

Moss flora of Western Himalayas, India - An updated Checklist

Afroz Alam

Department of Bioscience and Biotechnology, Banasthali Vidyapith, Tonk- 304 022
(Rajasthan) India
afrozalamsafvi@gmail.com

Abstract: The present study is a compilation of moss flora of Western Himalayas (India). This compilation listed 745 species of mosses, belonging to 19 orders; 55 families and 230 genera. Out of these 17 species have been reported endemic from Western Himalayas. 196 species have been synonymized and status of 86 species is still doubtful i.e. unresolved name. At present out of 745 only 463 species are validly known from this mountain range of India

Keywords: Bryophyta, India, Moss, Western Himalaya.

1. Introduction

“Abodes of snow”, the Himalaya – (Him+Alya) is one of the youngest and topmost mountain ranges on the earth with many peaks as high as 7000 meters and above. It is about 2400 km in length from Afghanistan-Pakistan in the west and Namcha Barwa in the east. It varies in width between 250 to 300 km along its length. The mountain range is arc-shaped, convex southwards with syntaxial bends at the western and eastern ends (Valdiya, 1980). Its snow and ice laden peaks above 4300–5800 metre snowline including 15000 glaciers feed major rivers of the world including the Brahmaputra, Ganges and the Indus (Ahmad, 2011).

The Himalayan mountain range of India is subdivided into four principal zones, from south to north these are: the Sub-Himalaya, the Lesser Himalaya, the Higher Himalayan Crystallines and the Tethyan Himalaya. The Sub-Himalaya, also known as the Siwalik Range (250–800 m high), rises above the Indo-Gangatic Plains along the Main Frontal Thrust. The Sub-Himalaya consists predominantly of Tertiary and Quaternary sediments and is bounded to the north by northward dipping Main Boundary Thrust, separating it from the overlying Lesser Himalaya.

Overall the Macro and micro environment of this mountain range is very conducive for the growth of bryophytes, especially mosses. Hundreds of species have been reported sporadically from this range by various workers. However, there was a lack of inclusive updated record regarding moss flora of this range. This compilation work is an attempt to provide current status of the moss flora of Western Himalayas (Jammu & Kashmir, Himachal Pradesh and Uttarakhand states of India). The resources of this work include almost all previous work and reports from these regions (Chopra, 1935; Vohra, 1970; Gangulee, 1969-1980; Chopra and Kumar, 1981; Tewari and Pant, 1994; Lal, 2005; Saxena and Gangwar, 2005; Saxena et al, 2006; Saxena et al, 2007; Nath et al, 2007; Nath et al, 2008; Aziz and Vohra, 2008; Saxena and Arfeen, 2009; Singh et al., 2010; Alam

et al, 2012; Alam, 2013; Asthana and Sahu, 2013). This work aims to be all-inclusive for species of mosses. It contains a total 745 moss species along with their upper hierarchy. The list has three categories for the species names viz. accepted name, synonym and unresolved name. These categories are based on 'The Plant List' (2010) which was prepared in collaboration of the Royal Botanic Gardens, Kew and Missouri Botanical Garden by combining multiple checklist datasets held by these institutions and other collaborators. This list provides the Accepted Latin name for most species, with links to all synonyms by which that species has been known. It also includes unresolved name names for which the contributing data sources did not contain sufficient evidence to decide whether they were accepted or Synonyms.

Therefore, this compilation provides comprehensive and reorganized account on the moss flora of Western Himalayas.

2. Method

This study is fundamentally based on all previous and recent reports regarding moss flora of Western Himalayas. The orders are arranged alphabetically for feasibility. All moss species included in the list were checked against the TROPICOS database (at the Missouri Botanical Garden). A modified classification scheme of Buck and Goffinet (2000) has been used.

List of Taxa:

1. ORDER: ANDREAEALES LIMPR.

1. Family: Andreaeaceae Dum.

1. *Andreaea* Hedw.

1. *A. kashyapii* Dixon & Vohra & Wadhwa Endemic (Lal, 2005); Present status: **Synonym** of *Didymodon subandreaeoides* (Kindb.) R.H. Zander

2. *A. rupestris* Hedw. [Lal, 2005]; **Present status: Accepted name**

2. ORDER: ARCHIDIALES LIMPR.

2. Family: Archidiaceae Schimp.

2. *Archidium* Brid.

3. *A. indicum* Müll. Hal. [Lal, 2005]; **Present status: Unresolved name**

3. ORDER: BRYALES LIMPR.

3. Family: Bryaceae Schwägr

3. *Anomobryum* Schimp.

4. *A. astorensis* (Broth.) Broth. [Lal, 2005]; **Present status: Accepted name**

5. *A. auratum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**

6. *A. cymbifolium* (Lindb.) Broth. [Lal, 2005]; **Present status: Accepted name**

7. *A. filiforme* (Griff.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**

8. *A. filiforme* var. *concinatum* (Spruce) Loesk. (Asthana & Sahu, 2013); **Present status: Accepted name**

9. *A. kashmirensis* (Broth.) Broth. [Lal, 2005]; **Present status: Accepted name**

10. *A. nitidum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**

11. *A. marginatum* Dixon & Badhw. [Lal, 2005]; Present status: **Synonym** of *Bryum blandum* subsp. *handelii* (Broth.) Ochi

12. *A. pellucidum* Dixon & Badhw. (Lal, 2005); Present status: **Synonym** of *Bryum himalayanopellucidum* Ochi

4. *Brachymenium* Schwägr.

13. *B. bryoides* Hook. & Schwägr. [Lal, 2005]; **Present status: Accepted name**

14. *B. exile* (Dozy & Molk.) Bosch & Sande Lac. [Lal, 2005]; **Present status: Accepted name**

15. *B. nepalense* Hook. [Lal, 2005]; **Present status: Accepted name**
- 5. *Bryum* Hedw.**
16. *B. allionii* Broth. [Lal, 2005]; Present status: **Synonym** of *Bryum mildeanum* Jur.
17. *B. alpinum* Huds. & With. [Lal, 2005]; **Present status: Accepted name**
18. *B. alpinum* var. *mildeanum* (Jur.) Podp. (Lal, 2005); Present status: **Synonym** of *Bryum mildeanum* Jur.
19. *B. apiculata* Schwägr. [Lal, 2005]; Present status: **Synonym** of *Bryum mildeanum* Jur.
20. *B. argenteum* Hedw. [Lal, 2005]; **Present status: Accepted name**
21. *B. argenteum* var. *lanthanum* (P. Beauv.) Hampe [Lal, 2005]; Present status: **Synonym** of *Bryum argenteum* Hedw.
22. *B. atrovirens* Brid. [Lal, 2005]; **Present status: Accepted name**
23. *B. badhwarii* Ochi [Lal, 2005]; Present status: **Synonym** of *Bryum kashmirensense* Broth.
24. *B. bicolor* Dicks. [Lal, 2005]; Present status: **Synonym** of *Bryum dichotomum* Hedw.
25. *B. billardieri* Schwägr. [Lal, 2005]; **Present status: Accepted name**
26. *B. bryoides* (R. Br.) Ångström [Lal, 2005]; Present status: **Synonym** of *Bryum arcticum* (R. Br.) Bruch & Schimp.
27. *B. caespitium* Hedw. [Lal, 2005]; **Present status: Accepted name**
28. *B. capillare* Hedw. [Lal, 2005]; Present status: **Synonym** of *Ptychostomum capillare* (Hedw.) D. T. Holyoak & N. Pedersen
29. *B. cellular* Hook. [Lal, 2005]; **Present status: Accepted name**
30. *B. coronatum* Schwägr. [Lal, 2005]; **Present status: Accepted name**
31. *B. medianum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Bryum neelgheriense* var. *neelgheriense*
32. *B. muehlenbeckii* Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
33. *B. paradoxum* Schwägr. [Lal, 2005]; **Present status: Accepted name**
34. *B. plumosum* Dozy & Molk. [Lal, 2005]; Present status: **Synonym** of *Gemmabryum apiculatum* (Schwägr.) J.R. Spence & H.P. Ramsay
35. *B. porphyronuron* subsp. *erythropus* M. Fleisch. [Lal, 2005]; Present status: **Synonym** of *Bryum mildeanum* Jur.
36. *B. pseudotriquetrum* (Hedw.) P. Gaertn., B. Mey. & Scherb. [Lal, 2005]; **Present status: Accepted name**
37. *B. recurvatum* Broth. [Lal, 2005]; Present status: **Synonym** of *Bryum recurvulum* Mitt.
38. *B. turbinatum* (Hedw.) Turner [Lal, 2005]; **Present status: Accepted name**
40. *B. uliginosum* (Brid.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
41. *B. weigelii* Spreng. [Lal, 2005]; **Present status: Accepted name**
- 6. *Mielichhobryum* J. P. Srivast.**
42. *M. sahayadrense* J.P. Srivast. [Lal, 2005]; Present status: **Unresolved name**
- 7. *Mniobryum* Limpr.**
43. *M. delicatulum* (Hedw.) Dixon [Lal, 2005]; Present status: **Synonym** of *Pohlia melanodon* (Brid.) A.J. Shaw
44. *M. ludwigii* (Spreng. & Schwägr.) Loeske [Lal, 2005]; Present status: **Synonym** of *Pohlia ludwigii*
45. *M. wahlenbergii* (F. Weber & D. Mohr) Jenn. [Lal, 2005]; **Present status: Accepted name**
- 8. *Rhodobryum* (Schimp.) Hampe**
46. *R. giganteum* (Schwägr.) Paris [Lal, 2005]; **Present status: Accepted name**
47. *R. ontariense* (Kindb.) Paris [Lal, 2005]; **Present status: Accepted name**
48. *R. roseum* (Hedw.) Limpr. [Lal, 2005]; **Present status: Accepted name**
- 4. Family: Mniaceae Schwägr.**
- 9. *Epipterygium* Lindb.**
49. *E. tozeri* (Grev.) Lindb. [Lal, 2005]; **Present status: Accepted name**
- 10. *Leptobryum* (Bruch & Schimp.) Wilson**

50. *L. pyriforme* (Hedw.) Wilson [Lal, 2005]; **Present status: Accepted name**
- 11. *Mielichhoferia*** Nees & Hornsch.
51. *M. acutifolia* Broth. [Lal, 2005]; Present status: **Unresolved name**
52. *M. badhwarii* Dixon [Lal, 2005]; Present status: **Unresolved name**
53. *M. himalayana* Mitt. [Lal, 2005]; **Present status: Accepted name**
54. *M. lahulensis* R. S. Williams [Lal, 2005]; Present status: **Unresolved name**
55. *M. pilifera* E. B. Bartram [Lal, 2005]; Present status: **Unresolved name**
56. *M. schmidii* Müll. Hal. [Lal, 2005]; Present status: **Unresolved name**
- 12. *Mnium*** Hedw.
57. *M. affine* Blandow & Funck [Lal, 2005]; Present status: **Synonym** of *Plagiomnium affine* (Blandow & Funck) T.J. Kop.
58. *M. cuspidatum* Neck. & Lindb. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium affine* (Blandow & Funck) T.J. Kop.
59. *M. heterophyllum* (Hook.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
60. *M. integrum* Bosch & Sande Lac. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium integrum* (Bosch & Sande Lac.) T.J. Kop.
61. *M. japonicum* Schimp. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium acutum* (Lindb.) T.J. Kop.
62. *M. kumaonensis* Srivastava [Lal, 2005]; Present status: **Unresolved name**
63. *M. laevinerve* Cardot [Lal, 2005]; **Present status: Accepted name**
64. *M. lycopodioides* Schwägr. [Lal, 2005]; Present status: **Synonym** of *Mnium ambiguum* H. Müll.
65. *M. marginatulum* Müll. Hal. [Lal, 2005]; Present status: **Synonym** of *Pohlia mauiensis* (Broth. & E.B. Bartram) W. Schultze-Motel
66. *M. marginatum* var. *riparium* (Mitt.) Husn. [Lal, 2005]; Present status: **Synonym** of *Polla riparia* (Mitt.) Loeske
67. *M. maximoviczii* Lindb. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium maximoviczii* (Lindb.) T.J. Kop.
68. *M. medium* Bruch & Schimp. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium medium* (Bruch & Schimp.) T.J. Kop.
69. *M. orthorrhynchum* Brid. [Lal, 2005]; Present status: **Synonym** of *Polla orthorrhyncha* (Brid.) Brid. & Loeske
70. *M. punctatum* Hedw. [Lal, 2005]; Present status: **Synonym** of *Rhizomnium punctatum* (Hedw.) T.J. Kop.
71. *M. punctatum* var. *horikawae* (Nog.) Nog. [Lal, 2005]; Present status: **Synonym** of *Rhizomnium punctatum* var. *horikawae* (Nog.) Nog.
72. *M. rostratum* Schrad. [Lal, 2005]; Present status: **Synonym** of *Pohlia mauiensis* (Broth. & E.B. Bartram) W. Schultze-Motel
73. *M. seligeri* Jur. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium elatum* (Bruch & Schimp.) T.J. Kop.
74. *M. stellare* Reichard & Hedw. [Lal, 2005]; **Present status: Accepted name**
75. *M. striatulum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Rhizomnium striatulum* (Mitt.) T.J. Kop.
76. *M. succulentum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Plagiomnium succulentum* (Mitt.) T.J. Kop.
77. *M. thomsonii* Schimp. [Lal, 2005]; **Present status: Accepted name**
- 13. *Orthomnion*** (Mitt.) Broth.
78. *O. bryoides* (Griff.) Nork. [Lal, 2005]; **Present status: Accepted name**
- 14. *Pohlia*** Hedw.
79. *P. camptotrachela* (Renauld & Cardot) Broth. [Lal, 2005]; **Present status: Accepted name**
80. *P. cruda* (Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**

