<i>D. tuberculosum</i> (Stirt.) Kalb, Staiger & Elix	C	Cr		Bajpai et al. 2022
185	<i>Diploschistes caesioplumbeus</i> (Nyl.) Vain.	T	Cr		Singh et al. 2015 A, Bajpai et al. 2022
186	<i>D. cinereocaesius</i> (Sw.) Vain.	T	Cr		Singh et al. 2015 A, Bajpai et al. 2022
187	<i>D. diacapsis</i> (Ach.) Lumbsch	T	Cr		Singh et al. 2015 A, Bajpai et al. 2022
188	<i>D. rampoddensis</i> (Nyl.) Zahlbr.	S	Cr		Bajpai et al. 2022
189	<i>D. scruposus</i> (Schreb.) Norman	S	Cr		Singh et al. 2015 A, Bajpai et al. 2022
190	<i>Dyplolabia afzelii</i> (Ach.) A. Massal.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
191	<i>Fissurina homiclodes</i> (Redinger) Luch & Lücking $\equiv$ <i>Graphis homiclodes</i> Redinger #	C	Cr		Singh and Sinha 2010
192	<i>F. inquinata</i> C. Knight & Mitt. #	C	Cr		Singh and Sinha 2010, Dubey 2010
193	<i>F. insidiosa</i> C. Knight & Mitt. #	C	Cr		Singh and Sinha 2010
194	<i>F. subcontexta</i> (Nyl.) Nyl.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018, Bajpai et al. 2022
195	<i>Glyphis cicatricosa</i> Ach.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
196	<i>G. scyphulifera</i> (Ach.) Staiger	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
197	<i>Graphis ajarekarii</i> Patw. & C.R. Kulk.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011
198	<i>G. anfractuosa</i> (Eschw.) Eschw.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
199	<i>G. aphaneomicrospora</i> (Makhija & Adaw.) J. Kalb & Kalb $\equiv$ <i>Hemithecium aphaneomicroporum</i> Makhija & Adaw.	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
200	<i>G. aphanes</i> Mont. & Bosch $\equiv$ <i>Hemithecium aphanes</i> (Mont. & Bosch) M. Nakan. & Kashiw.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
201	<i>G. balaghatensis</i> (Adaw. & Makhija) J. Kalb & Kalb $\equiv$ <i>Hemithecium balaghatense</i> Adaw. & Makhija #	C	Cr		Singh & Swarnalatha 2011
202	<i>G. caesiella</i> Vain.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
203	<i>G. capillacea</i> Stirt.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
204	<i>G. chlorotica</i> A. Massal.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

205	<i>G. cincta</i> (Pers.) Aptroot	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
206	<i>G. crebra</i> Vain.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018	
207	<i>G. cycadicola</i> A.W. Archer & Elix	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
208	<i>G. darjeelingensis</i> (Dharne & Roych.) Kr.P. Singh & Swarnal.	C	Cr	EN	Singh and Sinha 2010, Bajpai et al. 2022
209	<i>G. dendrogramma</i> Nyl.	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022	
210	<i>G. dimidiata</i> Vain.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018, Bajpai et al. 2022	
211	<i>G. duplicita</i> Ach.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
212	<i>G. filiformis</i> Adaw. & Makhija	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
213	<i>G. furcata</i> Fée	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
214	<i>G. galactoderma</i> (Zahlbr.) Lücking	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
215	<i>G. garoana</i> Nagarkar & Patw.	C	Cr	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
216	<i>G. glaucescens</i> Fée	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
217	<i>G. handelii</i> Zahlbr.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
218	<i>G. indica</i> J. Kalb & Kalb = <i>Hemithecium norsticticum</i> Makhija & Dube	C	Cr	EN	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
219	<i>G. intermediella</i> Stirt.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
220	<i>G. intricata</i> Fée	C	Cr	Bajpai et al. 2022	
221	<i>G. inustuloides</i> Lücking = <i>Graphina anguina</i> (Mont.) Müll. Arg. = <i>Graphis britannica</i> Staiger	C	Cr	Sinha et al. 2018, Bajpai et al. 2022	
222	<i>G. japonica</i> (Müll. Arg.) A.W. Archer & Lücking	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
223	<i>G. kousyuensis</i> (Horik. & M. Nakan.) Lücking	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
224	<i>G. leptoclada</i> Müll. Arg.	C	Cr	Bajpai et al. 2018 A, Singh et al. 2015 A, Bajpai et al. 2022	
225	<i>G. librata</i> C. Knight	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
226	<i>G. lineola</i> Ach.	C	Cr	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022	
227	<i>G. longiramea</i> Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022	
228	<i>G. longispora</i> D.D. Awasthi & S.R. Singh	C	Cr	EN	Singh et al. 2015 A, Singh & Swarnalatha 2011

An Updated Checklist of Lichens from Arunachal Pradesh, India

229	<i>G. nanodes</i> Vain.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018, Bajpai et al. 2022	
230	<i>G. norstictica</i> A.W. Archer & Lücking	C	Cr	Bajpai et al. 2022	
231	<i>G. oligospora</i> Zahlbr.	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
232	<i>G. paraserpens</i> Lizano & Lücking	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
233	<i>G. parilis</i> Kremp.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
234	<i>G. pertricosa</i> (Kremp.) A.W. Archer	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
235	<i>G. pinicola</i> Zahlbr.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
236	<i>G. proserpens</i> Vain	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
237	<i>G. puiggarii</i> (Müll. Arg.) Lückin	C	Cr	Bajpai et al. 2022	
238	<i>G. pyrrhocheilooides</i> Zahlbr.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
239	<i>G. renschiana</i> (Müll. Arg.) Stizenb.	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
240	<i>G. schizograpta</i> Müll. Arg.	C	Cr	Dubey 2010	
241	<i>G. scripta</i> (L.) Ach.	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
242	<i>G. sikkimensis</i> Nagarkar & Patw. #	C	Cr	Dubey 2010	
243	<i>G. sitapurensis</i> Makhija & Adaw.	C	Cr	EN	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
244	<i>G. streblocarpa</i> (Bél.) Nyl. $\equiv$ <i>Graphina streblocarpa</i> (Bél.) Müll.Arg.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
245	<i>G. subasahinae</i> Nagarkar & Patw.	C	Cr	Bajpai et al. 2022	
246	<i>G. subglauconigra</i> Nagarkar & Patw. #	C	Cr	Dubey 2010	
247	<i>G. subserpentina</i> Nyl. $\equiv$ <i>Graphina subserpentina</i> (Nyl.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022	
248	<i>G. subvirginea</i> Nyl. #	C	Cr	Dubey 2010	
249	<i>G. tenella</i> Ach.	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022	
250	<i>G. tsunodae</i> Zahlbr.	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022	
251	<i>G. valparaiensis</i> Adaw. & Makhija	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
252	<i>G. vittata</i> Müll. Arg.	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
253	<i>Hemithecium amboliense</i> Makhija & Dube	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
254	<i>H. lamii</i> (Redinger) V. Tewari & Upreti #	C	Cr		Singh and Sinha 2010, Dubey 2010
255	<i>H. nagalandicum</i> (Kr.P. Singh & G.P. Sinha) Adaw. & Makhija	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

256	<i>H. nakanishianum</i> (Patw. & C.R. Kulk.) Makhija & Dube #	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011
257	<i>Leiorreuma exaltatum</i> (Mont. & Bosch) Staiger	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
258	<i>L. subpatellulum</i> U. Dubey, Upreti & Nayaka	C	Cr	EN Singh et al. 2015 A, Dubey 2010, Sinha et al. 2018, Bajpai et al. 2022
259	<i>Leucodecon minisporum</i> Lücking #	C	Cr	Singh and Singh 2018
260	<i>Myriotrema clandestinum</i> (Fée) Hale #	C	Cr	Singh and Sinha 2010, Dubey 2010
261	<i>M. microposrum</i> (Mont.) Hale	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
262	<i>M. rugiferum</i> (Harm.) Hale	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
263	<i>Ocellularia annuloelevata</i> (Nagarkar, Sethy & Patw.) S. Joshi & Upreti	C	Cr	Bajpai et al. 2022
264	<i>O. arecae</i> (Vain.) Hale	C	Cr	Bajpai et al. 2022
265	<i>O. neopertusariiformis</i> Hale.	C	Cr	Singh et al. 2015 A, Singh et al. 2013, Sinha et al. 2018, Bajpai et al. 2022
266	<i>O. subgranulosa</i> (Homchant. & Coppins) Lumbsch & Papong,	C	Cr	Singh et al. 2015 A, Singh et al. 2013, Sinha et al. 2018, Bajpai et al. 2022
267	<i>O. subkeralensis</i> (Nagarkar, Sethy & Patw.) S. Joshi & Upreti	C	Cr	Bajpai et al. 2022
268	<i>O. papillata</i> (Leight.) Zahlbr. #	C	Cr	Singh and Sinha 2010
269	<i>Pallidogramme bengalensis</i> B.O. Sharma & Khadilkar	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
270	<i>P. chrysenteron</i> (Mont.) Staiger, Kalb & Lücking,	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
271	<i>P. divaricoides</i> (Räsänen) Pushpi Singh & Kr.P. Singh ≡ <i>Phaeographis divaricoides</i> Räsänen	C	Cr	EN Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
272	<i>Phaeographis angulosa</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010, Dubey 2010
273	<i>P. caesiodesca</i> Staiger #	C	Cr	Singh and Sinha 2010, Dubey 2010
274	<i>P. caesioradians</i> (Leight.) A.W. Archer	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
275	<i>P. dendritica</i> (Ach.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
276	<i>P. endophaeiza</i> (Stirt.) Zahlbr. #	C	Cr	Singh and Sinha 2010
277	<i>P. lyelli</i> (Sm.) Zahlbr. ≡ <i>Leiorreuma lyelli</i> (Sm.) Staiger #	C	Cr	Singh et al. 2015 A
278	<i>P. medusiformis</i> (Kremp.) Müll. Arg. #	C	Cr	Dubey 2010
279	<i>P. sculpturata</i> (Ach.) Staiger	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
280	<i>Phaeographopsis indica</i> (Patw. & Nagarkar) Sipman & Aptroot	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
281	<i>Platygramme australiensis</i> Staiger	C	Cr	Bajpai et al. 2022
282	<i>P. caesiopruinosa</i> (Fée) Fée	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

283	<i>P. discurrents</i> (Nyl.) Staiger	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
284	<i>P. muelleri</i> (A.W. Archer) Staiger	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
285	<i>P. pudica</i> (Mont. & Bosch) M. Nakan. & Kashiw.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
286	<i>P. wattiana</i> (Mull. Arg.) V. Tewari & Upreti	C	Cr	Singh & Swarnalatha 2011
287	<i>Platythecium serpentinellum</i> (Nyl.) Staiger	C	Cr	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
288	<i>Pliarionia montagnei</i> (Bosch) A. Massal. = <i>Thecaria montagnei</i> (Bosch) Staiger	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
289	<i>Pseudochapsa dilatata</i> (Müll. Arg.) Parnmen, Lücking & Lumbsch ≡ <i>Thelotrema dilatatum</i> (Müll. Arg.) Hale #	C	Cr	Singh and Sinha 2010, Dubey 2010
290	<i>Rhabdodiscus asiaticus</i> (Vain.) Rivas Plata, Lücking & Lumbsch	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
291	<i>R. crassus</i> (Müll. Arg.) Frisch	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
292	<i>R. indicus</i> Pushpi Singh & Kr.P. Singh	C	Cr	Singh et al. 2015 A, Singh et al. 2013, Sinha et al. 2018, Bajpai et al. 2022
293	<i>Sarcographa dendroides</i> (Leight.) Luch & Lücking ≡ <i>Phaeographis dendroides</i> (Leight.) Müll. Arg.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
294	<i>S. glyphiza</i> (Nyl.) Kr.P. Singh & G.P. Sinha	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
295	<i>S. heteroclita</i> (Mont.) Zahlbr.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
296	<i>S. intricans</i> (Nyl.) Müll. Arg. ≡ <i>Phaeographis intricans</i> (Nyl.) Staiger	C	Cr	Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
297	<i>S. abyrinthica</i> (Ach.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010, Bajpai et al. 2022
298	<i>S. medusulina</i> (Nyl.) Müll. Arg. #	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Dubey 2010
299	<i>S. subtorquescens</i> (Nyl.) Zahlbr. #	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010
300	<i>S. tricosa</i> (Ach.) Müll.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
301	<i>Schistophoron indicum</i> Kr.P. Singh & Swarnal.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh & Swarnalatha 2011, Sinha et al. 2018, Bajpai et al. 2022
302	<i>Stegobolus auberianus</i> (Mont.) Frisch & Kalb ≡ <i>Rhabdodiscus auberianus</i> (Mont.) Vain.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