81. *P. crudoides* (Sull. & Lesq.) Broth. [Lal, 2005]; **Present status: Accepted name**
82. *P. elongata* Hedw. [Lal, 2005]; **Present status: Accepted name**
83. *P. flexuosa* Harv. [Lal, 2005]; **Present status: Accepted name**
84. *P. longicollis* (Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**
85. *P. minor* Schleich. & Schwägr. [Lal, 2005]; **Present status: Accepted name**
86. *P. minor* subsp. *acuminata* (Hoppe & Hornsch.) Wijk & Margad. [Lal, 2005]; Present status: **Synonym of *Pohlia elongata* Hedw.**
- 15. *Plagiomnium* T. J. Kop.**
87. *P. rostratum* (Schrad.) T. J. Kop. [Lal, 2005]; **Present status: Accepted name**
- 5. Family: Aulacomniaceae Schimp.**
- 16. *Aulacomnium* Schwägr.**
88. *A. androgynum* (Hedw.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
89. *A. palustre* (Hedw.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
90. *A. turgidum* (wahlenb.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
- 6. Family : Bartramiaceae Schwägr.**
- 17. *Bartramia* Hedw.**
91. *B. halleriana* Hedw. [Lal, 2005]; **Present status: Accepted name**
92. *B. ithyphylla* Brid. [Lal, 2005]; **Present status: Accepted name**
93. *B. leptodonta* Wilson [Lal, 2005]; Present status: **Synonym of *Bartramia brevifolia* subsp. *brevifolia***
94. *B. pomiformis* Hedw. [Lal, 2005]; **Present status: Accepted name**
95. *B. pomiformis* var. *elongata* Turner [Lal, 2005]; Present status: **Synonym of *Bartramia pomiformis* Hedw.**
96. *B. subpellucida* Mitt. [Lal, 2005]; Present status: **Synonym of *Bartramia brevifolia* subsp. *brevifolia***
97. *B. subulata* Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
- 18. *Bartramidula* Bruch & Schimp.**
98. *B. bartramioides* (Griff.) Wijk. & Margad [Lal, 2005]; **Present status: Accepted name**
99. *B. griffithiana* var. *sikkimensis* Kabiersch [Lal, 2005]; Present status: **Synonym of *Philonotis sikkimensis* (Kabiersch) T.J. Kop.**
100. *B. roylei* (Hook. f.) Bruch & Schimp. [Lal, 2005]; Present status: **Synonym of *Glyphocarpus roylei* (Hook. f.) A. Jaeger**
- 19. *Breutelia* Bruch. & Schimp.**
101. *B. dicranacea* (Müll. Hal.) Mitt. [Lal, 2005]; **Present status: Accepted name**
- 20. *Conostomum* Sw. in Web. & Mohr**
102. *C. tetragonum* (Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**
- 21. *Fleischerobryum* Loesk.**
103. *F. longicolle* (Hampe) Loesk. [Lal, 2005]; **Present status: Accepted name**
- 22. *Philonotis* Brid.**
104. *P. angusta* Mitt. [Lal, 2005]; Present status: **Synonym of *Bartramia angusta* (Mitt.) Müll. Hal.**
105. *P. calcarea* (Bruch & Schimp.) Schimp. [Lal, 2005]; Present status: **Synonym of *Philonotis fontana* (Hedw.) Brid.**
106. *P. falcata* (Hook.) Mitt. (Asthana & Sahu, 2013); **Present status: Accepted name**
107. *P. fontana* (Hedw.) Brid. [Lal, 2005]; **Present status: Accepted name**
108. *P. fontana* var. *pumilla* (Turner) Brid. [Lal, 2005]; **Present status: Accepted name**
109. *P. hastata* (Duby) Wijk & Margad [Lal, 2005]; **Present status: Accepted name**
110. *P. heterophylla* Mitt. [Lal, 2005]; Present status: **Synonym of *Philonotis hastata* (Duby) Wijk & Margad.**
111. *P. lancifolia* Mitt. [Lal, 2005]; **Present status: Accepted name**

112. *P. leptocarpa* Mitt. [Lal, 2005]; Present status: **Synonym** of *Bartramia leptocarpa* (Mitt.) Müll. Hal.
 113. *P. nitida* Mitt. [Lal, 2005]; Present status: **Synonym** of *Philonotis turneriana* (Schwägr.) Mitt.
 114. *P. seriata* Mitt. [Lal, 2005]; Present status: **Synonym** of *Philonotis fontana* (Hedw.) Brid.
 115. *P. trachyphylla* Dixon & Badhw. [Lal, 2005]; **Present status:** Unresolved name
 116. *P. thwaitesii* Mitt. [Lal, 2005]; **Present status: Accepted name**
 117. *P. turneriana* (Schwägr.) Mitt. [Lal, 2005]; **Present status: Accepted name**
23. Plagiopus Brid.
 118. *P. oederi* (Brid.) Limpr. [Lal, 2005]; Present status: **Synonym** of *Plagiopus oederianus* (Sw.) H.A. Crum & L.E. Anderson

4. ORDER: DICRANALES H. PHILIB. & M. FLEISCH.

7. Family: Fissidentaceae Schimp.

24. *Fissidens* Hedw.

119. *F. anomalus* Mont. [Lal, 2005]; **Present status: Accepted name**
 120. *F. arnigadhensis* Broth. & S. S. Kumar [Lal, 2005]; Present status: **Unresolved name**
 121. *F. arunii* Srivastava & Norkett [Lal, 2005]; Present status: **Unresolved name**
 122. *F. bryoides* Hedw. [Lal, 2005]; **Present status: Accepted name**
 123. *F. ceylonensis* Dozy & Molk. [Lal, 2005]; **Present status: Accepted name**
 124. *F. cristatus* Wilson & Mitt. [Lal, 2005]; Present status: **Synonym** of *Fissidens dubius* P. Beauv.
 125. *F. curvatoinvolutus* Dixon [Lal, 2005]; Present status: **Synonym** of *Fissidens involutus* subsp. *curvatoinvolutus* (Dixon) Gangulee
 126. *F. curvatoxiphioides* Dixon & P. de la Varde [Lal, 2005]; Present status: **Synonym** of *Fissidens beckettii* Mitt.F
 127. *F. diversifolius* Mitt. [Lal, 2005]; **Present status: Accepted name**
 128. *F. grandifrons* Brid. [Lal, 2005]; **Present status: Accepted name**
 129. *F. hyalinus* Hook. & Wilson [Lal, 2005]; **Present status: Accepted name**
 130. *F. intromarginatulus* E.B. Bartram [Lal, 2005]; Present status: **Synonym** of *Fissidens ceylonensis* Dozy & Molk.
 131. *F. involutus* Wilson & Mitt. [Lal, 2005]; **Present status: Accepted name**
 132. *F. javanicus* Dozy & Molk. [Lal, 2005]; **Present status: Accepted name**
 133. *F. kalimpongensis* Gangulee [Lal, 2005]; Present status: **Unresolved name**
 134. *F. macrosporoides* Dixon & P. de la Varde [Lal, 2005]; Present status: **Unresolved name**
 135. *F. obscurus* Mitt. [Lal, 2005]; **Present status: Accepted name**
 136. *F. perplexans* Dixon [Lal, 2005]; Present status: **Unresolved name**
 137. *F. pokhrensensis* Nork. & S.S. Kumar [Lal, 2005]; Present status: **Unresolved name**
 138. *F. splachnobryoides* Broth. [Lal, 2005]; Present status: **Synonym** of *Fissidens flaccidus* Mitt.
 139. *F. virens* Thwaites & Mitt. [Lal, 2005]; **Present status: Accepted name**
 140. *F. viridulus* (Sw.) Wahlenb. (Asthana & Sahu, 2013); Present status: **Synonym** of *Fissidens bryoides* Hedw.
 141. *F. xiphioides* M. Fleisch. [Lal, 2005]; Present status: **Synonym** of *Fissidens zollingeri* Mont.

25. *Octogonella* Dixon

142. *O. scabrifolia* Dixon [Lal, 2005]; Present status: **Synonym** of *Rhachithecium papillosum* (R.S. Williams) Wijk & Margad.

8. Family : Rhachithecaceae H. Rob.

26. *Rhachithecium* Jolis

143. *R. papillosum* (R.S. Williams) Wijk & Margad. [Lal, 2005]; **Present status: Accepted name**

9. Family: Rhabdoweisiaceae Limpr.

27. *Rhabdoweisia* Bruch & Schimp.
 144. *R. crenulata* (Mitt.) H. Jameson [Lal, 2005]; **Present status: Accepted name**
- 10. Family: Dicranaceae Schimp.**
28. *Aongstroemia* Bruch & Schimp.
 145. *A. orientalis* Mitt. [Lal, 2005]; **Present status: Accepted name**
29. *Brothera* Müll. Hal.
 146. *B. himalayana* Broth. Endemic [Lal, 2005]; Present status: **Synonym** of *Atractylocarpus himalayanus* (Broth.) J.-P. Frahm
 147. *B. leana* (Sull.) Müll. Hal. [Lal, 2005]; **Present status: Accepted name**
30. *Campylopodia* Cardot
 148. *C. ditrichoides* Nog. [Lal, 2005]; Present status: **Synonym** of *Campylopodia himalayana* (Broth.) J.-P. Frahm
31. *Campylopodium* (Müll. Hal.) Besch.
 149. *C. griffithi* (Mitt.) Mitt. & Broth. [Lal, 2005]; **Present status: Accepted name**
32. *Campylopus* Brid.
 150. *C. fragilis* (Brid.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
 151. *C. fragilis* var. *pyriformis* (Schultz.) Agst. [Lal, 2005]; **Present status: Accepted name**
 152. *C. goughii* (Mitt.) A. Jaeger [Lal, 2005]; Present status: **Synonym** of *Campylopus fragilis* subsp. *zollingerianus* (Müll. Hal.) J.-P. Frahm
 153. *C. gracilis* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
 154. *C. richardii* Brid. [Lal, 2005]; **Present status: Accepted name**
33. *Dicranella* (Müll. Hal.) Schimp.
 155. *D. divaricata* (Mitt.) A. Jaeger [Lal, 2005]; Present status: **Synonym** of *Aongstroemia divaricata* (Mitt.) Müll. Hal.
 156. *D. heteromalla* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
 157. *D. spiralis* (Mitt.) A. Jaeger. [Lal, 2005]; Present status: **Synonym** of *Anisothecium spirale* (Mitt.) Broth.
34. *Dicranodontium* Bruch & Schimp.
 158. *D. attenuatum* (Mitt.) Wilson & A. Jaeger [Lal, 2005]; **Present status: Accepted name**
 159. *D. caespitosum* (Mitt.) Paris [Lal, 2005]; **Present status: Accepted name**
 160. *D. denudatum* (Brid.) E. Britton [Lal, 2005]; **Present status: Accepted name**
 161. *D. didictyon* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
35. *Dicranoweisia* Lindb. & Mild.
 162. *D. cirrata* (Hedw.) Lindb.
Present status: Accepted name
 163. *D. crispula* (Hedw.) Milde [Lal, 2005]; **Present status: Accepted name**
 164. *D. indica* (Wilson) Paris [Lal, 2005]; **Present status: Accepted name**
36. *Dicranum* Hedw.
 165. *D. bonjeanii* De Not. [Lal, 2005]; **Present status: Accepted name**
 166. *D. himalayanum* Mitt. [Lal, 2005]; **Present status: Accepted name**
 167. *D. kashmirensis* Broth. [Lal, 2005]; Present status: **Unresolved name**
 168. *D. lorifolium* Mitt. [Lal, 2005]; Present status: **Unresolved name**
 169. *D. scoparium* Hedw. (Saxena & Gangwar, 2005); **Present status: Accepted name**
 170. *D. spurium* Hedw. [Lal, 2005]; **Present status: Accepted name**
 171. *D. undulatum* Schrad. & Brid. [Lal, 2005]; **Present status: Accepted name**
37. *Microdus* Schimp.
 172. *M. brasiliensis* (Duby) Thér. [Lal, 2005]; Present status: **Synonym** of *Dicranella pomiformis* (Griff.) A. Jaeger
38. *Mitrobryum* H. Rob.
 173. *M. koelzi* H. Rob. [Lal, 2005]; Present status: **Unresolved name**
39. *Oncophorus* (Brid.) Brid.

174. *O. gracillimus* Dixon [Lal, 2005]; [Lal, 2005]; Present status: **Synonym** of *Oncophorus wahlenbergii* Brid.
175. *O. virens* (Hedw.) Brid. [Lal, 2005]; **Present status: Accepted name**
176. *O. wahlenbergii* Brid. [Lal, 2005]; **Present status: Accepted name**
- 40. Oreas** Brid.
177. *O. maritiana* (Hoppe & Hornsch.) Brid. [Lal, 2005]; **Present status: Accepted name**
- 41. Oreoweisia** (Bruch & Schimp.) De Not.
178. *O. laxifolia* (Hook. f.) Kindb. [Lal, 2005]; **Present status: Accepted name**
- 42. Orthodicranum** (Bruch & Schimp.) Loesk.
179. *O. montanum* (Hedw.) Loesk. [Lal, 2005]; **Present status: Accepted name**
- 43. Paraleucobryum** (Limpr.) Loesk.
180. *P. enerve* (Thed.) Loesk. [Lal, 2005]; **Present status: Accepted name**
181. *P. himalayanum* Dixon [Lal, 2005]; Present status: **Synonym** of *Campylopododiella himalayana* (Broth.) J.-P. Frahm
- 44. Symblepharis** Mont.
182. *S. vaginata* (Hook. & Harv.) Wijk & Margad. [Lal, 2005]; **Present status: Accepted name**
- 45. Trematodon** Michx.
183. *T. capillifolius* Müll. Hal. & G. Roth [Lal, 2005]; Present status: **Unresolved name**
184. *T. conformis* Mitt. [Lal, 2005]; **Present status: Accepted name**
185. *T. longicollis* Michx. [Lal, 2005]; **Present status: Accepted name**
186. *T. subulosus* Griff. [Lal, 2005]; Present status: **Unresolved name**
- 11. Family: Ditrichaceae** Limpr.
- 46. Ceratodon** Brid.
187. *C. purpureus* (Hedw.) Brid. [Lal, 2005]; **Present status: Accepted name**
188. *C. stenocarpus* Bruch & Schimp. [Lal, 2005]; Present status: **Synonym** of *Ceratodon purpureus* subsp. *stenocarpus* (Bruch & Schimp.) Dixon
- 47. Distichium** Bruch & Schimp.
189. *D. capillaceum* (Hedw.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
190. *D. inclinatum* (Hedw.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
- 48. Ditrichum** Hampe
191. *D. difficile* (Duby) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
192. *D. flexicaule* (Schwägr.) Hampe [Lal, 2005]; **Present status: Accepted name**
193. *D. heteromallum* (Hedw.) Britt. [Lal, 2005]; **Present status: Accepted name**
194. *D. homomallum* (Hedw.) Hampe [Lal, 2005]; Present status: **Synonym** of *Ditrichum heteromallum* (Hedw.) E. Britton
195. *D. pusillum* (Hedw.) Hampe [Lal, 2005]; **Present status: Accepted name**
196. *D. tortipes* (Mitt.) O. Kuntze [Lal, 2005]; **Present status: Accepted name**
197. *D. tortuloides* Grout [Lal, 2005]; Present status: **Synonym** of *Ditrichum ambiguum* Best
- 49. Saelania** Lindb.
198. *S. glaucescens* (Hedw.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 12. Family: Leucobryaceae** Schimp.
- 50. Leucobryum** Hampe
199. *L. aduncum* Dozy & Molk. [Lal, 2005]; **Present status: Accepted name**
200. *L. cucullifolium* Cardot [Lal, 2005]; Present status: **Synonym** of *Leucobryum humillimum* Cardot
201. *L. javense* (Brid.) Mitt. [Lal, 2005]; **Present status: Accepted name**
202. *L. neilgherrense* Müll. Hal. [Lal, 2005]; **Present status: Accepted name**
- 51. Ochrobryum** Mitt.
203. *O. nepalense* Besch. [Lal, 2005]; Present status: **Synonym** of *Ochrobryum kurzianum* Hampe
- 13. Family: Erpodiaceae** Broth.
- 52. Erpodium** (Brid.) Brid.

204. *E. abbreviatum* (Mitt.) I. G. Stone [Lal, 2005]; **Present status: Accepted name**
 205. *E. luzonense* (E. B. Bartram) H. A. Crum [Lal, 2005]; **Present status: Accepted name**
 206. *E. mangiferae* Müll. Hal. [Lal, 2005]; **Present status: Accepted name**

5. ORDER: ENCALYPTALES DIXON

14. Family: Encalyptaceae Schimp.

53. Encalypta Hedw.

207. *E. alpina* G. L. Sm. [Lal, 2005]; **Present status: Accepted name**
 208. *E. ciliata* Hedw. [Lal, 2005]; **Present status: Accepted name**
 209. *E. rhabdocarpa* Schwägr. [Lal, 2005]; Present status: **Synonym** of *Encalypta rhabdocarpa* Schwägr.
 210. *E. streptocarpa* Hedw. [Lal, 2005]; **Present status: Accepted name**
 211. *E. tibetana* Mitt. [Lal, 2005]; **Present status: Unresolved name**
 212. *E. vulgaris* Hedw. [Lal, 2005]; **Present status: Accepted name**

6. ORDER: FUNARIALES M. FLEISCH.

15. Family: Funariaceae Schwägr.

54. Entosthodon Schwägr.

213. *E. pilifer* Mitt. [Lal, 2005]; Present status: **Synonym** of *Funaria pilifera* (Mitt.) Broth.
 214. *E. wallichii* Mitt. [Lal, 2005]; Present status: **Synonym** of *Entosthodon buseanus* Dozy & Molk.
 215. *E. wichurae* M. Fleisch. [Lal, 2005]; **Present status: Accepted name**

55. Funaria Hedw.

216. *F. calcarea* Wahlenb. [Lal, 2005]; Present status: **Synonym** of *Funaria muehlenbergii* Turner
 217. *F. calcarea* var. *mediterranea* (Lindb.) C.E.O. Jensen & Medelius [Lal, 2005]; Present status: **Synonym** of *Funaria pulchella* H. Philib.
 218. *F. capillipes* (Müll. Hal. & Broth.) Broth. [Lal, 2005]; **Present status: Accepted name**
 219. *F. hygrometrica* Hedw. [Lal, 2005]; **Present status: Accepted name**
 220. *F. hygrometrica* var. *calvescens* (Schwägr.) Mont. [Lal, 2005]; **Present status: Accepted name**
 221. *F. koelzei* E.B. Bartram [Lal, 2005]; **Present status: Unresolved name**
 222. *F. orthocarpa* Mitt. [Lal, 2005]; Present status: **Synonym** of *Entosthodon orthocarpus* (Mitt.) A. Jaeger
 223. *F. wijkii* R. S. Chopra [Lal, 2005]; **Present status: Unresolved name**

56. Physcomitrium (Brid.) Brid.

224. *P. cyathicarpum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Physcomitrium immersum* Sull.
 225. *P. eurystomum* Sendtn. [Lal, 2005]; **Present status: Accepted name**
 226. *P. japonicum* (Hedw.) Mitt. [Lal, 2005]; **Present status: Accepted name**
 227. *P. pulchellum* (Griff.) Mitt. [Lal, 2005]; **Present status: Accepted name**

7. ORDER: GRIMMIALES M. FLEISCH.

16. Family: Orthotrichaceae= Drummondiaaceae (Vitt) Goffinet, comb. nov.

57. Drummondia Hook. in Drum.

228. *D. duthiei* Mitt. & Müll. Hal. . [Lal, 2005]; Present status: **Synonym** of *Drummondia sinensis* Müll. Hal.
 229. *D. stricta* (Mitt.) Müll. Hal. . [Lal, 2005]; **Present status: Accepted name**
 230. *D. thomsonii* Mitt. . [Lal, 2005]; **Present status: Accepted name**

17. Family: Grimmiaceae Arn.

58. Coscinodon Spreng.

231. *C. cribrosus* (Hedw.) Spruce [Lal, 2005]; **Present status: Accepted name**

59. Grimmia Hedw.

232. *G. anodon* Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
 233. *G. apiculata* Hornsch. [Lal, 2005]; Present status: **Synonym** of *Grimmia fuscolutea* Hook.
 234. *G. donniana* G.L. Sm. & Spruce [Lal, 2005]; **Present status: Accepted name**
 235. *G. laevigata* Mitt. [Lal, 2005]; Present status: **Synonym** of *Racomitrium laevigatum* A. Jaeger
 236. *G. ovalis* (Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**
 237. *G. pilifera* P. Beauv. [Lal, 2005]; **Present status: Accepted name**
 238. *G. pulvinata* (Hedw.) G. L. Sm. [Lal, 2005]; **Present status: Accepted name**
 239. *G. redunca* Wilson & Mitt. [Lal, 2005]; Present status: **Synonym** of *Grimmia elongata* Kaulf.
 240. *G. unicolour* Hook. [Lal, 2005]; **Present status: Accepted name**
60. Racomitrium Brid.
 241. *R. canescens* (Hedw.) Brid. [Lal, 2005]; Present status: **Synonym** of *Niphotrichum canescens* (Hedw.) Bednarek-Ochyra & Ochyra
 242. *R. crispipilum* (Taylor) A. Jaeger [Lal, 2005]; **Present status: Accepted name**
 243. *R. fuscescens* Wilson [Lal, 2005]; Present status: **Synonym** of *Bucklandiella fuscescens* (Wilson) Bednarek-Ochyra & Ochyra
 244. *R. himalayanum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
 245. *R. subsecundum* (Hook. et Grev. ex Harv.) Mitt. [Lal, 2005]; **Present status: Accepted name**
61. Schistidium Brid.
 246. *S. alpicola* (Hedw.) Limpr. [Lal, 2005]; Present status: **Synonym** of *Schistidium rivulare* (Brid.) Podp.
 247. *S. apocarpum* (Hedw.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
18. Family: Ptychomitriaceae Schimp.
62. Ptychomitrium Fuernr.
 248. *P. tortula* (Harv.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
8. ORDER: HEDWIGIALES OCHYRA
19. Family: Hedwigiaceae Schimp.
63. Braunia Bruch & Schimp.
 249. *B. attenuata* (Mitt.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**
64. Hedwigia P. Beauv.
 250. *H. ciliata* (Hedw.) P. Beauv. [Lal, 2005]; **Present status: Accepted name**
65. Hedwigidium Bruch & Schimp.
 251. *H. integrifolium* (P. Beauv.) Dixon [Lal, 2005]; **Present status: Accepted name**
66. Kashyapia R. S. Chopra
 252. *K. ambigua* R.S. Chopra [Lal, 2005]; **Present status: Unresolved name**
9. ORDER: HOOKERIALES M. FLEISCH
20. Family: Hookeriaceae Schimp.
67. Distichophyllum Dozy & Molk.
 253. *D. humifusum* (Wilson & Mitt.) Paris [Lal, 2005]; **Present status: Accepted name**
 254. *D. schmidtii* Broth. [Lal, 2005]; Present status: **Unresolved name**
68. Hookeria J.E. Sm.
 255. *H. acutifolia* Hook. & Grev. [Lal, 2005]; **Present status: Accepted name**
10. ORDER: HYPNALES (M. FLEISCH.) W. R. BUCK & VITT
21. Family: Cryphaeaceae Schimp.
69. Schoenobryum Dozy & Molk.
 256. *Schoenobryum concavifolium* (Griff.) Gangulee [Lal, 2005]; **Present status: Accepted name**
22. Family: Thuidiaceae Schimp.
70. Abietinella Müll. Hal.
 257. *A. abietina* (Hedw.) M. Fleisch [Lal, 2005]; **Present status: Accepted name**
 258. *A. brandissi* (Müll. Hal.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
71. Claopodium (Lesq. & Jam.) Ren. & Cardot.