303	<i>Thalloloma subvelata</i> (Stirt.) D.J. Galloway	C	Cr		Bajpai et al. 2022
304	<i>Thecaria austroindica</i> (D.D. Awasthi & Uperti) Kr.P. Singh & G.P. Sinha	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
305	<i>T. quassiicola</i> Fée	C	Cr		Singh et al. 2015 A, Singh & Swarnalatha 2011, Bajpai et al. 2022
<b>Haematommataceae</b>					
306	<i>Haematomma africanum</i> (J. Steiner) C.W. Dodge	C	Cr		Bajpai et al. 2022
307	<i>H. puniceum</i> (Ach.) A. Massal.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
308	<i>H. wattii</i> (Stirt.) Zahlbr.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Hygrophoraceae</b>					
309	<i>Cyphellostereum indicum</i> S. Nayaka & A. Debnath			EN	Nayaka and Debnath 2023
<b>Hymeneliaceae</b>					
310	<i>Ionaspis lacustris</i> (With.) Lutzoni	S	Cr		Singh et al. 2015 A, Bajpai et al. 2022
<b>Icmadophilaceae</b>					
311	<i>Dibaeis baeomyces</i> (L. f.) Rambold & Hertel	T	Di		Bajpai et al. 2022
312	<i>Icmadophila ericetorum</i> (L.) Zahlbr.	T	Cr		Bajpai et al. 2018 A
313	<i>Thamnolia vermicularis</i> (Sw.) Schaer.	T/M	Fr		Bajpai et al. 2018 A, Khare et al. 2010, Debnath et al. 2018
<b>Lecanoraceae</b>					
314	<i>Lecanora achroa</i> Nyl.	C	Cr		Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
315	<i>L. alba</i> Lumbsch	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
316	<i>L. albella</i> (Pers.) Ach. = <i>Lecanora allophana</i> (Ach.) Nyl.	C	Cr		Bajpai et al. 2018 A, Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
317	<i>L. austrointumescens</i> Lumbsch & Elix	C	Cr		Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
318	<i>L. caesiorubella</i> Ach.	C	Cr		Bajpai et al. 2018 A, Bajpai et al. 2022
319	<i>L. chondroderma</i> Zahlbr. #	C	Cr		Singh and Sinha 2010
320	<i>L. cinereofusca</i> H. Magn.	T/M	Cr		Bajpai et al. 2018 A, Bajpai et al. 2022
321	<i>L. concilianda</i> Vain.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
322	<i>L. fimbriata</i> H. Magn.	C	Cr		Bajpai et al. 2018 A, Singh et al. 2015 B, Bajpai et al. 2022
323	<i>L. fimbriatula</i> Stirt.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
324	<i>L. flavidofusca</i> Müll. Arg.	C	Cr		Bajpai et al. 2018 A, Bajpai et al. 2022
325	<i>L. helva</i> Stizenb.	C	Cr		Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
326	<i>L. hensseniae</i> Vänskä	S	Cr		Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

327	<i>L. impudens</i> Degel.	C	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
328	<i>L. imshaugii</i> Brodo.	C	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
329	<i>L. interjecta</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A
330	<i>L. intumescens</i> (Rebent.) Rabenh. #	C	Cr	Singh and Sinha 2010
331	<i>L. japonica</i> Müll. Arg.	C	Cr	Bajpai et al. 2022
332	<i>L. perplexa</i> Brodo	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
333	<i>L. phaeocardia</i> Vain.	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
334	<i>L. pulicaris</i> (Pers.) Ach.	C	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022
335	<i>L. rugosella</i> Zahlbr.	C	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
336	<i>L. streimannii</i> Lumbsch	S	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
337	<i>L. subalbellina</i> Vain.	C	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
338	<i>L. subimmersa</i> (Fée) Vain.	S	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
339	<i>L. subjaponica</i> L. Lü & H.Y. Wang	C	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Sinha et al. 2018, Bajpai et al. 2022
340	<i>L. tropica</i> Zahlbr.	C	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Bajpai et al. 2022
341	<i>L. wilsonii</i> Müll. Arg.	S	Cr	Singh et al. 2015 A, Singh et al. 2015 B, Sinha et al. 2018, Bajpai et al. 2022
<b>Lecideaceae</b>				
342	<i>Lecidea lapicida</i> (Ach.) Ach.	S	Cr	Singh et al. 2015 A, Bajpai et al. 2022
343	<i>Lecidoma demissum</i> (Rutstr.) Gotth. Schneid. & Hertel	T/M	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022
344	<i>Porpidia albocaerulescens</i> (Wulfen) Hertel & Knoph	S	Cr	Singh et al. 2015 A, Bajpai et al. 2022
345	<i>P. macrocarpa</i> (DC.) Hertel & A.J. Schwab	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
<b>Leprocaulaceae</b>				
346	<i>Leprocaulon textum</i> (K. Knudsen, Elix & Lendemer) Lendemer & B.P. Hodk.	S	Cr	Bajpai et al. 2018 B, Bajpai et al. 2022
<b>Letrouitiaceae</b>				
347	<i>Letrouitia domingensis</i> (Pers.) Hafellner & Bellem. #	C	Cr	Singh and Sinha 2010
348	<i>L. transgressa</i> (Malme) Hafellner & Bellem.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Malmideaceae</b>				

An Updated Checklist of Lichens from Arunachal Pradesh, India

349	<i>Malmidea granifera</i> (Ach.) Kalb, Rivas Plata & Lumbsch ≡ <i>Lecidea granifera</i> (Ach.) Vain.	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022	
<b>Megalosporaceae</b>					
350	<i>Megalospora atrorubricans</i> (Nyl.) Zahlbr.	C	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
351	<i>M. pruinata</i> (Müll.Arg.) Sipman	C	Cr	Bajpai et al. 2018 A, Dubey 2010, Bajpai et al. 2022	
352	<i>M. tuberculosa</i> (Fée) Sipman	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
<b>Megasporaceae</b>					
353	<i>Aspicilia dwaliensis</i> Räsänen	S	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
354	<i>Circinaria calcarea</i> (L.) A. Nordin, Savić & Tibell ≡ <i>Aspicilia calcarea</i> (L.) Sommerf	S	Cr	Singh and Sinha 2010, Bajpai et al. 2022	
<b>Monoblastiaceae</b>					
355	<i>Anisomeridium biforme</i> (Borrer) R.C. Harris	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
356	<i>A. calcicola</i> Upreti & Nayaka #	C	Cr	Singh and Sinha 2010	
357	<i>A. consobrinum</i> (Nyl.) Aptroot #	C	Cr	Dubey 2010	
<b>Mycosphaerellaceae</b>					
358	<i>Stigmidium allogenum</i> (Nyl.) D. Hawksw. = <i>Porina innata</i> (Arnold) Müll. Arg; <i>Arthopyrenia allogena</i> (Nyl.) Arnold	C	Cr	Singh et al. 2015 A, Singh and Sinha 2010, Bajpai et al. 2018 A, Bajpai et al. 2022	
<b>Naetrocymbaceae</b>					
359	<i>Naetrocymbe saxicola</i> (A. Massal.) R.C. Harris ≡ <i>Arthopyrenia saxicola</i> A. Massal.	S	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022	
<b>Ochrolechiaceae</b>					
360	<i>Ochrolechia harmandii</i> Verseghy	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
361	<i>O. rosella</i> (Müll. Arg.) Verseghy	C	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022	
362	<i>O. subpallescens</i> Verseghy	C	Cr	Bajpai et al. 2018 A, Singh et al. 2015 A, Bajpai et al. 2022	
<b>Opegraphaceae</b>					
363	<i>Cresponea plurilocularis</i> (Nyl.) Egea & Torrente	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
364	<i>Fouragea filicina</i> (Mont.) Trevis. ≡ <i>Opegrapha filicina</i> Mont.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
365	<i>Opegrapha vulgata</i> (Ach.) Ach.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
<b>Ophioparmaceae</b>					
366	<i>Ophioparma ventosa</i> (L.) Norman	S	Cr	Bajpai et al. 2018 A, Khare et al. 2010	
<b>Pannariaceae</b>					
367	<i>Pannaria emodii</i> P.M. Jørg.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
<b>Parmeliaceae</b>					
368	<i>Anzia ornatoides</i> Yoshim.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

369	<i>A. physoidea</i> A.L. Sm.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
370	<i>Bryoria asiatica</i> (Du Rietz) Brodo & D. Hawksw.	C	Fr	Debnath et al. 2018, Bajpai et al. 2022
371	<i>B. bicolor</i> (Hoffm.) Brodo & D. Hawksw.	C/T/S	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
372	<i>B. confusa</i> (D.D. Awasthi) Brodo & D. Hawksw	C	Fr	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
373	<i>B. himalayensis</i> (Motyka) Brodo & D. Hawksw.	C	Fr	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022
374	<i>B. lactinea</i> (Nyl.) Brodo & D. Hawksw	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
375	<i>B. levii</i> D.D. Awasthi	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
376	<i>B. nepalensis</i> D.D. Awasthi	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
377	<i>B. nitidula</i> (Th. Fr.) Brodo & D. Hawksw.	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
378	<i>B. perspinosa</i> (Bystrek) Brodo & D. Hawksw. #	C	Fr	Singh and Sinha 2010
379	<i>B. tenuis</i> (E. Dahl) Brodo & D. Hawksw.	C	Fr	Debnath et al. 2018
380	<i>B. variabilis</i> (Bystrek) Brodo & D. Hawksw.	C	Fr	Bajpai et al. 2018 A
381	<i>Bulbothrix isidiza</i> (Nyl.) Hale	C/T/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
382	<i>B. meizospora</i> (Nyl.) Hale	C/T/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
383	<i>B. setschwanensis</i> (Zahlbr.) Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
384	<i>Cetraria islandica</i> (L.) Ach.	M	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
385	<i>C. laevigata</i> Rass.	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
386	<i>Cetrelia braunsiana</i> (Müll. Arg.) W.L. Culb. & C.F. Culb.	C	Fo	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022
387	<i>C. cetrarioides</i> (Delise ex Duby) W.L. Culb. & C.F. Culb	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
388	<i>C. chicitae</i> (W.L.Culb.) W.L.Culb. & C.F.Culb.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
389	<i>C. collata</i> (Nyl.) W.L. Culb. & C.F. Culb.	C	Fo	Debnath et al. 2018, Bajpai et al. 2022
390	<i>C. isidiata</i> (Asahina) W.L. Culb. & C.F. Culb.	C	Fo	Mishra et al. 2022 B, Bajpai et al. 2022
391	<i>C. olivetorum</i> (Nyl.) W.L. Culb. & C.F. Culb.	C	Fo	Debnath et al. 2018, Bajpai et al. 2022
392	<i>C. pseudolivetorum</i> (Asahina) W.L. Culb. & C.F. Culb.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
393	<i>Cetreliosis rhytidocarpa</i> (Mont. & Bosch) Randlane & Saag	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
394	<i>C. rhytidocarpa</i> subsp. <i>rhytidocarpa</i> (Mont. & Bosch) Randlane & Saag	C	Fo	Bajpai et al. 2022
395	<i>Crespoa crozalsiana</i> (B. de Lesd. ex Harm.) Lendemer & B.P. Hodk. ≡ <i>Canoparmelia crozalsiana</i> (B. de Lesd. ex Harm.) Elix & Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