259. *C. assurgens* (Sull. & Lesq.) Cardot. [Lal, 2005]; **Present status: Accepted name**
260. *C. nervosum* (Harv.) M. M. Fleisch. [Lal, 2005]; *Present status: Synonym of *Claopodium prionophyllum* (Müll. Hal.) Broth.*
261. *C. pellucinerve* (Mitt.) Best [Lal, 2005]; **Present status: Accepted name**
262. *C. prionophyllum* (Müll. Hal.) Broth. [Asthana & Sahu, 2013]; **Present status: Accepted name**
- 72. *Haplocladium* (Müll. Hal.) Müll. Hal.**
263. *H. angustifolium* (Hampe & Müll. Hal.) Broth. [Lal, 2005]; **Present status: Accepted name**
264. *H. himalayanum* E. B. Bartram [Lal, 2005]; **Present status: Synonym of *H. schimperi* Thér**
265. *H. microphyllum* (Hedw.) Broth. [Asthana & Sahu, 2013]; **Present status: Accepted name**
266. *H. microphyllum* subsp. *capillatum* (Mitt.) Reimers [Lal, 2005]; **Present status: Accepted name**
267. *H. schimperi* Thér. [Lal, 2005]; **Present status: Accepted name**
268. *H. stratosum* (Mitt.) Dixon [Lal, 2005]; **Present status: Accepted name**
- 73. *Myurella* Bruch & Schimp.**
269. *Myurella julacea* (Schwägr.) Schimp. [Lal, 2005]; **Present status: Accepted name**
- 74. *Thuidium* Bruch & Schimp.**
270. *T. assimile* (Mitt.) A. Jaeger [Asthana & Sahu, 2013]; **Present status: Accepted name**
271. *T. contortulum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
272. *T. cymbifolium* (Dozy & Molk.) Dozy & Molk. [Lal, 2005]; **Present status: Accepted name**
273. *T. glaucinum* (Mitt.) Bosch & Lac. [Lal, 2005]; **Present status: Accepted name**
274. *T. haplohymenium* (Harv. & Hook. f.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**
275. *T. koelzii* H. Rob. [Lal, 2005]; *Present status: Synonym of *Pelekium fuscatum* (Besch.) Touw*
276. *T. meyenianum* (Hampe) Dozy & Molk. [Lal, 2005]; **Present status: Accepted name**
277. *T. minusculum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
278. *T. orientale* Mitt. & Dixon [Lal, 2005]; *Present status: Synonym of *Thuidium pristocalyx* (Müll. Hal.) A. Jaeger.*
279. *T. philibertii* Limpr. [Asthana & sahu, 2013]; *Present status: Synonym of *Thuidium recognitum* subsp. *philibertii* (Limpr.) Dixon*
280. *T. sparsifolium* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
281. *T. squarrosulum* Renaud & Cardot [Lal, 2005]; *Present status: Synonym of *Pelekium minusculum* (Mitt.) Touw*
282. *T. tamariscellum* (Müll. Hal.) Bosch & Sande Lac. [Lal, 2005]; **Present status: Accepted name**
283. *T. vestitissimum* Besch. [Lal, 2005]; *Present status: Synonym of *Cyrto-hypnum vestitissimum* (Besch.) W.R. Buck & H.A. Crum*
- 23. Family: Hypnaceae Schimp.**
- 75. *Bryosedgwickia* Cardot & Dixon**
284. *B. aurea* (Schwägr.) M. Fleisch. [Asthana & Sahu, 2013]; **Present status: Accepted name**
285. *B. polyantha* (Hedw.) Bruch & Schimp. [Lal, 2005]; *Present status: Unresolved name*
- 76. *Ectropothecium* Mitt.**
286. *E. cyperoides* (Hook. & Harv.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**
287. *E. cyperoides* var. *papillosum* Cardot & Dixon [Lal, 2005]; *Present status: Unresolved name*
288. *E. sikkimense* (Renaud & Cardot) Renaud & Cardot [Lal, 2005]; **Present status: Accepted name**
- 77. *Gollania* Broth.**
289. *G. clarescens* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
290. *G. ruginosa* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 78. *Hageniella* Broth**
291. *Hageniella assamica* Dixon [Alam, 2013]; *Present status: Unresolved name*
- 79. *Homomallium* (Schimp.) Loeske**

292. *H. incurvatum* (Schrad. & Brid.) Loeske [Lal, 2005]; **Present status: Accepted name**
293. *H. simalaense* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 80. Hypnum** Hedw.
294. *H. cupressiforme* Hedw. [Lal, 2005]; **Present status: Accepted name**
295. *H. vaucheri* fo. *vaucheri* Lesq. [Lal, 2005]; **Present status: Accepted name**
296. *Hypnum subimponens* subsp. *ulophyllum* (Müll. Hal.) Ando [Lal, 2005]; **Present status: Accepted name**
- 81. Isopterygiopsis** Iwats.
297. *I. muelleriana* (Schimp.) Z. Iwats. [Lal, 2005]; **Present status: Accepted name**
- 82. Isopterygium** Mitt.
298. *I. albescens* (Hook.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
299. *I. albescens* var. *smallii* (Sull. & Lesq.) Z. Iwats. [Lal, 2005]; **Present status: Accepted name**
300. *I. distichaceum* (Mitt.) A. Jaeger. [Lal, 2005]; Present status: **Synonym** of *Pseudotaxiphyllum distichaceum* (Mitt.) Z. Iwats.
301. *I. elegans* (Brid.) Lindb. [Saxena et al., 2007]; Present status: **Synonym** of *Pseudotaxiphyllum elegans* (Brid.) Z. Iwats.
302. *I. minutirameum* (Müll. Hal.) Broth. [Lal, 2005]; **Present status: Accepted name**
303. *I. muellerianum* (Schimp.) A. Jaeger. [Lal, 2005]; Present status: **Synonym** of *Isopterygiopsis muelleriana* (Schimp.) Z. Iwats.
304. *I. pallidulum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
305. *I. pulchellum* (Hedw.) A. Jaeger. [Lal, 2005]; Present status: **Synonym** of *Isopterygiopsis pulchella* (Hedw.) Z. Iwats.
- 83. Leiodontium** Broth.
306. *L. gracile* Broth. [Lal, 2005]; Present status: **Unresolved name**
- 84. Orthothecium** Schimp.
307. *O. intricatum* (Hartm.) Schimp. [Lal, 2005]; Present status: **Unresolved name**
- 85. Platydictya** Berk.
308. *P. jungermannioides* (Brid.) H.A. Crum [Lal, 2005]; **Present status: Accepted name**
309. *P. subtilis* (Hedw.) H. A. Crum
Present status: Accepted name
- 86. Platygyrium** Bruch & Schimp. [Lal, 2005]; 309. *P. repens* (Brid.) Schimp.
Present status: Accepted name
310. *P. russulum* (Mitt.) A. Jaeger [Lal, 2005]; Present status: **Synonym** of *Gammiella russula* (Mitt.) M. Fleisch.
- 87. Pleuridium** Brid.
311. *P. mussuriense* Broth. & G. Roth [Lal, 2005]; **Present status: Synonym** of *Brothera leana* (Sull.) Müll. Hal.
312. *P. tenue* Mitt. [Lal, 2005]; Present status: **Synonym** of *Astomum tenue* (Mitt.) Müll. Hal.
- 88. Pseudostereodon** (Broth.) M. Fleisch.
313. *P. procerrimus* (Molendo) M. Fleisch. [Lal, 2005]; Present status: **Synonym** is a **Synonym** of *Ctenidium procerrimum* (Molendo) Lindb.
- 89. Pseudosymblepharis** Broth.
314. *P. angustata* (Mitt.) Hilp. [Lal, 2005]; **Present status: Accepted name**
315. *P. subduriuscula* (Müll. Hal.) P.C. Chen [Lal, 2005]; Present status: **Synonym** of *Pseudosymblepharis angustata* (Mitt.) Hilp.
- 24. Family Pterigyandraceae** Schimp
- 90. Pterigynandrum** Hedw.
316. *P. filiforme* Hedw. [Lal, 2005]; **Present status: Accepted name**
- 91. Ptilium** De Not.
317. *P. crista-castrensis* (Hedw.) De Not. [Lal, 2005]; **Present status: Accepted name**

92. Pylaisia Bruch & Schimp.

318. *P. polyantha* (Hedw.) Schimp. [Lal, 2005]; Present status: **Synonym** of *Pylaisiella polyantha* (Hedw.) Grout

93. Taxiphyllum M. Fleisch.

319. *T. giraldii* (Müll. Hal.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**

320. *T. maniae* (Renauld & Paris) M. Fleisch. [Lal, 2005]; Present status: **Synonym** of *Taxiphyllum taxirameum* (Mitt.) M. Fleisch.

321. *T. taxirameum* (Mitt.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**

94. Vesicularia (Müll. Hal.) Müll. Hal.

322. *V. montagnei* (Schimp.) Broth. [Lal, 2005]; **Present status: Accepted name**

323. *V. reticulata* (Dozy & Molk.) Broth. [Lal, 2005]; **Present status: Accepted name**

324. *V. subscaturiginosa* M. Fleisch. [Lal, 2005]; Present status: **Unresolved name**

325. *V. succosa* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**

25. Family: Pterobryaceae Kindb.**95. Calypothecium** Mitt.

326. *C. hookeri* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**

96. Entodon Müll. Hal.

327. *E. flavescens* (Hook.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**

328. *E. myurus* (Hook.) Hampe [Lal, 2005]; Present status: **Synonym** of *Cylindrothecium myurum* (Hook.) Paris

329. *E. plicatus* Müll. Hal. [Lal, 2005]; **Present status: Accepted name**

330. *E. prorepens* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**

331. *E. subplicatus* Renauld & Cardot [Lal, 2005]; Present status: **Unresolved name**

332. *E. luteonitens* Renauld & Cardot [Asthana & Sahu, 2013]; **Present status: Accepted name**

333. *E. concinnus* subsp. *caliginosus* (Mitt.) Mizush. [Lal, 2005]; **Present status: Accepted name**

334. *Entodon isopterygioides* Dixon [Lal, 2005]; Present status: **Unresolved name**

97. Penzigiella M. Fleisch.

335. *P. cordata* (Hook. & Harv.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**

98. Pterobryopsis M. Fleisch.

336. *P. orientalis* (Müll. Hal.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**

26. Family: Brachytecaceae G. Roth.**99. Brachytecium** Schimp.

337. *B. brachycladum* (Broth.) Paris [Lal, 2005]; Present status: **Unresolved name** Endemic

338. *B. buchananii* (Hook.) A. Jaeger. [Asthana & Sahu, 2013]; **Present status: Accepted name**

339. *B. buchananii* var. *cuspidiferum* (Mitt.) Gangulee & Vohra [Lal, 2005]; **Present status: Accepted name**

340. *B. cameratum* (Mitt.) A. Jaeger [Lal, 2005]; Present status: **Synonym** of *Cirriphyllum cameratum* (Mitt.) Broth.