396	<i>Dolichousnea longissima</i> (Ach.) Articus ≡ <i>Usnea longissima</i> Ach.	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
397	<i>Eumitria baileyi</i> Stirt. ≡ <i>Usnea baileyi</i> (Stirt.) Zahlbr.	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022	
398	<i>E. pectinata</i> (Taylor) Articus ≡ <i>Usnea pectinata</i> Taylor, = <i>Usnea misaminensis</i> (Vain.) Motyka #	C	Fr	Singh and Sinha 2010, Debnath et al. 2018	
399	<i>Flavoparmelia caperata</i> (L.) Hale	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
400	<i>Flavopunctelia flaventior</i> (Stirt.) Hale	C	Fo	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022	
401	<i>Fuscopannaria subgemmascens</i> Upreti & Divakar	C	Fo	Bajpai et al. 2022	
402	<i>Hypogymnia alpina</i> D.D. Awasthi #	C	Fo	Debnath et al. 2018	
403	<i>H. crystallina</i> McCune, Divakar & Upreti	C	Fo	EN	Bajpai et al. 2018 A, McCune et al. 2012, Sinha et al. 2018, Bajpai et al. 2022
404	<i>H. enteromorpha</i> (Ach.) Nyl. #	C	Fo		Debnath et al. 2018
405	<i>H. hengduanensis</i> J.C. Wei	C	Fo	Bajpai et al. 2022	
406	<i>H. hypotrypa</i> (Nyl.) Ras.	T	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
407	<i>H. mundata</i> (Nyl.) Oxner ex Rass.	C	Fo	McCune et al. 2012, Sinha et al. 2018	
408	<i>H. physodes</i> (L.) Nyl.	C	Fo	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022	
409	<i>H. pseudobitteriana</i> (D.D. Awasthi) D.D. Awasthi	C	Fo	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022	
410	<i>H. pseudohypotrypa</i> (Asahina) Ajay Singh #	C	Fo	Debnath et al. 2018	
411	<i>H. sikkimensis</i> G.P. Sinha & Elix	C	Fo	Bajpai et al. 2022	
412	<i>H. thomsoniana</i> (Müll. Arg.) D.D. Awasthi #	C	Fo	Debnath et al. 2018	
413	<i>H. vittata</i> (Ach.) Parrique	C	Fo	Debnath et al. 2018, Bajpai et al. 2022	
414	<i>H. wattiana</i> (Müll. Arg.) D.D. Awasthi	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
415	<i>Hypotrachyna adducta</i> (Nyl.) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
416	<i>H. cirrhata</i> (Fr.) Divakar = <i>Everniastrum cirrhatum</i> (Fr.) Hale ex Sipman	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
417	<i>H. coorgiana</i> Patw. & Prabhu	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
418	<i>H. costaricensis</i> (Nyl.) Hale	C	Fo	Bajpai et al. 2022	
419	<i>H. degelii</i> (Hale) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
420	<i>H. exsecta</i> (Taylor) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
421	<i>H. imbricatula</i> (Zahlbr.) Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
422	<i>H. immaculata</i> (Kurok.) Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
423	<i>H. incognita</i> (Kurok.) Hale	C	Fo	Bajpai et al. 2022	
424	<i>H. infirma</i> (Kurok.) Hale	C	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
425	<i>H. koyaensis</i> (Asahina) Hale #	C	Fo	Singh and Sinha 2010	
426	<i>H. mason-halei</i> Patw. & Prabhu	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

	<i>H. neocirrhata</i> (Hale & M. Wirth)			
427	Divakar, A. Crespo, Sipman, Elix & Lumbsch $\equiv$ <i>Everniastrum neocirrhatum</i> (Hale & M. Wirth) Hale ex Sipman #	C	Fo	Debnath et al. 2018
428	<i>H. neodissecta</i> (Hale) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
429	<i>H. nepalensis</i> (Taylor) Divakar, A. Crespo, Sipman, Elix & Lumbsch $\equiv$ <i>Everniastrum nepalense</i> (Taylor) Hale ex Sipman	C	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
430	<i>H. ossealba</i> (Vain.) Y.S. Park & Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
431	<i>H. physcioides</i> (Nyl.) Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
432	<i>H. revoluta</i> (Flörke) Hale	C	Fo	Bajpai et al. 2022
433	<i>H. scytophylla</i> (Kurok.) Hale #	C	Fo	Singh and Sinha 2010
434	<i>H. spumosa</i> (Asahina) Krog & Swinscow $\equiv$ <i>Parmelinopsis spumosa</i> (Asahina) Elix & Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
435	<i>H. sublaevigata</i> (Nyl. ex Tuck.) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
	<i>H. vexans</i> (Zahlbr. ex W.L. Culb. & C.F. Culb.) Divakar, A. Crespo, Sipman,			
436	Elix & Lumbsch $\equiv$ <i>Everniastrum vexans</i> (Zahlbr. ex W.L. Culb. & C.F. Culb.) Hale ex Sipman	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
437	<i>Lethariella cladonioides</i> (Nyl.) Krog	T	Fr	Debnath et al. 2018, Bajpai et al. 2022
438	<i>Melanelia agnata</i> (Nyl.) A. Thell	S	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
439	<i>M. stygia</i> (L.) Essl	C	Fo	Bajpai et al. 2018 A, Mishra et al. 2022 A, Debnath et al. 2018, Bajpai et al. 2022
	<i>Melanohalea infumata</i> (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch			
440		C	Fo	Bajpai et al. 2022
441	<i>M. poeltii</i> (Essl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch	C	Fo	Bajpai et al. 2022
442	<i>Menegazzia terebrata</i> (Hoffm.) A. Massal.	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
	<i>Montanelia panniformis</i> (Nyl.) Divakar, A. Crespo, Wedin & Essl. $\equiv$ <i>Melanelia panniformis</i> (Nyl.) Essl.			
443		S/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
444	<i>Myelochroa aurulenta</i> (Tuck.) Elix & Hale	C/S	Fo	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
445	<i>M. entotheiochroa</i> (Hue) Elix & Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
446	<i>M. macrogalbinica</i> Divakar, Upreti & Elix	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
447	<i>M. metarevoluta</i> (Asahina) Elix & Hale #	C	Fo	Debnath et al. 2018
	<i>M. radiculata</i> (Kurok.) Divakar & A. Crespo $\equiv$ <i>Hypotrachyna radiculata</i> (Kurok.) Elix			
448		C	Fo	Bajpai et al. 2022
449	<i>M. sikkimensis</i> Divakar, Upreti, G.P. Sinha & Elix	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

450	<i>M. subaurulenta</i> (Nyl.) Elix & Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
451	<i>M. xantholepis</i> (Mont. & Bosch) Elix & Hale	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
452	<i>Nephromopsis ahtii</i> (Randlane & Saag) Randlane & Saag	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
453	<i>N. awasthii</i> G.K. Mishra, Nayaka & Upadhyay	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
454	<i>N. laii</i> (A. Thell & Randlane) Saag & A. Thell	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
455	<i>N. morrisonicola</i> M.J. Lai	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
456	<i>N. nephromoides</i> (Nyl.) Ahti & Randlane	C/T	Fo	Mishra et al. 2022 A, Debnath et al. 2018
457	<i>N. pallescens</i> (Schaer.) Park	C/S	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022, Bajpai et al. 2018 A
458	<i>N. pseudoweberi</i> (Essl.) Divakar, A. Crespo & Lumbsch	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
459	<i>N. rugosa</i> Asahina	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022
460	<i>N. stracheyi</i> (C. Bab.) Müll. Arg.	C	Fo	Singh and Sinha 2010, Mishra et al. 2022 A, Bajpai et al. 2022
461	<i>N. togashii</i> (Asahina) A. Thell & Kärnefelt	C	Fo	Bajpai et al. 2022, Bajpai et al. 2018 A
462	<i>N. yunnanensis</i> (Nyl.) Randlane & Saag	C	Fo	Bajpai et al. 2022
463	<i>Nipponoparmelia ricasolioides</i> (Nyl.) A. Crespo & Divakar ≡ <i>Parmelia ricasolioides</i> Nyl.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
464	<i>Parmelia adaugescens</i> Nyl.	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
465	<i>P. meiophora</i> Nyl.	C	Fo	Bajpai et al. 2022
466	<i>P. sulcata</i> Taylor	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
467	<i>Parmelinella chozoubae</i> (Kr.P. Singh & G.P. Sinha) Elix & Pooprang #	C	Fo	Debnath et al. 2018
468	<i>P. manipurensis</i> (Kr.P. Singh) Elix & Hale	C	Fo	EN Singh and Sinha 2010, Bajpai et al. 2022
469	<i>P. simplicior</i> (Hale) Elix & Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
470	<i>P. wallichiana</i> (Taylor) Elix & Hale	C/S/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
471	<i>Parmelinopsis spathulata</i> (Kurok.) Elix & Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
472	<i>Parmotrema cooperi</i> (J. Steiner & Zahlbr.) Sérus.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
473	<i>P. cristiferum</i> (Taylor) Hale	C/T	Fo	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
474	<i>P. dilatatum</i> (Vain.) Hale #	C	Fo	Dubey 2010
475	<i>P. eunetum</i> (Stirt.) Hale	C	Fo	Bajpai et al. 2022
476	<i>P. hababianum</i> (Gyeln.) Hale	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
477	<i>P. latissimum</i> (Fée) Hale	C	Fo	Bajpai et al. 2022
478	<i>P. mesotropum</i> (Müll. Arg.) Hale	C/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
479	<i>P. nilgherrense</i> (Nyl.) Hale	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

480	<i>P. praeioreiosum</i> (Nyl.) Hale #	C	Fo	Debnath et al. 2018	
481	<i>P. ravum</i> (Krog & Swinscow) Sérus.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
482	<i>P. reticulatum</i> (Taylor) M. Choisy = <i>Canomaculina leucosemota</i> (Hue) Elix	C/T	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
483	<i>P. robustum</i> (Degel.) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
484	<i>P. saccatilobum</i> (Taylor) Hale #	C	Fo	Dubey 2010	
485	<i>P. sancti-angeli</i> (Lynge) Hale	C	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
486	<i>P. subsumptum</i> (Nyl.) Hale ≡ <i>Canomaculina subsumpta</i> (Nyl.) Elix # <i>P. subthomsonii</i> (D.D. Awasthi) A.	C	Fo	Debnath et al. 2018	
487	Crespo, Divakar & Elix ≡ <i>Parmelia subthomsonii</i> D.D. Awasthi #	C	Fo	Debnath et al. 2018	
488	<i>P. subtinctiorium</i> (Zahlbr.) Hale	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
489	<i>P. thomsonii</i> (Stirt.) A. Crespo, Divakar & Elix ≡ <i>Parmelia thomsonii</i> (Stirt.) D.D. Awasthi	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022	
490	<i>P. tinctorum</i> (Despr. ex Nyl.) Hale	C	Fo	Singh and Sinha 2010, Dubey 2010, Debnath et al. 2018, Bajpai et al. 2022	
491	<i>P. zollingeri</i> (Hepp) Hale	T	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
492	<i>Platismatia erosa</i> W.L. Culb. & C.F. Culb.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022	
493	<i>Remototrichyna adducta</i> (Nyl.) Divakar, Lumbsch, Ferencová, Prado & A. Crespo	C	Fo	Bajpai et al. 2022	
494	<i>R. awasthii</i> (Hale & Patw.) Divakar & A. Crespo ≡ <i>Hypotrachyna awasthii</i> Hale & Patw.	C/S	Fo	Bajpai et al. 2022	
495	<i>R. flexilis</i> (Kurok.) Divakar & A. Crespo ≡ <i>Hypotrachyna flexilis</i> (Kurok.) Hale	C/S	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010	
496	<i>R. infirma</i> (Kurok.) A. Crespo & Divakar	C/S	Fo	Bajpai et al. 2022	
497	<i>R. koyaensis</i> (Asahina) A. Crespo & Divakar	C	Fo	EN	Bajpai et al. 2022
498	<i>R. rigidula</i> (Kurok.) Divakar & A. Crespo ≡ <i>Hypotrachyna rigidula</i> (Kurok.) Hale	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010	
499	<i>R. scytophylla</i> (Kurok.) Divakar, Lumbsch, Ferencová, Prado & A. Crespo	C	Fo	Bajpai et al. 2022	
500	<i>R. thryptica</i> (Hale) Divakar & A. Crespo ≡ <i>Hypotrachyna thryptica</i> (Hale) Hale	C	Fo	EN	Singh and Sinha 2010, Bajpai et al. 2022
501	<i>Sulcaria sulcata</i> (Lév.) Bystrek ex Brodo & D. Hawksw.	C	Fr	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
502	<i>S. virens</i> (Taylor) Bystrek ex Brodo & D. Hawksw.	C	Fr	Singh and Sinha 2010, Bajpai et al. 2022	
503	<i>Tuckneraria laureri</i> (Kremp.) Randlane & A. Thell ≡ <i>Nephromopsis laureri</i> (Kremp.) Kurok.	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

504	<i>T. pseudocomPLICata</i> (Asahina) Randlane & Saag ≡ <i>Nephromopsis pseudocomPLICata</i> (Asahina) M.J. Lai	C	Fo	Mishra et al. 2022 A, Bajpai et al. 2022	
505	<i>Usnea aciculifera</i> Vain.	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Debnath et al. 2018, Bajpai et al. 2022	
506	<i>U. angulata</i> Ach. = <i>Usnea undulata</i> Stirt.	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022	
507	<i>U. bismolliuscula</i> Zahlbr.	C	Fr	Singh and Sinha 2010, Rana et al. 2015, Debnath et al. 2018, Bajpai et al. 2022	
508	<i>U. bornmuelleri</i> J. Steiner	C	Fr	Singh and Sinha 2010, Bajpai et al. 2022	
509	<i>U. cineraria</i> Motyka	C	Fr	EN	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
510	<i>U. dendritica</i> Stirt.	C	Fr		Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
511	<i>U. eumitrioides</i> Motyka	C	Fr	Rana et al. 2015, Bajpai et al. 2022	
512	<i>U. fragilis</i> Stirt.	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Debnath et al. 2018, Bajpai et al. 2022	
513	<i>U. glabrata</i> (Ach.) Vain.	C	Fr	Bajpai et al. 2022	
514	<i>U. himalayana</i> C. Bab.	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022	
515	<i>U. himantodes</i> Stirt.	C	Fr	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
516	<i>U. lucea</i> Motyka	C	Fr	Rana et al. 2015, Bajpai et al. 2022	
517	<i>U. luridorufa</i> Stirt.	C	Fr	Rana et al. 2015, Bajpai et al. 2022	
518	<i>U. maculata</i> Stirt.	C	Fr	Bajpai et al. 2022	
519	<i>U. nepalensis</i> G. Awasthi	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022	
520	<i>U. nilgirica</i> G. Awasthi	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022	
521	<i>U. nipparensis</i> Asahina	C	Fr	Bajpai et al. 2022	
522	<i>U. orientalis</i> Motyka	C	Fr	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	
523	<i>U. pangiana</i> Stirt.	C	Fr	Singh and Sinha 2010, Bajpai et al. 2022	
524	<i>U. perplexans</i> Stirt.	C	Fr	Bajpai et al. 2022	
525	<i>U. pictoides</i> G. Awasthi	C	Fr	Bajpai et al. 2022	
526	<i>U. rigidula</i> (Stirt.) G. Awasthi	C	Fr	Bajpai et al. 2022	
527	<i>U. robusta</i> Stirt.	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022	
528	<i>U. rubicunda</i> Stirt	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022	
529	<i>U. spinosula</i> Stirt.	C	Fr	Rana et al. 2015, Bajpai et al. 2022	
530	<i>U. splendens</i> Stirt.	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022	
531	<i>U. stigmatoides</i> G. Awasthi	C	Fr	Bajpai et al. 2022	
532	<i>U. subfloridana</i> Stirt.	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022	
533	<i>U. thomsonii</i> Stirt.	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022	

**Peltigeraceae**

An Updated Checklist of Lichens from Arunachal Pradesh, India

534	<i>Dendriscosticta platyphylla</i> (Trevis.) B. Moncada & Lücking = <i>Sticta nylanderiana</i> Zahlbr.	C	Fo	Debnath et al. 2018, Bajpai et al. 2022
535	<i>D. platyphylloides</i> (Nyl.) B. Moncada & Lücking	C/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
536	<i>D. praetextata</i> (Räsänen) B. Moncada & Lücking ≡ <i>Sticta praetextata</i> (Räsänen) D.D. Awasthi,	C/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
537	<i>Lobaria crassior</i> Vain.	C	Fo	Bajpai et al. 2022
538	<i>L. discolor</i> (Bory ex Delise) Hue	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
539	<i>L. fuscotomentosa</i> Yoshim.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
540	<i>L. isidiosa</i> (Müll. Arg.) Vain.	T/M/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
541	<i>L. kurokawai</i> Yoshim	C/T	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
542	<i>L. pindarensis</i> Räsänen	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
543	<i>L. pseudopulmonaria</i> Gyeln.	T/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
544	<i>L. retigera</i> (Bory) Trevis.	C/T/ M/S	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
545	<i>Nephroma helveticum</i> Ach.	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
546	<i>Peltigera canina</i> (L.) Willd.	T/S	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
547	<i>P. collina</i> (Ach.) Schrad. #	T	Fo	Debnath et al. 2018
548	<i>P. dolichorhiza</i> (Nyl.) Nyl.	T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
549	<i>P. elisabethae</i> Gyeln.	T	Fo	Bajpai et al. 2022
550	<i>P. malacea</i> (Ach.) Funck	T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
551	<i>P. polydactylon</i> (Neck.) Hoffm.	T	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
552	<i>P. praetextata</i> (Flörke ex Sommerf.) Zopf	T	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
553	<i>P. rufescens</i> (Weiss) Humb.	T	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
554	<i>Pseudocyphellaria aurata</i> (Ach.) Vain.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
555	<i>P. crocata</i> (L.) Vain.	C	Fo	Dubey 2010, Bajpai et al. 2022
556	<i>Sticta damicornis</i> (Sw.) Ach.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
557	<i>S. henryana</i> Mull. Arg.	C/T	Fo	Singh and Sinha 2010
558	<i>S. limbata</i> (Sm.) Ach.	C	Fo	Bajpai et al. 2022
559	<i>S. orbicularis</i> (A. Braun ex Meyen & Flot.) Vain.	C/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
560	<i>S. weigelii</i> (Ach.) Vain.	C/T	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
<b>Pertusariaceae</b>				
561	<i>Lepra albescens</i> (Huds.) Hafellner ≡ <i>Pertusaria albescens</i> (Huds.) M. Choisy & Werner	C	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

562	<i>L. amara</i> (Ach.) Hafellner $\equiv$ <i>Pertusaria amara</i> (Ach.) Nyl.	C	Cr	Bajpai et al. 2022
563	<i>L. colorata</i> (D.D. Awasthi & Preeti Srivast.) Q. Ren $\equiv$ <i>Pertusaria colorata</i> D.D. Awasthi & Preeti Srivast.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
564	<i>L. composita</i> (Zahlbr.) Q. Ren $\equiv$ <i>Pertusaria composita</i> Zahlbr.	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010
565	<i>L. leucosorodes</i> (Nyl.) I. Schmitt, B.G. Hodk. & Lumbsch $\equiv$ <i>Pertusaria leucosorodes</i> Nyl.	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
566	<i>L. multipuncta</i> (Turner) Hafellner $\equiv$ <i>Pertusaria multipuncta</i> (Turner) Nyl.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
567	<i>L. submultipuncta</i> (Nyl.) Q. Ren $\equiv$ <i>Pertusaria submultipuncta</i> Nyl	C	Cr	Bajpai et al. 2018 A, Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
568	<i>Pertusaria ceylonica</i> Müll. Arg.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
569	<i>P. coccodes</i> (Ach.) Nyl. #	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010
570	<i>P. coronata</i> (Ach.) Th. Fr. #	C	Cr	Singh and Sinha 2010
571	<i>P. indica</i> Preeti Srivast. & D.D. Awasthi	S	Cr	EN Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
572	<i>P. leioplaca</i> (Ach.) DC. = <i>Pertusaria alpina</i> Hepp ex Ahles, = <i>Pertusaria leucostoma</i> (Berch.) Massal.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
573	<i>P. multipuncta</i> (Turner) Nyl.	C	Cr	Bajpai et al. 2022
574	<i>P. pertusa</i> (L.) Tuck.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
575	<i>P. quassiae</i> (Fée) Nyl.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A
576	<i>P. subcopelandii</i> Jariangpr.	C	Cr	Bajpai et al. 2022
	<b>Phlyctidaceae</b>			
577	<i>Phlyctis karnatakana</i> S. Joshi & Upreti	C	Cr	EN Singh et al. 2015 A, Bajpai et al. 2022
578	<i>P. subhimalayensis</i> S. Joshi & Upreti	C	Cr	EN Singh et al. 2015 A, Joshi et al. 2012, Sinha et al. 2018, Bajpai et al. 2022
	<b>Physciaceae</b>			
579	<i>Anaptychia ciliaris</i> (L.) Flot.	C	Fo	Bajpai et al. 2022
580	<i>Heterodermia albiflava</i> (Kurok.) D.D. Awasthi	C/S	Fo	Bajpai et al. 2022
581	<i>H. angustiloba</i> (Müll. Arg.) D.D. Awasthi	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
582	<i>H. barbifera</i> (Nyl.) Kr.P. Singh	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
583	<i>H. dactyliza</i> (Nyl.) Swinscow & Krog	C	Fo	Bajpai et al. 2022
584	<i>H. diademata</i> (Taylor) D.D. Awasthi	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
585	<i>H. firmula</i> (Linds.) Trevis.	C/S/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022
586	<i>H. flabellata</i> (Fée) D.D. Awasthi	S/T	Fo	Singh and Sinha 2010, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