341. *B. campestre* (Müll. Hal.) Schimp. [Lal, 2005]; **Present status: Accepted name**

342. *B. chakratense* Vohra [Lal, 2005]; Present status: **Unresolved name**

343. *B. cirrosum* (Schwägr.) Schimp. [Lal, 2005]; **Present status: Accepted name**

344. *B. curvatulum* (Broth.) Paris [Lal, 2005]; **Present status: Accepted name**

345. *B. falcatulum* (Broth.) Paris v **Present status: Accepted name**

346. *B. garhwalense* Vohra [Lal, 2005]; Present status: **Unresolved name** (Endemic)

347. *B. glaciale* Schimp. [Lal, 2005]; **Present status: Accepted name**

388. *B. indicopopuleum* Dixon [Lal, 2005]; Present status: **Unresolved name**

349. *B. kamounense* (Harv.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**

350. *B. kashmirensis* (Broth.) Paris [Lal, 2005]; Present status: **Synonym** of *Brachytecium kashmirensis* (Broth.) Ignatov & Huttunen (Endemic)

351. *B. laevivelutinum* Dixon [Lal, 2005]; Present status: **Unresolved name** (Endemic)

352. *B. laxifolium* Dixon [Lal, 2005]; Present status: **Unresolved name** (Endemic)

353. *B. longicuspidatum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name** (Endemic)
354. *B. microsericeum* Dixon [Lal, 2005]; **Present status: Accepted name** (Endemic)
355. *B. myurelliforme* Dixon [Lal, 2005]; Present status: **Synonym** of *Brachythecium collinum* (Schleich. & Müll. Hal.) Schimp. **Endemic**
356. *B. obsoletinerve* Dixon [Lal, 2005]; Present status: **Unresolved name** **Endemic**
357. *B. plumosum* (Hedw.) Bruch & Schimp. [Asthana & Sahu, 2013]; Present status: **Unresolved name**
358. *B. populeum* (Hedw.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
359. *B. procumbens* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
360. *B. rivulare* Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
361. *B. rivulare* var. *alare* (Dixon) Vohra [Lal, 2005]; **Present status: Accepted name**
362. *B. rutabulum* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
363. *B. salebrosum* (Hoffm. et F. Weber ex D. Mohr) Schimp. [Lal, 2005]; **Present status: Accepted name**
364. *B. spuriopopuleum* (Broth.) Paris [Lal, 2005]; **Present status: Accepted name**
365. *B. starkii* var. *explanatum* (Brid.) Mönk. [Lal, 2005]; *Present status: Synonym* of *Brachythecium oedipodium* (Mitt.) A. Jaeger
366. *B. stricticalyx* Dixon & Badhw. [Lal, 2005]; Present status: **Unresolved name**
367. *B. velutinum* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
368. *B. waziriense* Dixon [Lal, 2005]; Present status: **Unresolved name**
- 100. Bryhnia** Kaur.
369. *B. decurvans* (Mitt.) Dixon [Lal, 2005]; **Present status: Accepted name**
- 101. Camptothecium** Bruch & Schimp.
370. *C. lutescens* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
- 102. Cirriphyllum** Grout
371. *C. alare* Dixon [Lal, 2005]; Present status: **Unresolved name**
372. *C. cameratum* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
373. *C. cirrosum* (Schwägr.) Grout [Lal, 2005]; **Present status: Accepted name**
- 103. Eurhynchium** Bruch & Schimp.
374. *E. hians* (Hedw.) Sande Lac. [Lal, 2005]; **Present status: Accepted name**
375. *E. muelleri* (A. Jaeger.) E. B. Bartram [Lal, 2005]; **Present status: Accepted name**
376. *E. muelleri* var. *minus* Dixon [Lal, 2005]; Present status: **Unresolved name**
377. *E. praelongum* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
378. *E. pulchellum* (Hedw.) Jenn. [Lal, 2005]; **Present status: Accepted name**
379. *E. riparioides* (Hedw.) P. W. Richards [Lal, 2005]; **Present status: Accepted name**
380. *E. striatum* (Schreb. & Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
- 104. Homalothecium** Bruch & Schimp.
381. *H. euchloron* (Bruch & Müll. Hal.) R.S. Chopra [Lal, 2005]; **Present status: Accepted name**
382. *H. integerrimum* Dixon [Lal, 2005]; Present status: **Unresolved name** Endemic
383. *H. nilgheriense* (Mont.) H. Rob. [Lal, 2005]; **Present status: Accepted name**
384. *H. sericeum* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
- 105. Palamocladium** (Müll. Hal.) H. Rob.
385. *P. euchloron* (Bruch & Müll. Hal.) Wijk & Margad. [Lal, 2005]; **Present status: Accepted name**
386. *P. nilgheriense* (Mont.) Müll. Hal. [Lal, 2005]; *Present status: Synonym* of *Palamocladium leskeoides* (Hook.) E. Britton
- 106. Rhynchostegiella** (Bruch & Schimp.) Limpr.
387. *R. compacta* (Hook.) Loeske [Lal, 2005]; **Present status: Accepted name**
388. *R. humillima* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**

389. *R. ramicola* (Broth.) Broth. [Lal, 2005]; **Present status: Synonym** of *Remyella ramicola* (Broth.) Ignatov & Huttunen
390. *R. sachensis* Dixon [Lal, 2005]; **Present status: Unresolved name**
391. *R. scabrisseta* (Schwägr.) Broth. [Lal, 2005]; **Present status: Accepted name**
392. *Rhynchostegiella divaricatifolia* (Renauld & Cardot) Broth. [Saxena et al., 2010]; **Present status: Accepted name**
- 107. Rhynchostegium** Bruch & Schimp.
393. *R. celebicum* (Sande Lac.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
394. *R. duthiei* Müll. Hal. & Dixon [Lal, 2005]; **Present status: Unresolved name**
395. *R. herbaceum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
396. *R. hookeri* A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
397. *R. muelleri* A. Jaeger [Lal, 2005]; **Present status: Synonym** of *Eurhynchium muelleri* (A. Jaeger) E.B. Bartram
397. *R. planiusculum* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
398. *R. riparioides* (Hedw.) Cardot [Lal, 2005]; **Present status: Accepted name**
399. *R. subrectocarpum* (Dixon) Vohra [Lal, 2005]; **Present status: Accepted name**
400. *R. vagans* A. Jaeger [Asthana & Sahu, 2013]; **Present status: Synonym** of *Oxyrrhynchium vagans* (A. Jaeger) Ignatov & Huttunen
- 108. Rozea** Besch.
401. *R. pterogonioides* (Harv.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
- 27. Family: Fabroniaceae Schimp.**
- 109. Fabronia** Raddi
402. *F. ciliaris* (Brid.) Brid. [Lal, 2005]; **Present status: Accepted name**
403. *F. goughi* Mitt. [Lal, 2005]; **Present status: Unresolved name**
405. *F. madurensis* Dixon & P. de la Varde [Lal, 2005]; **Present status: Unresolved name**
406. *F. minuta* Mitt. [Lal, 2005]; **Present status: Unresolved name**
407. *F. secunda* Mont. [Asthana & Sahu, 2007]; **Present status: Accepted name**
- 110. Levierella** Müll. Hal.
408. *L. fabroniacea* Müll. Hal. [Lal, 2005]; **Present status: Synonym** of *Levierella neckeroides* (Griff.) O'Shea & Matcham
- 28. Family: Meteoriaceae Kindb.**
- 111. Aerobryidium** M. Fleisch.
409. *A. filamentosum* (Hook.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
- 112. Aerobryopsis** M. Fleisch.
410. *A. longissima* (Dozy & Molk.) M. Fleisch. [Lal, 2005]; **Present status: Synonym** of *Aerobryopsis wallichii* (Brid.) M. Fleisch.
- 113. Barbella** M. Fleisch. in Broth.
411. *B. bombycina* (Renauld & Cardot) M. Fleisch [Lal, 2005]; **Present status: Accepted name**
412. *B. compressiramea* (Renauld & Cardot) M. Fleisch [Lal, 2005]; **Present status: Accepted name**
- 114. Diaphanodon** Renuald & Cardot
413. *D. blandus* (Harv.) Renuald & Cardot [Lal, 2005]; **Present status: Accepted name**
414. *D. procumbens* (Müll. Hal.) Renuald & Cardot [Lal, 2005]; **Present status: Accepted name**
- 115. Duthiella** Müll. Hal.
415. *D. declinata* (Mitt.) Zanten [Lal, 2005]; **Present status: Accepted name**
416. *D. flaccida* (Cardot) Broth. [Lal, 2005]; **Present status: Accepted name**
417. *D. wallichii* (Mitt.) Müll. Hal. [Lal, 2005]; **Present status: Accepted name**
- 116. Floribundaria** M. Fleisch.
418. *F. floribunda* (Dozy & Molk.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
419. *F. leptonema* (Müll. Hal.) Broth. [Lal, 2005]; **Present status: Accepted name**
420. *F. walkeri* (Renauld & Cardot) Broth. [Lal, 2005]; **Present status: Accepted name**

117. *Meteoriopsis* M. Fleisch.
 421. *M. ancistrodes* (Renauld & Cardot) Broth. [Asthana & Sahu, 2013]; **Present status: Accepted name**
422. *M. formosana* Nog. [Lal, 2005]; Present status: **Synonym of *Meteoriopsis reclinata* (Müll. Hal.) M. Fleisch**
423. *M. reclinata* (Müll. Hal.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
424. *M. squarrosa* (Hook. & Harv.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
118. *Meteorium* (Brid.) Dozy & Molk.
 425. *M. buchananii* (Brid.) Broth. [Lal, 2005]; **Present status: Accepted name**
119. *Papillaria* (Müll. Hal.) Müll. Hal.
 426. *P. semitorta* (Müll. Hal.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**
120. *Trachypodopsis* M. Fleisch.
 427. *T. auriculata* (Mitt.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
428. *T. serrulata* (P. Beauv.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
121. *Trachypus* Reinw. & Hornsch.
 429. *T. bicolor* Reinw. & Hornsch. [Lal, 2005]; **Present status: Accepted name**
29. **Family: Entodontaceae Kindb.**
122. *Erythrodontium* Hampe
 430. *E. julaceum* (Hook. & Schwägr.) Paris [Lal, 2005]; **Present status: Accepted name**
123. *Orthotheciadelphus* Dixon
 431. *O. ovicarpus* Dixon [Lal, 2005]; Present status: **Synonym of *Orthothecium ovicarpum* (Dixon) W.R. Buck**
124. *Retidens* Dixon
 432. *R. stewartii* Dixon [Lal, 2005]; **Present status: Synonym of *Entodon stewartii* (Dixon) W.R. Buck**
30. **Family: Plagiotheciaceae (Broth.) M. Fleisch.**
125. *Plagiothecium* Bruch & Schimp.
 433. *P. cochleatum* Dixon [Lal, 2005]; Present status: **Unresolved name**
434. *P. denticulatum* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
435. *P. neckeroideum* Schimp. [Lal, 2005]; **Present status: Accepted name**
436. *P. neckeroideum* var. *sikkimense* Renauld & Cardot. [Lal, 2005]; Present status: **Unresolved name**
437. *P. nemorale* (Mitt.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
438. *P. perminutum* Dixon [Lal, 2005]; Present status: **Unresolved name**
439. *P. roseanum* Schimp. [Lal, 2005]; **Present status: Accepted name**
440. *P. sylvaticum* (Brid.) Schimp. [Lal, 2005]; Present status: **Synonym of *Plagiothecium denticulatum* subsp. *sylvaticum* (Brid.) Dixon**
126. *Stereophyllum* Mitt.
 441. *S. decorum* (Mitt.) Wijk & Margad [Lal, 2005]; **Present status: Accepted name**
442. *S. tavoyense* (Hook. & Harv.) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
443. *S. wightii* (Mitt.) A. Jaeger [Lal, 2005]; Present status: **Synonym of *Entodontopsis wightii* (Mitt.) W.R. Buck & Ireland**
444. *S. ligulatum* A. Jaeger [Lal, 2005]; Present status: **Synonym of *Entodontopsis nitens* (Mitt.) W.R. Buck & R.R. Ireland**
31. **Family: Regmatodontaceae Broth.**
127. *Regmatodon* Brid.
 445. *R. declinatus* (Hook.) Brid. [Lal, 2005]; **Present status: Accepted name**
446. *R. orthostegius* Mont. [Lal, 2005]; **Present status: Accepted name**
32. **Family: Leucodontaceae Schimp.**
128. *Forsstroemia* Lindb.