587	<i>H. himalayensis</i> (D.D. Awasthi) D.D. Awasthi	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
588	<i>H. hypochraea</i> (Vain.) Swinscow & Krog	C	Fo	Bajpai et al. 2018 A, Bajpai et al. 2022
589	<i>H. incana</i> (Stirt.) D.D. Awasthi	C	Fo	Bajpai et al. 2022
590	<i>H. obscurata</i> (Nyl.) Trevis.	C/S/T	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
591	<i>H. pandurata</i> (Kurok.) J.C. Wei	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
592	<i>H. pellucida</i> (D.D. Awasthi) D.D. Awasthi	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
593	<i>H. podocarpa</i> (Bél.) D.D. Awasthi	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
594	<i>H. pseudospeciosa</i> (Kurok.) W.L. Culb.	C/S/T	Fo	Singh and Sinha 2010, Dubey 2010, Debnath et al. 2018
595	<i>H. punctifera</i> (Kurok.) D.D. Awasthi	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
596	<i>H. rubescens</i> (Räsänen) D.D. Awasthi	C/S	Fo	Singh and Sinha 2010, Bajpai et al. 2022
597	<i>H. rubricosa</i> (Stirt.) Poelt	C	Fo	Bajpai et al. 2022
598	<i>H. speciosa</i> (Wulfen) Trevis. #	C	Fo	Debnath et al. 2018
599	<i>Leucodermia boryi</i> (Fée) Kalb ≡ <i>Heterodermia boryi</i> (Fée) Kr.P. Singh & S.R. Singh	C	Fo	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022
600	<i>L. leucomelos</i> (L.) Kalb ≡ <i>Heterodermia leucomelos</i> (L.) Poelt	C/T	Fo	Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
601	<i>L. lutescens</i> (Kurok.) Kalb ≡ <i>Heterodermia lutescens</i> (Kurok.) Follmann	C	Fo	Bajpai et al. 2022
602	<i>Phaeophyscia endococcina</i> (Körb.) Moberg	C/S/M	Fo	Singh and Sinha 2010, Bajpai et al. 2022
603	<i>P. endococcinodes</i> (Poelt) Essl. ≡ <i>Phaeophyscia endococcina</i> var. <i>endococcinodes</i> (Poelt) Moberg	C/S	Fo	Singh and Sinha 2010 Bajpai et al. 2022
604	<i>P. hispidula</i> (Ach.) Essl.	C	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Bajpai et al. 2022
605	<i>Physcia adscendens</i> H. Olivier	T	Fo	Bajpai et al. 2022
606	<i>P. caesia</i> (Hoffm.) Fürnr. #	C	Fo	Debnath et al. 2018
607	<i>P. integrata</i> (Nyl.) Arnold	C	Fo	Singh and Sinha 2010
608	<i>P. leptalea</i> (Ach.) DC. = <i>Physcia semipinnata</i> (Leers ex J.F. Gmel.) Moberg	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
609	<i>P. sorediosa</i> (Vain.) Lyngé #	C	Fo	Dubey 2010
610	<i>P. tribacioides</i> Nyl.	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
611	<i>Polyblastidium dendriticum</i> (Pers.) Kalb ≡ <i>Heterodermia dendritica</i> (Pers.) Poelt	C	Fo	Singh and Sinha 2010, Bajpai et al. 2022
612	<i>P. hypocaesium</i> (Yasuda ex Räsänen) Kalb ≡ <i>Heterodermia hypocaesia</i> (Yasuda ex Räsänen) D.D. Awasthi	C	Fo	Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

613	<i>P. japonicum</i> (M. Satô) Kalb ≡ <i>Heterodermia japonica</i> (M. Satô) Swinscow & Krog	C	Fo	Bajpai et al. 2022
614	<i>P. propaguliferum</i> (Vain.) Kalb ≡ <i>Heterodermia propagulifera</i> (Vain.) J.P. Dey	C	Fo	Bajpai et al. 2022
615	<i>P. togashii</i> (Kurok.) Kalb ≡ <i>Heterodermia togashii</i> (Kurok.) D.D. Awasthi	C	Fo	Singh and Sinha 2010, Bajpai et al. 2018 A
616	<i>Rinodina badiella</i> (Nyl.) Th. Fr. #	C	Cr	Singh and Sinha 2010
617	<i>R. dolichospora</i> Malme #	C	Cr	Kumar et al. 2021
618	<i>R. intrusa</i> (Nyl.) Malme	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
619	<i>R. mackenziei</i> Räsänen	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
620	<i>R. sophodes</i> (Ach.) A. Massal.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Pilocarpaceae</b>				
621	<i>Bapalmua palmularis</i> (Müll. Arg.) Sérus.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
622	<i>Brasilicia olivaceorufa</i> (Vain.) Farkas. ≡ <i>Bacidia olivaceorufa</i> Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
623	<i>Byssolecania deplanata</i> (Müll. Arg.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
624	<i>B. fumosonigricans</i> (Müll. Arg.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
625	<i>Byssoloma chlorinum</i> (Vain.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
626	<i>B. leucoblepharum</i> (Nyl.) Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
627	<i>B. polychromum</i> (Müll. Arg.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
628	<i>B. subdiscordans</i> (Nyl.) P. James	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
629	<i>B. tricholomum</i> (Mont.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
630	<i>Calopadia fusca</i> (Müll. Arg.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
631	<i>C. nymanii</i> (R. Sant.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
632	<i>C. perpallida</i> (Nyl.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
633	<i>C. puiggarii</i> (Müll. Arg.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
634	<i>C. subcoeruleascens</i> (Zahlbr.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
635	<i>Fellhanera bouteillei</i> (Desm.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

636	<i>F. fuscatula</i> (Müll. Arg.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
637	<i>Fellhanera mastothallina</i> (Vain.) Lücking & Sérus. ≡ <i>Bacidina mastothallina</i> (Vain.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
638	<i>F. raphidophylli</i> (Rehm) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
639	<i>F. semecarpi</i> (Vain.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
640	<i>Lasioloma arachnoideum</i> (Kremp.) R. Sant.	F	Cr	Singh et al. 2015 A, Bajpai et al. 2022
641	<i>L. phycophilum</i> (Vain.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
642	<i>Leimonis lynceola</i> (Th. Fr.) Aptroot = <i>Micarea excipulata</i> Coppins	C	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022
643	<i>Loflammia gabrielis</i> (Müll. Arg.) Vězda	F	Cr	Singh et al. 2015 A, Bajpai et al. 2022
644	<i>L. intermedia</i> (R. Sant.) Vězda	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
645	<i>Sporopodium argillaceum</i> (Müll. Arg.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
646	<i>S. awasthianum</i> Kr.P. Singh & Pinokiyo	F	Cr	EN Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
647	<i>S. phyllocharis</i> (Mont.) A. Massal.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
648	<i>S. xantholeucum</i> (Müll. Arg.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
649	<i>Tapellaria bilimbioides</i> R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
650	<i>T. epiphylla</i> (Müll. Arg.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
651	<i>T. moelleri</i> (Henriq. ex Nyl.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
652	<i>T. nana</i> (Fée) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
653	<i>T. nigrata</i> (Müll. Arg.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
654	<i>T. saxicola</i> Vězda & Poelt	S	Cr	Bajpai et al. 2022
	<b>Pyrenulaceae</b>			
655	<i>Anthracothecium assamense</i> (Stirt.) Ajay Singh #	C	Cr	Singh and Sinha 2010, Dubey 2010
656	<i>A. badioatrum</i> Ajay Singh #	C	Cr	Singh and Sinha 2010
657	<i>A. bengalense</i> Ajay Singh #	C	Cr	Singh and Sinha 2010
658	<i>A. borbonicum</i> (Nyl.) Müll. Arg #	C	Cr	Singh and Sinha 2010, Dubey 2010
659	<i>A. himalayense</i> (Räsänen) D.D. Awasthi #	C	Cr	Singh and Sinha 2010
660	<i>A. indicum</i> Ajay Singh #	C	Cr	Singh and Sinha 2010, Dubey 2010
661	<i>A. interlatens</i> (Nyl.) Aptroot	C	Cr	Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

662	<i>A. macrosporum</i> (Hepp) Mull. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
663	<i>A. maculatum</i> Nagarkar & Patw. #	C	Cr	Singh and Sinha 2010
664	<i>A. manipurensis</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010, Dubey 2010
665	<i>A. oculatum</i> Müll. Arg. ≡ <i>Pyrenula neocolubata</i> Aptroot	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022
666	<i>A. prasinum</i> (Eschw.) R.C. Harris	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
667	<i>A. pseudohimalayense</i> Ajay Singh #	C	Cr	Singh and Sinha 2010
668	<i>A. thwaitesii</i> (Leight.) Müll. Arg. #	C	Cr	Singh and Sinha 2010, Dubey 2010
669	<i>Lithothelium hyalosporum</i> (Nyl.) Aptroot	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
670	<i>L. obtectum</i> (Müll. Arg.) Aptroot	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
671	<i>Pyrenula aggregata</i> (Fée) Fée	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
672	<i>P. andina</i> Aptroot	C	Cr	Bajpai et al. 2022
673	<i>P. anomala</i> (Ach.) Vain.	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022
674	<i>P. approximata</i> Vain. #	C	Cr	Singh and Sinha 2010
675	<i>P. aspistea</i> (Afzel. ex Ach.) Ach.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
676	<i>P. awasthii</i> G.K. Mishra, S. Nayaka & D.K. Upreti	C	Cr	Mishra et al. 2022 C, Bajpai et al. 2022
677	<i>P. bahiana</i> Malme	C	Cr	Bajpai et al. 2022
678	<i>P. balia</i> (Kremp.) R.C. Harris	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
679	<i>P. bilirana</i> Vain. #	C	Cr	Singh and Sinha 2010
680	<i>P. breutelii</i> (Müll. Arg.) Aptroot	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
681	<i>P. brunnea</i> Fée	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
682	<i>P. castanea</i> (Eschw.) Müll. Arg.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
683	<i>P. cayennensis</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010
684	<i>P. cinereovelata</i> Vain. #	C	Cr	Singh and Sinha 2010
685	<i>P. citrifolmis</i> R.C. Harris #	C	Cr	Singh and Sinha 2010
686	<i>P. complanata</i> (Mont.) Trevis.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
687	<i>P. costaricensis</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010, Dubey 2010
688	<i>P. cruenta</i> (Mont.) Vain.	C	Cr	Bajpai et al. 2022
689	<i>P. decumbens</i> (Müll. Arg.) Upreti = <i>Lithothelium decumbens</i> (Müll. Arg.) Aptroot	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
690	<i>P. defossa</i> Müll. Arg. #	C	Cr	Dubey 2010
691	<i>P. dermatodes</i> (Borrer) Schaer.	C	Cr	Bajpai et al. 2022
692	<i>P. dissimilans</i> (Müll. Arg.) R.C. Harris	C	Cr	Bajpai et al. 2022
693	<i>P. duplicans</i> (Nyl.) Aptroot	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
694	<i>P. ectypa</i> (Kremp.) Zahlbr. #	C	Cr	Singh and Sinha 2010
695	<i>P. fetivica</i> (Kremp.) Müll. Arg.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
696	<i>P. finitima</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010

An Updated Checklist of Lichens from Arunachal Pradesh, India

697	<i>P. fuscoolivacea</i> Vain. #	C	Cr	Singh and Sinha 2010	
698	<i>P. fuscolorida</i> Vain. #	C	Cr	Singh and Sinha 2010, Dubey 2010	
699	<i>P. glabrescens</i> Vain. #	C	Cr	Singh and Sinha 2010	
700	<i>P. globifera</i> (Eschw.) Aptroot	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
701	<i>P. immersa</i> Müll. Arg. #	C	Cr	Dubey 2010	
702	<i>P. immissa</i> (Stirt.) Zahlbr.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022	
703	<i>P. impressa</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010	
704	<i>P. interducta</i> (Nyl.) Zahlbr.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022	
705	<i>P. introducta</i> (Stirt.) Zahlbr. #	C	Cr	Dubey 2010	
706	<i>P. leucostoma</i> Ach. #	C	Cr	Singh and Sinha 2010	
707	<i>P. leucotrypa</i> (Nyl.) Upreti	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
708	<i>P. limae</i> Vain. #	C	Cr		Singh and Sinha 2010, Dubey 2010
709	<i>P. macularis</i> (Zahlbr.) R.C. Harris #	C	Cr	Singh and Sinha 2010	
710	<i>P. mamillana</i> (Ach.) Trevis.	C	Cr	Dubey 2010, Bajpai et al. 2022	
711	<i>P. maravalensis</i> Vain.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
712	<i>P. massariospora</i> (Starbäck) R.C. Harris	C	Cr	Bajpai et al. 2022	
713	<i>P. mastophoriza</i> (Nyl.) Zahlbr. #	C	Cr	Dubey 2010	
714	<i>P. mastophorizans</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010	
715	<i>P. minarum</i> Vain.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022	
716	<i>P. nodulata</i> (Stirt.) Zahlbr. #	C	Cr	Singh and Sinha 2010	
717	<i>P. nuda</i> Ajay Singh & Upreti #	C	Cr	Singh and Sinha 2010, Dubey 2010	
718	<i>P. oculata</i> Ajay Singh & Upreti	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
719	<i>P. oculifera</i> Vain. #	C	Cr	Singh and Sinha 2010	
720	<i>P. papillifera</i> (Nyl.) Aptroot	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
721	<i>P. pinguis</i> Fée #	C	Cr	Singh and Sinha 2010	
722	<i>P. platystoma</i> (Müll. Arg.) Aptroot ≡ <i>Anthracothecium platystomum</i> Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
723	<i>P. punctella</i> (Nyl.) Trevis.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
724	<i>P. pyrenuloides</i> (Mont.) R.C. Harris	C	Cr	Singh and Sinha 2010, Bajapai et al. 2022	
725	<i>P. quassiicola</i> Fée	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
726	<i>P. santensis</i> (Nyl.) Müll. Arg. #	C	Cr	Singh and Sinha 2010	
727	<i>P. scutata</i> (Stirt.) Zahlbr.	C	Cr	Bajpai et al. 2022	
728	<i>P. subacutalis</i> Upreti #	C	Cr	Singh and Sinha 2010	
729	<i>P. subaggregata</i> Müll. Arg. #	C	Cr	Singh and Sinha 2010, Dubey 2010	
730	<i>P. subelliptica</i> (Tuck.) R.C. Harris	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
731	<i>P. subglabrata</i> (Nyl.) Müll. Arg.	C	Cr	Rajaprabu et al. 2021, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

732	<i>P. sublaevigata</i> (Patw. & Makhija) Upreti	C	Cr	EN	Singh and Sinha 2010, Bajpai et al. 2022
733	<i>P. subnitidella</i> (Nyl.) Müll. #	C	Cr		Singh and Sinha 2010
734	<i>P. subumbilicata</i> (C. Knight) Aptroot #	C	Cr		Singh and Sinha 2010
735	<i>P. thailandica</i> Aptroot	C	Cr		Singh et al. 2015 A, Aptroot et al. 2012, Sinha et al. 2018, Bajpai et al. 2022
736	<i>P. zeylanica</i> Upreti & Ajay Singh	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
737	<i>Pyrgillus cubanus</i> Nyl.	C	Cr		Singh et al. 2015 A, Singh and Singh 2012, Sinha et al. 2018, Bajpai et al. 2022
738	<i>P. javanicus</i> (Mont. & Bosch) Nyl.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
739	<i>P. tibellii</i> Kr.P. Singh & Pushpi Singh	C	Cr	EN	Singh et al. 2015 A, Singh and Singh 2012, Sinha et al. 2018, Bajpai et al. 2022
<b>Ramalinaceae</b>					
740	<i>Bacidia alutacea</i> (Kremp.) Zahlbr.	C	Cr		Bajpai et al. 2022
741	<i>B. heterochroa</i> (Müll. Arg.) Zahlbr.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
742	<i>B. laurocerasi</i> (Delise ex Duby) Zahlbr.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
743	<i>B. millegrana</i> (Taylor) Zahlbr.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
744	<i>B. nigrofusca</i> (Müll. Arg.) Zahlbr.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
745	<i>B. personata</i> Malme	C	Cr		Bajpai et al. 2018 A, Bajpai et al. 2022
746	<i>B. rubella</i> (Hoffm.) A. Massal.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
747	<i>B. submedialis</i> (Nyl.) Zahlbr.	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
748	<i>Bacidina apiahica</i> (Müll. Arg.) Vězda	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
749	<i>B. medialis</i> (Tuck. ex Nyl.) Kistenich, Timdal, Bendiksby & S. Ekman ≡ <i>Bacidia medialis</i> (Tuck.) Zahlbr.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
750	<i>B. pallidocarnea</i> (Müll. Arg.) Vězda	F	Cr		Singh and Sinha 2010, Bajpai et al. 2022
751	<i>Bacidiopsora psorina</i> (Nyl.) Kalb	C	Cr		Singh and Sinha 2010, Bajpai et al. 2022
752	<i>Badimia galbinea</i> (Kremp.) Vězda	F	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
753	<i>Biatora subduplex</i> (Nyl.) Printzen	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
754	<i>B. vernalis</i> (L.) Fr.	C	Cr		Singh et al. 2015 A, Bajpai et al. 2022
755	<i>Megalaria laureri</i> (Hepp ex Th. Fr.) Hafellner	C	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
756	<i>Mycobilimbia hunana</i> (Zahlbr.) D.D. Awasthi	S	Cr		Singh et al. 2015 A, Bajpai et al. 2022
757	<i>M. philippina</i> (Vain.) D.D. Awasthi	T	Cr		Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
758	<i>Phyllopsora albicans</i> Müll. Arg.	C	Sq		Mishra et al. 2011, Sinha et al. 2018, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

759	<i>P. corallina</i> (Eschw.) Müll. Arg.	C	Sq	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
760	<i>Ramalina conduplicans</i> Vain	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Bajpai et al. 2022
761	<i>R. himalayensis</i> Räsänen #	C	Fr	Rana et al. 2015
762	<i>R. hossei</i> Vain.	S	Fr	Bajpai et al. 2018 A, Rana et al. 2015, Debnath et al. 2018, Bajpai et al. 2022
763	<i>R. nervulosa</i> (Müll. Arg.) Abbayes	C	Fr	Bajpai et al. 2022
764	<i>R. pacifica</i> Asahina	C	Fr	Bajpai et al. 2022
765	<i>R. pollinaria</i> (Westr.) Ach.	C	Fr	Rana et al. 2015, Bajpai et al. 2022
766	<i>R. roesleri</i> (Hochst. ex Schaer.) Hue	C	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
767	<i>R. sinensis</i> Jatta	C	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Rana et al. 2015, Debnath et al. 2018, Bajpai et al. 2022
<b>Ramboldiaceae</b>				
768	<i>Ramboldia brunneocarpa</i> Kantvilas & Elix	C	Cr	Bajpai et al. 2022
769	<i>R. russula</i> (Ach.) Kalb, Lumbsch & Elix	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
<b>Rhizocarpaceae</b>				
770	<i>Rhizocarpon geographicum</i> (L.) DC.	S	Cr	Singh et al. 2015 A, Khare et al. 2010, Debnath et al. 2018, Bajpai et al. 2022
<b>Roccellaceae</b>				
771	<i>Chiodecton congestulum</i> Nyl.	C	Cr	Bajpai et al. 2022
772	<i>C. leptosporum</i> Müll. Arg.	C	Cr	Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
773	<i>Erythrodection malacum</i> (Kremp.) G. Thor	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
774	<i>Graphidastrum byssiseda</i> (Müll. Arg.) G. Thor	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
775	<i>Mazosia bambusae</i> (Vain.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
776	<i>M. melanophthalma</i> (Müll. Arg.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
777	<i>M. paupercula</i> (Müll. Arg.) R. Sant.	F	Cr	Singh and Sinha 2010, Bajpai et al. 2022
778	<i>M. phylloosema</i> (Nyl.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
779	<i>M. rotula</i> (Mont.) A. Massal.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
780	<i>M. tumidula</i> (Müll. Arg.) Zahlbr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Sphaerophoraceae</b>				
781	<i>Bunodophoron australe</i> (Laurer) A. Massal.	C	Fr	Bajpai et al. 2022
782	<i>B. formosanum</i> (Zahlbr.) Wedin	C	Fr	Singh and Sinha 2010, Bajpai et al. 2022
783	<i>B. macrocarpum</i> (Ohlsson) Wedin	C	Fr	Singh and Sinha 2010, Bajpai et al. 2022
<b>Stereocaulaceae</b>				

An Updated Checklist of Lichens from Arunachal Pradesh, India

784	<i>Lepraria caesioalba</i> (B. de Lesd.) J.R. Laundon #	C	Cr	Singh et al. 2015 A
785	<i>L. cupressicola</i> (Hue) J.R. Laundon	C/S	Cr	Bajpai et al. 2018 B, Bajpai et al. 2022
786	<i>L. isidiata</i> (Llimona) Llimona & A. Crespo	T/S	Cr	Bajpai et al. 2018 B, Bajpai et al. 2022
787	<i>L. lobificans</i> Nyl.	C/S	Cr	Singh et al. 2015 A, Bajpai et al. 2022
788	<i>Stereocaulon alpinum</i> Laurer	S	Fr	Bajpai et al. 2018 A, Debnath et al. 2018, Bajpai et al. 2022
789	<i>S. foliolosum</i> Nyl.	S/T	Fr	Bajpai et al. 2018 A, Singh and Sinha 2010, Debnath et al. 2018, Bajpai et al. 2022
790	<i>S. foliolosum</i> var. <i>foliolosum</i> Nyl.	S	Fr	Bajpai et al. 2022
791	<i>S. glareosum</i> (Savicz) H. Magn.	S/T	Fr	Bajpai et al. 2022
792	<i>S. himalayense</i> D.D. Awasthi & I.M. Lamb	S/T	Fr	Debnath et al. 2018, Bajpai et al. 2022
793	<i>S. macrocephalum</i> Müll. Arg.	S/T	Fr	Bajpai et al. 2018 A, Bajpai et al. 2022
794	<i>S. massartianum</i> Hue	S/T	Fr	Singh and Sinha 2010, Bajpai et al. 2022
795	<i>S. myriocarpum</i> Th. Fr.	T	Fr	Bajpai et al. 2022
796	<i>S. piluliferum</i> Th. Fr.	S/T	Fr	Singh and Sinha 2010, Bajpai et al. 2022
797	<i>S. pomiferum</i> P.A. Duvign.	T	Fr	Bajpai et al. 2022
798	<i>S. togashii</i> I.M. Lamb	S	Fr	Singh and Sinha 2010
	<b>Strigulaceae</b>			
799	<i>Phyllobathelium indicum</i> G.P. Sinha & Kr.P. Singh	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
800	<i>Phyllocharis orbicularis</i> (Fr.) S.H. Jiang, Lücking & Sérus. ≡ <i>Strigula orbicularis</i> Fr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
801	<i>Puiggariella hypothelia</i> (Nyl.) S.H. Jiang, Lücking & Sérus. ≡ <i>Strigula nemathora</i> f. <i>hypothelia</i> (Nyl.) Lücking	F	Cr	Singh et al. 2015 A, Bajpai et al. 2022
802	<i>P. nemathora</i> (Mont.) S.H. Jiang, Lücking & J.C. Wei ≡ <i>Strigula nemathora</i> Mont.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
803	<i>Racoplasca maculata</i> (Cooke & Massee) S.H. Jiang, Lücking & J.C. Wei ≡ <i>Strigula maculata</i> (Cooke & Massee) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
804	<i>R. melanobapha</i> (Kremp.) S.H. Jiang, Lücking & J.C. Wei ≡ <i>Strigula melanobapha</i> (Kremp.) R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
805	<i>Strigula antillarum</i> (Fée) Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
806	<i>S. concreta</i> (Fée) R. Sant.	F	Cr	Singh et al. 2015 A, Bajpai et al. 2022
807	<i>S. janeirensis</i> (Müll. Arg.) Lücking	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
808	<i>S. multipunctata</i> (G. Merr. ex R. Sant.) R.C. Harris	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022