447. *F. inclusa* Cardot & Dixon [Lal, 2005]; Present status: **Synonym** of *Forsstroemia thomsonii* (Mitt.) W.R. Buck
448. *F. secunda* Dixon & Badhw. [Lal, 2005]; Present status: **Synonym** of *Herpetineuron acutifolium* (Mitt.) Granzow
- 129. Leucodon** Schwägr.
449. *L. sciuroides* (Hedw.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
450. *Leucodon secundus* (Harv.) Mitt. [Lal, 2005]; **Present status: Accepted name**
- 33. Family: Amblystegiaceae G. Roth.**
- 130. Amblystegium** Bruch & Schimp.
451. *A. juratzkanum* Schimp. [Lal, 2005]; Present status: **Synonym** of *Amblystegium serpens* (Hedw.) Schimp.
452. *A. saxatile* Schimp. [Lal, 2005]; **Present status: Synonym** of *Campylium radicale* (P. Beauv.) Grout
453. *Amblystegium serpens* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
454. *Amblystegium serpens* var. *saxicola* (Hesselbo) C.E.O. Jensen [Lal, 2005]; **Present status: Accepted name**
455. *A. tibetanum* (Mitt.) Paris [Lal, 2005]; **Present status: Accepted name**
456. *A. varium* (Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**
- 131. Hygroamblystegium** Loeske
457. *H. gangulianum* Vohra [Lal, 2005]; Present status: **Synonym** of *Brachythecium gangulianum* (Vohra) Ochyra **Endemic**
458. *H. obtusulum* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
459. *H. tenax* (Hedw.) Jenn. [Lal, 2005]; **Present status: Accepted name**
- 34. Family: Campyliaceae (Kanda) W. R. Buck**
- 132. Campyliadelphus** (Kindb.) R. S. Chopra
460. *Campyliadelphus elodes* (Lindb.) Kanda [Lal, 2005]; **Present status: Accepted name**
461. *Campyliadelphus protensus* (Brid.) Kanda [Lal, 2005]; Present status: **Synonym** of *Campyliadelphus stellatus* var. *protensus* (Brid.) Ochyra
- 133. Campylium** (Sull.) Mitt.
462. *C. chrysophyllum* (Brid.) J. Lange [Lal, 2005]; **Present status: Accepted name**
463. *C. gollanii* Müll. Hal. [Lal, 2005]; **Current status: Unresolved name Endemic**
464. *Campylium halleri* (Sw. & Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**
465. *C. sommerfeltii* (Myrin) J. Lange [Lal, 2005]; **Present status: Accepted name**
- 35. Family: Cratoneuraceae Mönk.**
- 134. Cratoneuron** (Sull.) Spruce
466. *C. commutatum* (Hedw.) G. Roth. [Lal, 2005]; **Present status: Accepted name**
467. *C. commutatum* var. *falcatum* (Brid.) Mönk. [Lal, 2005]; **Present status: Accepted name**
468. *C. filicinum* (Hedw.) Spruce [Lal, 2005]; **Present status: Accepted name**
469. *C. filicinum* var. *fallax* (Brid.) G. Roth. [Lal, 2005]; **Present status: Accepted name**
- 135. Drepanocladus** (Müll. Hal.) G. Roth.
470. *D. aduncus* (Hedw.) Warnst. [Lal, 2005]; **Present status: Accepted name**
471. *D. exannulatus* (Schimp.) Warnst. [Lal, 2005]; **Present status: Accepted name**
472. *D. fluitans* (Hedw.) Warnst. [Lal, 2005]; **Present status: Accepted name**
473. *D. uncinatus* (Hedw.) Warnst. [Lal, 2005]; Present status: **Synonym** of *Sanionia uncinata* (Hedw.) Loeske
- 136. Hygrohypnum** Lindb.
474. *H. dilatatum* (Wilson) Loeske [Lal, 2005]; **Present status: Synonym** of *Hygrohypnum duriusculum* (De Not.) D.W. Jamieson
475. *H. luridum* (Hedw.) Jenn. [Lal, 2005]; **Present status: Accepted name**
476. *H. nairii* Vohra [Lal, 2005]; Present status: **Unresolved name Endemic**
- 137. Leptodictyum** (Schunp.) Warnst.

477. *L. riparium* (Hedw.) Warnst. [Lal, 2005]; **Present status: Accepted name**
- 36. Family: Neckeraceae Schimp.**
- 138. *Cryptoleptodon*** Renauld & Cardot
478. *C. flexuosus* (Harv.) Renauld & Cardot [Lal, 2005]; **Present status: Accepted name**
479. *C. pluvinii* (Brid.) Broth. [Lal, 2005]; **Present status: Accepted name**
480. *C. rigidulus* (Wilson & Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 139. *Homalia*** (Brid.) Bruch & Schimp.
481. *H. obtusata* Mitt. [Lal, 2005]; **Present status: Synonym of *Homalia trichomanoides* (Hedw.) Schimp.**
- 140. *Homali dendron*** Fleisch
482. *H. exiguum* (Bosch & Lac.) M. Fleisch. [Asthana & Sahu, 2013]; **Present status: Accepted name**
483. *H. microdendron* (Mont.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
484. *H. obtusatum* (Mitt.) Gangulee [Lal, 2005]; **Present status: Synonym of *Homalia trichomanoides* (Hedw.) Schimp.**
485. *H. scalpellifolium* (Mitt.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
486. *H. stracheyanum* (Mitt.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
- 141. *Neckera*** Hedw.
487. *N. complanata* (Hedw.) Huebener [Lal, 2005]; **Present status: Accepted name**
488. *N. crenulata* Harv. [Lal, 2005]; **Present status: Accepted name**
489. *N. himalayana* Mitt. [Lal, 2005]; **Present status: Accepted name**
490. *N. pennata* Hedw. [Lal, 2005]; **Present status: Accepted name**
- 142. *Neckeropsis*** Reichdt.
491. *N. exserta* (Hook. & Schwägr.) Broth. [Lal, 2005]; **Present status: Accepted name**
492. *N. lepineana* (Mont.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
- 143. *Pinnatella*** M. Fleisch.
493. *P. ambigua* (Bosch & Sande Lac.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
494. *P. gollanii* Broth. [Lal, 2005]; **Present status: Unresolved name**
- 144. *Porotrichum*** (Brid.) Hampe
495. *P. fruticosum* Mitt. [Lal, 2005]; **Present status: Synonym of *Camptochaete fruticosa* Paris**
- 145. *Thamnobryum*** Nieuwl.
496. *T. alopecurum* (Hedw.) Nieuwl. & Gangulee [Lal, 2005]; **Present status: Accepted name**
497. *T. latifolium* (Bosch & Sande Lac.) Nieuwl. [Lal, 2005]; **Present status: Accepted name**
498. *T. subseriatum* (Mitt. & Sande Lac.) B.C. Tan [Lal, 2005]; **Present status: Accepted name**
- 37. Family : Hylocomiaceae (Broth.) M. Fleisch.**
- 146. *Cyathothecium*** Dixon
499. *C. distichaceum* Dixon [Lal, 2005]; **Present status: Unresolved name**
- 147. *Hylocomium*** Bruch & Schimp.
500. *H. himalayanum* (Mitt.) A. Jaeger [Lal, 2005]; **Present status: Synonym of *Hylocomiastrum himalayanum* (Mitt.) Broth.**
501. *H. indicum* Dixon [Lal, 2005]; **Present status: Synonym of *Pseudopleuropus indicus* (Dixon) T.Y. Chiang**
- 148. *Leptohymenium*** Schwägr.
502. *L. tenue* (Hook.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
- 149. *Macrothamnium*** M. Fleisch.
503. *M. macrocarpum* (Reinw. & Hornsch.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
504. *M. submacrocarpum* A. Jaeger et Renauld ex Cardot [Lal, 2005]; **Present status: Synonym of *Macrothamnium macrocarpum* (Reinw. & Hornsch.) M. Fleisch.**
- 150. *Rhytidiadelphus*** (Limpr.) Warnst.
505. *R. triquetrus* (Hedw.) Warnst. [Lal, 2005]; **Present status: Accepted name**

151. Macrothamnium

506. *Macrothamnium stigmatophyllum* M. Fleisch. [Lal, 2005]; Present status: **Synonym** of *Macrothamnium submacrocarpum* (A. Jaeger et Renauld ex Cardot) M. Fleisch.

152. Stenotheciopsis M. Fleisch.

507. *S. serrula* Mitt. [Lal, 2005]; Present status: **Synonym** of *Stenotheciopsis serrula* (Mitt.) M. Fleisch.

38. Family: Leskeaceae Schimp.**153. Anomodon** Hook. & Taylor

508. *A. acutifolius* Mitt. [Lal, 2005]; **Present status: Accepted name**

509. *A. attenuatus* (Hedw.) Huebener [Lal, 2005]; **Present status: Accepted name**

510. *A. minor* (Hedw.) Fürnr. [Lal, 2005]; **Present status: Accepted name**

511. *A. minor* (Hedw.) Lindb. ssp. *integerrimus* (Mitt.) Z. Iwats. [Lal, 2005]; **Present status: Accepted name**

512. *A. planatus* Mitt. [Lal, 2005]; Present status: **Synonym** of *Anomodon minor* (Hedw.) Lindb.

513. *A. rostratus* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**

514. *A. rugelii* (Müll. Hal.) Keissl. [Lal, 2005]; **Present status: Accepted name**

515. *A. thrautus* Müll. Hal. [Lal, 2005]; **Present status: Accepted name**

516. *A. viticulosus* (Hedw.) Hook. & Taylor [Lal, 2005]; **Present status: Accepted name**

154. Habrodon Schimp.

517. *H. kashmiriensis* Vohra [Lal, 2005]; Present status: **Unresolved name** Endemic

155. Haplohymenium Dozy & Molk.

518. *H. triste* (Ces.) Kindb. [Lal, 2005]; **Present status: Accepted name**

156. Herpetineuron (Müll. Hal.) Cardot

519. *H. tocoae* (Sull. & Lesq.) Cardot [Lal, 2005]; **Present status: Accepted name**

157. Leptopterigynandrum Müll. Hal.

520. *L. brevirete* Dixon [Lal, 2005]; Present status: **Unresolved name**

521. *L. subintegrum* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**

158. Lescuraea Bruch & Schimp.

522. *L. incurvata* (Hedw.) E. Lawton [Lal, 2005]; **Present status: Accepted name**

523. *L. laevifolia* (Mitt.) R. S. Chopra [Lal, 2005]; **Present status: Accepted name**

524. *L. mutabilis* (Brid.) Lindb. [Lal, 2005]; **Present status: Accepted name**

525. *L. ramuligera* (Mitt.) R. S. Chopra [Lal, 2005]; **Present status: Accepted name**

526. *L. saxicola* (Bruch & Schimp.) Molendo [Lal, 2005]; **Present status: Accepted name**

159. Leskea Hedw.

527. *L. hyalopiculata* Dixon [Lal, 2005]; Present status: **Unresolved name**

160. Leskeella (Limpr.) Loesk.

528. *L. incrassata* (Lindb. & Broth.) Broth. [Lal, 2005]; **Present status: Accepted name**

529. *L. nervosa* (Brid.) Loesk. [Lal, 2005]; **Present status: Accepted name**

161. Lindbergia Kindb.

530. *L. duthiei* (Broth.) Broth. [Lal, 2005]; **Present status: Accepted name**

531. *L. koelzii* R. S. Williams [Lal, 2005]; Present status: **Unresolved name**

532. *L. longinervis* Cardot. & Dixon [Lal, 2005]; Present status: **Unresolved name**

162. Pseudoleskea Bruch & Schimp.

533. *P. laevifolia* (Mitt.) A. Jaeger. [Lal, 2005]; Present status: **Synonym** of *Lescuraea laevifolia* (Mitt.) R.S. Chopra

163. Pseudoleskeella Kindb.

534. *P. catenulata* (Brid. & Schrad.) Kindb. [Lal, 2005]; **Present status: Accepted name**

164. Pseudoleskeopsis Broth.

535. *P. pseudoleskeopsis decurvata* (Mitt.) Broth. [Lal, 2005]; Present status: **Synonym** of *Pseudoleskea decurvata* (Mitt.) Broth. & Dixon

536. *P. serrulata* Cardot & Thér. [Lal, 2005]; Present status: **Synonym** of *Pseudoleskeopsis zippelii* (Dozy & Molk.) Broth.
537. *P. zippelii* (Dozy & Molk.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 39. Family: Sematophyllaceae** Broth.
- 165. *Aptychella*** (Broth.) Herz.
538. *A. tenuiramea* (Mitt.) Tixier [Lal, 2005]; **Present status: Accepted name**
- 166. *Brotherella*** Loesk. & M. Fleisch.
539. *B. harveyana* (Mitt.) Dixon [Lal, 2005]; **Present status: Accepted name**
540. *B. perpinnata* (Broth.) M. Fleisch. [Lal, 2005]; Present status: **Synonym** of *Pylaisiadelpha perpinnata* (Broth.) W.R. Buck
541. *B. yokahamae* (Broth.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 167. *Clastobryum*** Dozy & Molk.
542. *C. capillaceum* (Griff.) Broth. [Lal, 2005]; Present status: **Synonym** of *Pylaisiadelpha capillacea* (Griff.) B.C. Tan & Y. Jia
- 168. *Heterophyllum*** (Saxhimp.) Kindb.
543. *H. haldanianum* (Grev.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**
- 169. *Pylaisiadelpha*** Cardot.
544. *P. drepanioides* Cardot. & Dixon [Lal, 2005]; Present status: **Unresolved name**
- 170. *Sematophyllum*** Mitt.
545. *S. humile* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 171. *Struckia*** Müll. Hal.
546. *S. argentata* (Mitt.) Müll. Hal. [Lal, 2005]; **Present status: Accepted name**
- 172. *Wijkia*** Crum
547. *W. tanytricha* (Mont.) H. A. Crum [Lal, 2005]; **Present status: Accepted name**
- 40. Family: Helodiaceae** (M. Fleisch.) Ochyra.
- 173. *Actinohuidium*** (Besch.) Broth.
548. *A. hookeri* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**
- 11. ORDER: ORTHOTRICHALES DIXON**
- 41. Family: Orthotrichaceae** Arn.
- 174. *Macrocoma*** (Müll. Hal.) Grout
549. *M. orthotrichoides* (Raddi) Wijk & Margad [Lal, 2005]; **Present status: Accepted name**
- 175. *Amphidium*** Schimp.
550. *A. lapponicum* (Hedw.) Schimp. [Lal, 2005]; **Present status: Accepted name**
- 176. *Macromitrium*** Brid.
551. *M. hymenostomum* Mont. [Lal, 2005]; **Present status: Accepted name**
552. *M. moorcroftii* (Hook. & Grev.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
553. *M. rigbyanum* Dixon [Singh et al., 2010]; Present status: **Unresolved name**
- 42. Family: Orthotrichaceae** Arn.
- 177. *Orthotrichum*** Hedw.
554. *O. affine* Schwägr. [Lal, 2005]; Present status: **Synonym** of *Orthotrichum affine* Schrad. & Brid.
555. *O. affine* var. *fastigiatum* (Bruch & Brid.) Huebener [Lal, 2005]; Present status: **Synonym** of *Orthotrichum affine* Schrad. & Brid.
556. *O. alpestre* Hornsch. & B. S. G. [Lal, 2005]; **Present status: Accepted name**
557. *O. anomalum* Hedw. [Lal, 2005]; **Present status: Accepted name**
558. *O. cupulatum* Hoffm. & Brid. [Lal, 2005]; **Present status: Accepted name**
559. *O. duthiei* Venturi [Lal, 2005]; Present status: **Synonym** of *Orthotrichum alpestre* Hornsch. & B.S.G.
560. *O. griffithi* Mitt. & Dixon [Lal, 2005]; Present status: **Unresolved name**
561. *O. hookeri* Wilson & Mitt. [Lal, 2005]; **Present status: Accepted name**
562. *O. macounii* Austin [Lal, 2005]; **Present status: Accepted name**

563. *O. obtusifolium* Brid. [Lal, 2005]; **Present status: Accepted name**
564. *O. pumilum* Sw. [Lal, 2005]; **Present status: Accepted name**
565. *O. rupestre* Schleich. & Schwägr. [Lal, 2005]; **Present status: Accepted name**
566. *O. speciosum* Nees [Lal, 2005]; **Present status: Accepted name**
567. *O. striatum* Hedw. [Lal, 2005]; Present status: **Synonym** of *Dorcadion striatum* (Hedw.) Lindb.
568. *O. sturmii* Hoppe & Hornsch. [Lal, 2005]; Present status: **Synonym** of *Orthotrichum rupestre* subsp. *sturmii* (Hoppe & Hornsch.) Boulay
569. *O. urnigerum* Myrin [Lal, 2005]; **Present status: Accepted name**
570. *O. venustum* Venturi [Lal, 2005]; Present status: **Synonym** of *Orthotrichum alpestre* Hornsch. & B.S.G.
571. *O. virens* Venturi [Lal, 2005]; Present status: **Synonym** of *Orthotrichum crenulatum* Mitt.
- 43. Family: Rhytidiaceae** Broth.
- 178. Rhytidium** (Sull.) Kindb.
572. *R. rugosum* (Ehrh. & Hedw.) Kindb. [Lal, 2005]; **Present status: Accepted name**
- 12. ORDER: POLYTRICHALES M. FLEISCH**
- 44. Family: Polytrichaceae** Schwägr
- 179. Atrichum** P. Beauv.
573. *A. aculeatum* Cardot & P. de la Varde [Lal, 2005]; Present status: **Synonym** of *Atrichum subserratum* (Harv. & Hook. f.) Mitt.
574. *A. flavisetum* Mitt. [Lal, 2005]; **Present status: Accepted name**
575. *A. obtusulum* (Müll. Hal.) A. Jaeger [Lal, 2005]; **Present status: Accepted name**
576. *A. pallidum* Renauld & Cardot [Lal, 2005]; Present status: **Synonym** of *Atrichum subserratum* (Harv. & Hook. f.) Mitt.
577. *A. undulatum* (Hedw.) P. Beauv. [Asthana & Sahu, 2013]; **Present status: Accepted name**
578. *A. undulatum* var. *subserratum* (Hook.) Paris [Lal, 2005]; Present status: Unresolved name
- 180. Oligotrichum** Lam. & Cand.
579. *O. semilamellatum* (Hook. f.) Mitt. [Lal, 2005]; **Present status: Accepted name**
- 181. Pogonatum** P. Beauv.
580. *P. aloides* (Hedw.) P. Beauv. [Lal, 2005]; **Present status: Accepted name**
581. *P. alpinum* (Hedw.) Röhl. [Lal, 2005]; Present status: **Synonym** of *Polytrichastrum alpinum* (Hedw.) G.L. Sm.
582. *P. fuscatum* Mitt. [Lal, 2005]; **Present status: Accepted name**
583. *P. hexagonum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Pogonatum patulum* (Harv.) Mitt.
584. *P. himalayanum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Pogonatum urnigerum* (Hedw.) P. Beauv.
585. *P. junghuhnianum* (Dozy & Molk.) Dozy & Molk. [Lal, 2005]; Present status: **Synonym** of *Pogonatum neesii* (Müll. Hal.) Dozy
586. *P. junghuhnianum* var. *sikkimense* Renauld & Cardot [Lal, 2005]; Present status: **Synonym** of *Pogonatum neesii* (Müll. Hal.) Dozy
587. *P. microstomum* (R. Br. & Schwägr.) Brid. [Asthana & Sahu, 2013]; **Present status: Accepted name**
588. *P. perichaetiale* (Mont.) A. Jaeger [Asthana & Sahu, 2013]; Present status: **Synonym** of *Pogonatum gracilifolium* Besch.
589. *P. seminudum* Mitt. [Lal, 2005]; Present status: **Synonym** of *Polytrichum proliferum* Griff.
590. *P. stevensii* Renauld & Cardot [Lal, 2005]; Present status: **Synonym** of *Pogonatum neesii* (Müll. Hal.) Dozy
591. *P. thomsonii* (Mitt.) A. Jaeger [Lal, 2005]; Present status: **Synonym** of *Pogonatum perichaetiale* subsp. *thomsonii* (Mitt.) Hyvönen
592. *P. urnigerum* (Hedw.) P. Beauv. [Lal, 2005]; **Present status: Accepted name**

182. *Polytrichastrum* G. L. Sm.

593. *P. papillatum* G. L. Sm. [Lal, 2005]; **Present status: Accepted name**

183. *Polytrichum* Hedw.

594. *P. alpinum* Hedw. [Lal, 2005]; Present status: **Synonym** of *Polytrichastrum alpinum* (Hedw.) G.L. Sm.

595. *P. juniperinum* Hedw. [Lal, 2005]; **Present status: Accepted name**

596. *P. piliferum* Hedw. [Lal, 2005]; Present status: **Synonym** of *Polytrichum juniperinum* Hedw.

13. ORDER: POTTIALES M. FLEISCH.

45. Family: Pottiaceae Schimp.

184. *Aloina* (Müll. Hal.) Kindb.

597. *A. rigida* (Hedw.) Limpr. [Lal, 2005]; **Present status: Accepted name**

185. *Anoetangium* Schwägr.

598. *A. bicolor* Renaud & Cardot [Lal, 2005]; Present status: **Unresolved name**

599. *A. clarum* Mitt. [Lal, 2005]; **Present status: Accepted name**

600. *A. kashmiriense* M. N. Aziz & Vohra [Lal, 2005]; Present status: **Unresolved name**

601. *A. stracheyanum* Mitt. [Lal, 2005]; **Present status: Accepted name**

602. *A. thomsonii* Mitt. [Asthana & Sahu, 2013]; **Present status: Accepted name**

603. *A. walkeri* Broth. [Lal, 2005]; Present status: **Unresolved name**

186. *Astomum* Hampe

604. *A. crispum* (Hedw.) Hampe [Lal, 2005]; **Present status: Accepted name**

187. *Barbula* Hedw.

605. *B. arcuata* Griff. [Lal, 2005]; **Present status: Accepted name**

606. *B. confertifolia* Mitt. [Lal, 2005]; *Present status: Synonym* of *Didymodon confertifolius* (Mitt.) Paris

607. *B. funalis* Dixon & Badhw. [Lal, 2005]; Present status: **Unresolved name**

608. *B. fuscescens* Wall. [Lal, 2005]; **Present status: Accepted name**

609. *B. gregaria* (Mitt.) A. Jaeger [Lal, 2005]; *Present status: Synonym* of *Barbula indica* var. *gregaria* (Mitt.) R.H. Zander

610. *B. horricomis* Müll. Hal. & Gangulee [Lal, 2005]; Present status: **Unresolved name**

611. *B. indica* (Hook.) Spreng. [Lal, 2005]; **Present status: Accepted name**

612. *B. leucodontoides* (Gangulee) Gangulee [Lal, 2005]; **Present status: Accepted name**

613. *B. microstoma* (Dixon & Badhw.) R. S. Chopra [Lal, 2005]; **Present status: Accepted name**

614. *B. obscura* Mitt. [Lal, 2005]; Present status: **Synonym** of *Didymodon mittenii* Gangulee

615. *B. ovata* Mitt. [Lal, 2005]; Present status: **Synonym** of *Trichostomum ovatum* (Mitt.) Müll. Hal.

616. *B. reflexa* (Brid.) Brid. [Lal, 2005]; Present status: **Synonym** of *Didymodon ferrugineus* (Schimp. & Besch.) M.O. Hill

617. *B. subcontorta* Broth. [Lal, 2005]; *Present status: Synonym* of *Didymodon vinealis* (Brid.) R.H. Zander

618. *B. unguiculata* Hedw. [Lal, 2005]; **Present status: Accepted name**

619. *B. vinealis* Brid. [Lal, 2005]; *Present status: Synonym* of *Didymodon vinealis* (Brid.) R.H. Zander

188. *Bryoerythrophyllum* P. C. Chen

620. *B. alpigenum* (Vent.) P.C. Chen [Lal, 2005]; **Present status: Accepted name**

621. *B. atrorubens* (Besch.) P.C. Chen [Lal, 2005]; **Present status: Accepted name**

622. *B. gymnostomum* (Broth.) P. C. Chen [Lal, 2005]; **Present status: Accepted name**

623. *B. inaequalifolium* (Taylor) R. H. Zander [Lal, 2005]; **Present status: Accepted name**

624. *B. recurvirostrum* (Hedw.) P. C. Chen [Lal, 2005]; **Present status: Accepted name**

625. *B. yunnanense* (Herzog) P.C. Chen [Lal, 2005]; Present status: **Synonym** of *Erythrobarbula yunnanensis* (Herzog) Steere

626. *B. yunnanense* var. *noguchianum* Gangulee [Lal, 2005]; Present status: **Synonym** of *Bryoerythrophyllum noguchianum* (Gangulee) K. Saito
- 189. Cinclidotus** P. Beauv.
627. *C. acutifolius* Broth. [Lal, 2005]; Present status: **Unresolved name**
- 190. Desmatodon** Brid.
628. *D. cernuus* (Huebener) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
629. *D. gemmascens* P. C. Chen [Lal, 2005]; **Present status: Accepted name**
630. *D. kabir-khanii* Broth. [Lal, 2005]; Present status: **Synonym** of *Tortula kabir-khanii* (Broth.) R.H. Zander
631. *D. leucostoma* (R. Br.) Berggr. [Lal, 2005]; Present status: **Synonym** of *Tortula leucostoma* (R. Br.) Hook. & Grev.
- 191. Didymodon** Hedw.
632. *D. asperifolius* (Mitt.) H.A. Crum, Steere & L.E. Anderson [Lal, 2005]; **Present status: Accepted name**
633. *Didymodon canaliculatus* Dixon [Lal, 2005]; Present status: **Synonym** of *Barbula canaliculata* (Dixon) R.S. Chopra
634. *D. constrictus* (Mitt.) K. Saito [Lal, 2005]; **Present status: Accepted name**
635. *D. fallax* (Hedw.) R. H. Zander [Lal, 2005]; **Present status: Accepted name**
636. *D. hastatus* (Mitt.) R. H. Zander [Lal, 2005]; **Present status: Accepted name**
637. *D. leskeoides* K. Saito [Lal, 2005]; Present status: **Unresolved name**
638. *D. mittenii* Gangulee [Lal, 2005]; **Present status: Accepted name**
639. *D. nigrescens* (Mitt.) K. Saito [Lal, 2005]; **Present status: Accepted name**
640. *D. rigidulus* Hedw. [Lal, 2005]; **Present status: Accepted name**
641. *D. rigidulus* var. *gracilis* (Schleich. & Hook. & Grev.) R.H. Zander [Lal, 2005]; **Present status: Accepted name**
642. *D. stewartii* (E.B. Bartram) R.H. Zander [Lal, 2005]; **Present status: Accepted name**
643. *D. topiaceus* (Brid.) Lisa [Lal, 2005]; **Present status: Accepted name**
644. *D. vinealis* (Brid.) R. H. Zander [Lal, 2005]; **Present status: Accepted name**
- 192. Eucladium** Bruch & Schimp.
645. *E. verticillatum* (Hedw.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
- 193. Ganguleea** R. H. Zander
646. *G. angulosa* (Broth. & Dixon) R. H. Zander [Lal, 2005]; **Present status: Accepted name**
- 194. Gymnostomum** Nees & Hornsch.
647. *G. aeruginosum* G. L. Sm. [Lal, 2005]; **Present status: Accepted name**
648. *G. calcareum* Nees & Hornsch. [Lal, 2005]; Present status: **Synonym** of *Gymnostomum aeruginosum* Sm.
- 195. Hydrogonium** (Müll. Hal.) A. Jaeger.
649. *H. amplexifolium* (Mitt.) P. C. Chen [Lal, 2005]; **Present status: Accepted name**
650. *H. arcuatum* (Griff.) Wijk & Margad. [Lal, 2005]; **Present status: Accepted name**
651. *H. consanguineum* (Thwaites & Mitt.) Hilp. [Lal, 2005]; **Present status: Accepted name**
652. *H. dicranelloides* Gangulee [Lal, 2005]; Present status: **Unresolved name**
653. *H. ehrenbergii* (Lorentz) A. Jaeger. [Lal, 2005]; **Present status: Accepted name**
654. *H. gracilentum* (Mitt.) P. C. Chen [Lal, 2005]; **Present status: Accepted name**
655. *H. javanicum* (Dozy & Molck.) Hilp. [Lal, 2005]; **Present status: Accepted name**
656. *H. mussoorianum* Vohra [Lal, 2005]; Present status: **Unresolved name**
657. *H. subpellucidum* (Mitt.) Hilp. [Lal, 2005]; **Present status: Accepted name**
- 196. Hymenostomum** R. Br.
658. *H. microstomum* (Hedw.) R. Br. [Lal, 2005]; Present status: **Synonym** of *Weissia brachycarpa* (Nees & Hornsch.) Jur.
659. *H. rostellatum* (Brid.) Schimp. [Lal, 2005]; Present status: **Synonym** of *Weissia rostellata* (Brid.) Lindb