An Updated Checklist of Lichens from Arunachal Pradesh, India

809	<i>S. nitidula</i> Mont.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
810	<i>S. phyllogena</i> (Müll. Arg.) R.C. Harri	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
811	<i>S. smaragdula</i> Fr.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
812	<i>S. subelegans</i> Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
813	<i>S. subtilissima</i> (Fée) Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Teloschistaceae</b>				
814	<i>Athallia alnetorum</i> (Giralt, Nimis & Poelt) Arup, Frödén & Søchting ≡ <i>Caloplaca alnetorum</i> Giralt, Nimis & Poelt	C	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022
815	<i>Blastenia ferruginea</i> (Huds.) A. Massal. ≡ <i>Caloplaca ferruginea</i> (Huds.) Th. Fr.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
816	<i>Calogaya saxicola</i> (Hoffm.) Vondrák ≡ <i>Caloplaca saxicola</i> (Hoffm.) Nordin	S	Cr	Singh et al. 2015 A, Bajpai et al. 2022
817	<i>C. brebissonii</i> (Fée) J. Sant. ex Hafellner & Poelt	C	Cr	Singh et al. 2015 A
818	<i>C. cerina</i> (Hedw.) Th. Fr.	C	Cr	Bajpai et al. 2022
819	<i>C. handelii</i> (Zahlbr.) D.D. Awasthi	S	Cr	Singh et al. 2015 A, Bajpai et al. 2022
820	<i>C. herbidella</i> (Hue) H. Magn. ≡ <i>Blastenia herbidella</i> (Hue) Servit	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
821	<i>C. indica</i> Y. Joshi, Jagad. Ram & G.P. Sinha <i>Huneckia pollinii</i> (A. Massal.) S.Y. Kondr., Kärnefelt, Elix, A. Thell, Jung Kim, A.S. Kondr. & Hur. ≡ <i>Caloplaca pollinii</i> (A. Massal.) Jatta	S	Cr	EN Singh et al. 2015 A, Joshi et al. 2013, Sinha et al. 2018, Bajpai et al. 2022
822	<i>Opeltia flavorubescens</i> (Huds.) S.Y. Kondr. & Hur ≡ <i>Caloplaca flavorubescens</i> (Huds.) J.R. Laundon	C	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022
823	<i>Oxneriopsis bassiae</i> (Ach.) S.Y. Kondr., Upreti & Hur ≡ <i>Caloplaca bassiae</i> (Ach.) Zahlbr.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
824	<i>Teloschistes flavicans</i> (Sw.) Norman	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Tephromelataceae</b>				
826	<i>Mycoblastus affinis</i> (Schaer.) T. Schauer	C	Cr	Singh et al. 2015 A, Singh and Singh 2015, Sinha et al. 2018, Bajpai et al. 2022
<b>Thelenellaceae</b>				
827	<i>Aspidothelium scutellicarpum</i> var. <i>indicum</i> Kr.P. Singh & Pinokiyo	F	Cr	EN Singh and Sinha 2010, Bajpai et al. 2022
<b>Thelotremaeae</b>				

An Updated Checklist of Lichens from Arunachal Pradesh, India

828	<i>Thelotrema allosporoides</i> Nyl. ≡ <i>Ocellularia allosporoides</i> (Nyl.) Patw. & Kulk.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
<b>Trapeliaceae</b>					
829	<i>Trapelia involuta</i> (Taylor) Hertel #	S	Cr	Dubey 2010	
830	<i>Trapeliopsis wallrothii</i> (Flörke) Hertel & Gotth. Schneid	T	Cr	Bajpai et al. 2018 A, Bajpai et al. 2022	
<b>Trichotheliaceae</b>					
831	<i>Clathroporina mastoidea</i> (Ach.) R.C. Harris ≡ <i>Porina mastoidea</i> (Ach.) Müll. Arg. #	C	Cr	Dubey 2010	
832	<i>P. albicera</i> (Kremp.) Overeem & D. Overeem	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
833	<i>P. andamanica</i> Makhija, Adaw. & Patw.	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
834	<i>P. appланata</i> Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
835	<i>P. atriceps</i> (Vain.) Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
836	<i>P. atroperiostiola</i> Makhija, Adaw. & Patw	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
837	<i>P. belonospora</i> (Nyl.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
838	<i>P. chrysophora</i> (Stirt.) R. Sant. = <i>Porina kamerunensis</i> F. Schill.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
839	<i>P. conica</i> R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
840	<i>P. cupreola</i> (Müll. Arg.) F. Schill.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
841	<i>P. desquamescens</i> Féé #	C	Cr	Dubey 2010	
842	<i>P. epiphylla</i> Féé	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
843	<i>P. fulvella</i> Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
844	<i>P. glaucoflava</i> Makhija, Adaw. & Patw.	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
845	<i>P. halei</i> Makhija, Adaw. & Patw	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
846	<i>P. imitatrix</i> Müll. Arg.	F	Cr	Singh and Sinha 2010, Bajpai et al. 2022	
847	<i>P. indica</i> Makhija, Adaw. & Patw. #	C	Cr	Dubey 2010	
848	<i>P. internigrans</i> (Nyl.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
849	<i>P. interstes</i> (Nyl.) Harm. #	C	Cr	Dubey 2010	
850	<i>P. karnatakensis</i> Makhija, Adaw. & Patw.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
851	<i>P. limbulata</i> (Kremp.) Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
852	<i>P. lucida</i> R. Sant.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	

An Updated Checklist of Lichens from Arunachal Pradesh, India

853	<i>P. luteopallens</i> (Nyl.) Zahlbr.	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022
854	<i>P. mastoidella</i> (Nyl.) Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
855	<i>P. monocarpa</i> (Kremp.) F. Schill.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
856	<i>P. napensis</i> Lücking	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A
857	<i>P. pallescens</i> R. Sant.	F	Cr	Singh and Sinha 2010
858	<i>P. pulchella</i> Müll. Arg. #	C	Cr	Dubey 2010
859	<i>P. rufula</i> (Kremp.) Vain.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
860	<i>P. subcutanea</i> Ach. #	C	Cr	Singh and Sinha 2010, Dubey 2010
861	<i>P. subhibernica</i> Upreti	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
862	<i>P. subinterstes</i> (Nyl.) Müll. Arg.	S	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
863	<i>P. tetracerae</i> (Ach.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
864	<i>P. tetramera</i> (Malme) R. Sant.	F	Cr	Singh and Sinha 2010, Bajpai et al. 2022
865	<i>P. tijucana</i> Vain.	S	Cr	Singh et al. 2015 A, Sinha et al. 2018, Bajpai et al. 2022
866	<i>P. trichothelioides</i> R. Sant.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
867	<i>P. virescens</i> (Kremp.) Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
868	<i>Pseudosagedia aenea</i> (Körb.) Hafellner & Kalb ≡ <i>Porina aenea</i> (Körb.) Zahlbr.	C	Cr	Singh and Sinha 2010, Bajpai et al. 2022
869	<i>P. atrocoerulea</i> (Müll. Arg.) Hafellner & Kalb ≡ <i>Porina atrocoerulea</i> Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
870	<i>P. nitidula</i> (Müll. Arg.) Hafellner & Kalb ≡ <i>Porina nitidula</i> Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
871	<i>Trichothelium alboatrum</i> Vain.	F	Cr	Singh and Sinha 2010, Dubey 2010, Bajpai et al. 2022
872	<i>T. epiphyllum</i> Müll. Arg.	F	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
<b>Trypetheliaceae</b>				
873	<i>Astrothelium luridum</i> (Zahlbr.) Aptroot & Lücking	C	Cr	Bajpai et al. 2022
874	<i>A. macrosporum</i> (Makhija & Patw.) Aptroot & Lücking	C	Cr	Bajpai et al. 2022
875	<i>A. megaspernum</i> (Mont.) Aptroot & Lücking ≡ <i>Laurera megasperma</i> (Mont.) Riddle	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022
876	<i>A. meghalayense</i> (Makhija & Patw.) Pushpi Singh & Kr.P. Singh ≡ <i>Trypethelium meghalayense</i> Makhija & Patw. #	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A

An Updated Checklist of Lichens from Arunachal Pradesh, India

	<i>A. meristosporum</i> (Mont. & Bosch) Aptroot & Lücking ≡ <i>Laurera meristospora</i> (Mont. & Bosch) Zahlbr.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
877	<i>A. pupula</i> (Ach.) Aptroot & Lücking ≡ <i>Pseudopyrenula pupula</i> (Ach.) Müll. Arg. #	C	Cr	Singh and Sinha 2010	
878	<i>A. scoria</i> (Fée) Aptroot & Lücking	C	Cr	Bajpai et al. 2022	
879	<i>A. subnitidiusculum</i> (Makhija & Patw.) Pushpi Singh & Kr.P. Singh ≡ <i>Trypethelium subnitidiusculum</i> Makhija & Patw.	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
880	<i>Bogoriella conothelena</i> (Nyl.) Aptroot & Lücking ≡ <i>Mycomicrothelia conothelena</i> (Nyl.) D. Hawksw.	C	Cr	EN	Singh et al. 2015 A, Bajpai et al. 2022
881	<i>Macroconstrictolumina majuscula</i> (Nyl.) Lücking, R. Miranda & Aptroot ≡ <i>Arthopyrenia majuscula</i> (Nyl.) Zahlbr.	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
882	<i>Nigrovothelium tropicum</i> (Ach.) Lücking, M.P. Nelsen & Aptroot ≡ <i>Trypethelium tropicum</i> (Ach.) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022	
883	<i>Polymeridium albopruinosum</i> (Makhija & Patw.) Aptroot ≡ <i>Trypethelium albopruinosum</i> Makhija & Patw.	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
884	<i>Pseudopyrenula diluta</i> (Fée) Müll. Arg.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
885	<i>P. subnudata</i> Müll. Arg.,	C	Cr	Singh et al. 2015 A, Bajpai et al. 2022	
886	<i>Trypethelium dichroum</i> Makhija & Patw.	C	Cr	EN	Singh and Sinha 2010, Bajpai et al. 2022
887	<i>T. eluteriae</i> Spreng.	C	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022	
888	<i>T. inaequale</i> Fée	C	Cr	EN	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022
	<b>Umbilicariaceae</b>				
890	<i>Umbilicaria indica</i> Frey	S	Fo	Bajpai et al. 2018 A, Singh and Sinha 2010, Khare et al. 2010, Debnath et al. 2018, Bajpai et al. 2022	
891	<i>U. vellea</i> (L.) Michx. #	S	Fo	Debnath et al. 2018	
892	<i>U. yunnana</i> (Nyl.) Hue	S	Fo	Singh and Sinha 2010, Bajpai et al. 2022	
	<b>Varicellariaceae</b>				
893	<i>Varicellaria velata</i> (Turner) I. Schmitt & Lumbsch ≡ <i>Pertusaria velata</i> (Turner) Nyl.	C	Cr	Bajpai et al. 2022	
	<b>Verrucariaceae</b>				
894	<i>Agonimia tristicula</i> (Nyl.) Zahlbr	T	Sq	Upreti et al. 2013, Sinha et al. 2018, Bajpai et al. 2022	
895	<i>Dermatocarpon vellereum</i> Zschacke #	S	Cr	Debnath et al. 2018	
896	<i>Parmentaria toowoombensis</i> Müll. Arg. ≡ <i>Anthracothecium toowoombense</i> (Müll. Arg.) Aptroot #	C	Cr	Singh and Sinha 2010	

## An Updated Checklist of Lichens from Arunachal Pradesh, India

897	<i>P. verrucosareolata</i> Makhija & Patw. #	C	Cr	Singh and Sinha 2010
898	<i>Phylloblastia dolichospora</i> Vain.	F	Cr	Singh and Sinha 2010, Bajpai et al. 2022
899	<i>Staurothele clopima</i> (Wahlenb. ex Ach.) Th. Fr.	S	Cr	Singh et al. 2015 A, Dubey 2010, Bajpai et al. 2022
900	<i>Verrucaria aethiobola</i> Wahlenb. ex Ach.	S	Cr	Bajpai et al. 2022
901	<i>V. coerulea</i> DC.	S	Cr	Singh et al. 2015 A, Bajpai et al. 2022
902	<i>V. laevata</i> Ach. #	S	Cr	Dubey 2010
903	<i>V. transiliens</i> (Arnold) Lettau	S	Cr	Singh and Sinha 2010, Singh et al. 2015 A, Bajpai et al. 2022

(Abbreviations: # addition to list of Bajpai et al. (2022), C = corticolous, F = foliicolous, S = saxicolous, T = terricolous, M = muscicolous, Cr = crustose, Fo = foliose, Fr = fruticose, Di = dimorphic, Sq = squamulose, EN = Endemic)

## CONCLUSION

The updated list of lichens with 903 species indicates that Arunachal Pradesh supports a rich diversity of lichens. It can be noted that most of the collections so far are taken from tourist places or easily accessible places. Arunachal Pradesh has 25 districts and to date, collections have been done from 17 districts, while there are no representative collections from districts such as Kamle, Kra Daadi, Kurung Kumey, Leparada, Longding, Pakke Kessang, Shi Yomi and Siang (Fig. 1). The study of lichens in the unexplored states could lead to significant increase in the total number and discovery of several interesting species.

## ACKNOWLEDGMENTS

The authors are thankful to Director, CSIR-National Botanical Research Institute, Lucknow, for providing infrastructure facilities; to the Science and Engineering Research Board (SERB), New Delhi for financial assistance (CRG/2021/002263); to the Department of Environment and Forests, Itanagar for permission to access forest of Arunachal Pradesh and to all previous collectors who have deposited the lichen specimens in herbarium LWG.

## REFERENCES

- Aptroot A, Schumm F and Cáceres MES (2012). Six new species of *Pyrenula* from the tropics. *Lichenologist* 44(5): 611–618. <https://doi.org/10.1017/s0024282912000254>
- Awasthi DD (1961). Some foliose and fruticose lichens from Assam and North-East Frontier Agency of India. *Proceedings of the Indian Academy of Sciences, Section B* 54: 24–44.
- Bajpai R, Singh CP, Tripathi OP, Paul RR and Upreti DK (2022). Estimating lichen diversity of Arunachal Pradesh, India along with new records for the country. *Nelumbo* 64(2): 57–80. <https://doi.org/10.20324/nelumbo/v64/2022/171964>
- Bajpai R, Shukla V, Singh CP, Tripathi OP, Nayaka S and Upreti DK (2018 A). Lichen community composition in Tawang district of Arunachal Pradesh, tool for long-term climate change monitoring. *Proceedings of the National Academy of Sciences, India. Section B*, 88(3): 915–922. <https://doi.org/10.1007/s40011-016-0830-z>
- Bajpai R, Upreti DK and Nayaka S (2018 B). The lichen genera *Lepraria* (Stereocaulaceae) and *Leprocaulon* (Leprocaulaceae) in India. *Phytotaxa* 356(2): 101–116. <https://doi.org/10.11646/phytotaxa.356.2.1>
- Das K, Rossi W, Leonardi M, Ghosh A, Bera I, Hembrom ME, Bajpai R, Joseph S, Nayaka S, Upreti DK, Wang XH, Hofstetter V and Buyck B (2018). Fungal Biodiversity Profiles 61–70. *Cryptogamie. Mycologie* 39(4): 381–418. <https://doi.org/10.7872/crym/v39.iss4.2018.381>
- Debnath R, Khare R, Gogoi L, Upreti DK and Rout J (2018). New additions of macrolichens to the lichen flora of Arunachal Pradesh, India in Eastern Himalaya. *Studies in Fungi* 3(1): 100–114. <https://doi.org/10.5943/sif/3/1/12>
- Dubey U, Upreti DK and Rout J (2007). Lichen flora of Along town, West Siang district, Arunachal Pradesh. *Phytotaxonomy* 7: 21–26.
- Dubey U (2010). *Assessment of lichen diversity and distribution for prospecting the ecological and economic potential of lichens in and around along town West Siang district Arunachal Pradesh*. PhD Thesis - Assam University <http://hdl.handle.net/10603/90606>
- Joshi S, Upreti DK and Nayaka S (2012). Two new species in the lichen genus *Phlyctis* (Phlyctidaceae) from India. *Lichenologist* 44(3): 363–369. <https://doi.org/10.1017/S0024282911000879>
- Khare R, Rai H, Upreti DK, Dubey U and Gupta RK (2010). Occurrence of rare, crustose lichen, *Ophioparma ventosa* (Ophioparmaceae, lichenized Ascomycota), from alpine regions of Arunachal Pradesh, India. *Feddes Repertorium* 121(5–6): 184–188. <https://doi.org/10.1002/fedr.201000029>
- Kumar V, Ngangom R, Nayaka S and Ingle KK (2021). New species and new records in the lichen genus *Rinodina* (Physciaceae) from India. *Taiwania* 66(2): 193–202. <https://doi.org/10.6165/tai.2021.66.193>
- McCune B, Divakar PK and Upreti DK (2012). *Hypogymnia* in the

## An Updated Checklist of Lichens from Arunachal Pradesh, India

- Himalayas of India and Nepal. *Lichenologist* 44(5): 595–609. <https://doi.org/10.1017/s0024282912000321>
- Mishra GK, Maurya P and Upreti DK (2022 B). *Cetrelia isidiata* (Asahina) W.L. Culb. & C.F. Culb. (Parmeliaceae) – an addition to the Indian lichen biota. *Journal of Threatened Taxa* 14(7): 21467–21469. <https://doi.org/10.11609/jott.7891.14.7.21467-21469>
- Mishra GK, Nayaka S, Upreti DK and Bajpai R (2022 C). *Pyrenula awasthii* sp. nov., containing Lichenoxanthone and Antraquonone from India. *Cryptogam Biodiversity Assessment* 6(1): 14–16.
- Mishra GK, Nayaka S, Upreti DK, Kondratyuk SY, Thell A and Kärnefelt I (2022 A). Cetrarioid lichens from India revised, including *Nephromopsis awasthii* sp. nov. and new records. *Mycotaxon* 137(2): 283–334. <https://doi.org/10.5248/137.283>
- Nayaka S and Debnath A (2023). *Cyphelostereum indicum* (Hygrophoraceae), a new species of basidiolichen from India. *Phytotaxa* 603(3): 271–279. <https://doi.org/10.11646/phytotaxa.603.3.6>
- Pinokiyo A, Singh KP and Singh JS (2008). Diversity and distribution of lichens in relation to altitude within a protected biodiversity hot spot, north-east India. *Lichenologist* 40(1): 47–62. <https://doi.org/10.1017/s0024282908007214>
- Rajaprabu N, Ponnurugan P and Mishra GK (2021). A new record of pyrenocarpous lichen to the Indian biota. *Journal of Threatened Taxa* 13(1): 17607–17610. <https://doi.org/10.11609/jott.6885.13.1.17607-17610>
- Ram TAMJ and Sinha GP (2011). A new species and a new record of *Herpothallon* from (lichenized Ascomycota) India. *Mycotaxon* 116(1): 313–316. <https://doi.org/10.5248/116.313>
- Rana K, Nayaka S, Shukla P and Upreti DK (2015 A). Notes on occurrence of fruticose lichens in Joram Top, Ziro Valley, Arunachal Pradesh with 10 new records to the state. *International Journal of Science and Research* 4(12): 1999–2003. <https://doi.org/10.21275/v4i12.nov152355>
- Rout J, Kar A and Upreti DK (2004 A). Lichens of Sessa Orchid Sanctuary, West Kameng, Arunachal Pradesh. *Phytotaxonomy* 4: 38–40.
- Rout J, Kar A and Upreti DK (2004 B). Traditional remedy for kidney stones from a high-altitude lichen: *Cladonia rangifera* (L.) Wigg. (Reindeer moss) of Eastern Himalaya. *Ethnobotany* 17: 164–166.
- Singh KP and Swarnalatha G (2011). A note on Graphidaceous Lichens from Arunachal Pradesh, India. *Indian Journal of Forestry* 34(3): 353–360. <https://doi.org/10.54207/bsmps1000-2011-5v923j>
- Singh KP and A Pinokiyo (2014). *Foliicolous lichens of India*. Dehradun: Bishen Singh Mehendra Pal Singh.
- Singh KP, Singh P and Sinha GP (2018). Lichen diversity in the Eastern Himalaya biodiversity hotspot region, India. *Cryptogam Biodiversity and Assessment Special Volume*: 71–114.
- Singh P, Singh K and Bhatt A (2013). New Species and New Records of Thelotremonoid Graphidaceae (Lichenized Ascomycota) from Arunachal Pradesh (India). *Taiwania* 58(4): 246–250. <https://doi.org/10.6165/TAI.2013.58.246>
- Singh P and Singh KP (2014). *Cyphelium inquinans* (Sm.) Trev. (Lichenized: Ascomycota): A new record for India. *Check List* 10(1): 178–179. <https://doi.org/10.15560/10.1.178>
- Singh P, Singh KP and Bhatt AB (2015 A). Diversity and distribution of microlichens in the state of Arunachal Pradesh, Eastern Himalaya, India. *Check List* 11(6): 1–20. <https://doi.org/10.15560/11.6.1807>
- Singh P, Singh KP and Bhatt AB (2015 B). Lichen genus *Lecanora* Ach. (lichenized Ascomycota) from Arunachal Pradesh, India. *Geophytology* 45(2): 127–128.
- Sinha GP, Nayaka S and Joseph S (2018). Additions to the checklist of Indian lichens after 2010. *Cryptogam Biodiversity and Assessment Special Volume*: 197–206. <https://doi.org/10.21756/cab.esp16>
- Upreti DK (1985 A). Studies on the lichen genus *Baeomyces* from India. *Geophytology* 15(2): 159–163.
- Upreti DK (1985 B). The lichen genus *Cladia* from India and Nepal. *Journal of Economic and Taxonomic Botany* 7(3): 722–724.
- Upreti DK, Dubey U and Nayaka S (2011). A new isidiate species of *Hemithecium* Trevis. (Ascomycota, Graphidaceae) from India. *Lichenologist* 43(5): 483–485. <https://doi.org/10.1017/s0024282911000430>
- Upreti DK, Mishra GK and Nayaka S (2013). New records of lichen genera *Agonimia* and *Baeomyces* (Ascosmycota) from India. *Geophytology* 43: 69–73.
- Wijayawardene NN, Hyde KD, Dai DQ, Sanchez-Garcia M, Goto BT, Saxena RK, Erdogan M, Selçuk F, Rajeshkumar KC, Aptroot A, Błaszkowski J, Boonyuen N, da Silva GA, de Souza FA, Dong W, Ertz D, Haelewaters D, Jones EBG, Karunarathna SC, Kirk PM, Kukwa M, Kumla J, Leontyev DV, Lumbsch HT, Maharachchikumbura SSN, Marguno F, Martínez-Rodríguez P, Mešić A, Monteiro JS, Oehl F, Pawłowska J, Pem D, Pfleigler WP, Phillips AJL, Pošta A, He MQ, Li JX, Raza M, Sruthi OP, Suetrong S, Suwannarach N, Tedersoo L, Thiyagaraja V, Tibpromma S, Tkalčec Z, Tokarev YS, Wanasinghe DN, Wijesundara DSA, Wimalaseana SDMK, Madrid H, Zhang GQ, Gao Y, Sánchez-Castro, Tang LZ, Stadler M, Yurkov A and Thines M (2022). Outline of Fungi and fungus-like taxa—2021. *Mycosphere* 13(1): 53–453. <https://doi.org/10.5943/mycosphere/13/1/2>