660. *H. tortile* (Schwägr.) Bruch & Schimp. [Lal, 2005]; Present status: **Synonym** of *Weissia condensata* (Voit) Lindb.
- 197. Hymenostyliella** E. B. Bartram
661. *H. llanosii* (Broth.) H. Rob. [Lal, 2005]; Present status: **Accepted name**
- 198. Hymenostylium** Brid.
662. *H. dicranelloides* Broth. & Dixon [Lal, 2005]; Present status: **Accepted name**
663. *H. filiforme* Dixon [Lal, 2005]; Present status: **Synonym** of *Didymodon filiforme* (Dixon) M.N. Aziz & Vohra
664. *H. grandir&e* Dixon [Lal, 2005]; Present status: **Unresolved name**
665. *H. recurvirostrum* (Hedw.) Dixon [Asthana & Sahu, 2013]; Present status: **Accepted name**
666. *H. recurvirostrum* var. *aurantiacum* (Mitt.) Gangulee [Lal, 2005]; Present status: **Accepted name**
667. *H. shephardae* Cardot & Dixon [Lal, 2005]; Present status: **Synonym** of *Anoetangium shephardae* (Cardot & Dixon) R.H. Zander
- 199. Hyophila** Brid.
668. *H. involuta* (Hook.) A. Jaeger. [Lal, 2005]; Present status: **Accepted name**
669. *H. rosea* R. S. Williams [Lal, 2005]; Present status: **Accepted name**
670. *H. spathulata* (Harv.) A. Jaeger. [Lal, 2005]; Present status: **Synonym** of *Tortula spathulata* (Harv.) Mitt.
- 200. Leptodontium** (Müll. Hal.) Hampe
671. *L. flexifolium* (Dicks.) Hampe [Lal, 2005]; Present status: **Accepted name**
- 201. Molendoa** Lindb.
672. *M. duthiei* (Broth.) Broth. [Lal, 2005]; Present status: **Accepted name**
673. *M. roylei* (Mitt.) Broth. [Lal, 2005]; Present status: **Accepted name**
674. *M. sendtneriana* (Bruch & Schimp.) Limpr. [Lal, 2005]; Present status: **Accepted name**
- 202. Oxystegus** (Limpr.) Hilp.
675. *O. cylindricus* (Bruch & Brid.) Hilp. [Lal, 2005]; Present status: **Synonym** of *Trichostomum tenuirostre* var. *tenuirostre*
676. *O. stenophyllus* (Mitt.) Gangulee [Lal, 2005]; Present status: **Accepted name**
677. *O. tenuirostris* (Hook. & Taylor) A.J.E. Sm. [Asthana & Sahu, 2013]; Present status: **Synonym** of *Trichostomum tenuirostre* (Hook. & Taylor) Lindb.
678. *O. tenuirostris* var. *gemmaiparus* (Schimp.) R. H. Zander [Lal, 2005]; Present status: **Unresolved name**
- 203. Pleurochaete** Lindb.
679. *P. squarrosa* (Brid.) Lindb. [Lal, 2005]; Present status: **Accepted name**
- 204. Pottia** (Reichenb.) Fuernr.
680. *P. alpicola* Dixon [Lal, 2005]; Present status: **Unresolved name**
681. *P. starckeana* (Hedw.) Müll. Hal. [Lal, 2005]; Present status: **Synonym** of *Microbryum starckeanum* (Hedw.) R.H. Zander
- 205. Reimersia** P. C. Chen
682. *R. inconspicua* (Griff.) P. C. Chen [Lal, 2005]; Present status: **Accepted name**
- 206. Rhamphidium** Mitt.
683. *R. cribbifolium* Dixon & Wijk, Margad. & Florsch. [Lal, 2005]; Present status: **Unresolved name**
684. *R. laticuspe* Dixon [Lal, 2005]; Present status: **Unresolved name**
685. *R. mussuriensis* Dixon [Lal, 2005]; Present status: **Unresolved name**
- 207. Scopelophila** (Mitt.) Lindb.
686. *S. cataractae* (Mitt.) Broth. [Lal, 2005]; Present status: **Accepted name**
687. *S. ligulata* (Spruce) Spruce [Lal, 2005]; Present status: **Accepted name**
- 208. Semibarbula** Herz. & Hilp.
688. *S. orientalis* (F. Weber) Wijk & Margad. [Lal, 2005]; Present status: **Accepted name**

- 209. *Stegonia*** Vent.
689. *S. latifolia* (Schwägr.) Venturi & Broth. [Lal, 2005]; **Present status: Accepted name**
- 210. *Syntrichia*** Brid.
690. *S. princeps* (De Not.) Mitt. [Lal, 2005]; **Present status: Accepted name**
- 211. *Timmiella*** (De Not.) Limpr.
691. *T. anomala* (Bruch & Schimp.) Limpr. [Lal, 2005]; **Present status: Accepted name**
692. *T. barbulooides* (Brid.) Mönk. [Lal, 2005]; **Present status: Accepted name**
693. *T. diminuta* (Müll. Hal.) P. C. Chen [Lal, 2005]; **Present status: Accepted name**
- 212. *Tortella*** (Lindb.) Limpr.
694. *T. alpicola* Dixon [Lal, 2005]; **Present status: Accepted name**
695. *T. fragilis* (Hook. & Wilson) Limpr. [Lal, 2005]; **Present status: Accepted name**
696. *T. tortuosa* (Hedw.) Limpr. [Lal, 2005]; **Present status: Accepted name**
- 213. *Tortula*** Hedw.
697. *T. brandisii* (Müll. Hal.) Broth. [Lal, 2005]; Present status: **Synonym** of *Syntrichia brandisii* (Müll. Hal.) R.H. Zander
698. *T. inermis* (Brid.) Mont. [Lal, 2005]; **Present status: Accepted name**
699. *T. montana* Mitt. [Lal, 2005]; Present status: **Synonym** of *Rhamphidium montanus* (Mitt.) R.H. Zander
700. *T. muralis* Hedw. [Lal, 2005]; **Present status: Accepted name**
701. *T. princeps* De Not. [Lal, 2005]; Present status: **Synonym** of *Syntrichia princeps* (De Not.) Mitt.
702. *T. pseudoprinceps* Dixon [Lal, 2005]; Present status: **Unresolved name**
703. *T. rubripila* Dixon [Lal, 2005]; Present status: **Synonym** of *Tortula norvegica* var. *norvegica*
704. *T. ruralis* (Hedw.) P. Gaertn., B. Mey. & Scherb. [Lal, 2005]; Present status: **Synonym** of *Syntrichia ruralis* (Hedw.) F. Weber & D. Mohr
705. *T. subulata* Hedw. [Lal, 2005]; **Present status: Accepted name**
706. *T. websteri* H. Rob. [Lal, 2005]; Present status: **Unresolved name**
- 214. *Trichostomum*** Bruch
707. *T. brachydontium* Müll. Hal. [Lal, 2005]; **Present status: Accepted name**
708. *T. lillei* Dixon [Lal, 2005]; Present status: **Unresolved name**
709. *T. uncinifolium* Dixon [Lal, 2005]; Present status: **Synonym** of *Pseudosymblypharis bombayensis* (Müll. Hal.) P. Sollman
- 215. *Weissia*** Hedw.
710. *W. controversa* Hedw. [Lal, 2005]; **Present status: Accepted name**
711. *W. rutilans* (Hedw.) Lindb. [Lal, 2005]; **Present status: Accepted name**
712. *W. wimmeriana* (Sendtn.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name**
- 46. Family: Calymperaceae** Kindb.
- 216. *Octoblepharum*** Hedw.
713. *O. albidum* Hedw. [Lal, 2005]; **Present status: Accepted name**
- 217. *Syrrhopodon*** Schwägr.
714. *S. gardneri* (Hook.) Schwägr. [Lal, 2005]; **Present status: Accepted name**
715. *S. himalayanus* Dixon [Lal, 2005]; Present status: **Synonym** of *Syrrhopodon tristichus* Nees & Schwägr.
716. *S. spiculosus* Hook. & Grev. [Lal, 2005]; **Present status: Accepted name**
- 14. ORDER: RHIZOGONIALES (M.FLESCHE) GOFFINET & W.R.BUCK.**
- 47. Family: Rhizogoniaceae** Broth.
- 218. *Rhizogonium*** Brid.
717. *R. spiniforme* (Hedw.) Bruch [Lal, 2005]; **Present status: Accepted name**
- 48. Family: Racopilaceae** Kindb.
- 219. *Racopilum*** P. Beauv.
718. *R. orthocarpum* Wilson & Mitt. [Lal, 2005]; **Present status: Accepted name**

15. ORDER: SELIGERIALES (M.FLESCH.) GOFFINET & W.R.BUCK.**49. Family: Seligeriaceae Schimp.****220. *Blindia* Bruch & Schimp.**719. *B. campylopodiodes* Dixon & Badhw. [Lal, 2005]; **Present status: Accepted name**720. *B. himalayana* Dixon & Badhw. [Lal, 2005]; **Present status: Accepted name**721. *B. roerichii* R. S. Williams [Lal, 2005]; **Present status: Accepted name**722. *B. sordida* (Wilson & Mitt.) Müll. Hal. [Lal, 2005]; Present status: **Synonym** of *Dicranodontium sordidum* (Wilson & Mitt.) Müll. Hal.**16. ORDER: SPHAGNALES LIMPR.****50. Family: Sphagnaceae Dum.****221. *Sphagnum* L.**723. *S. fimbriatum* Wilson [Lal, 2005]; **Present status: Accepted name**724. *S. girgensohnii* Russow [Lal, 2005]; **Present status: Accepted name**725. *S. squarrosum* Crome [Lal, 2005]; **Present status: Accepted name****17. ORDER: SPLACHNALES GREV. & ARN.****51. Family: Meesiaceae Schimp.****222. *Amblyodon* Bruch & Schimp.**726. *A. dealbatus* (Sw. & Hedw.) Bruch & Schimp. [Lal, 2005]; **Present status: Accepted name****52. Family : Splachnaceae Grev.****223. *Gymnostomiella* M. Fleisch.**727. *G. vernicosa* (Hook. & Harv.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name****224. *Splachnobryum* Müll. Hal.**728. *S. indicum* Hampe & Müll. Hal. [Lal, 2005]; Present status: **Synonym** of *Splachnobryum obtusum* (Brid.) Müll. Hal.729. *S. procerrimum* Dixon & P. de la Varde [Lal, 2005]; Present status: **Synonym** of *Splachnobryum aquaticum* Müll. Hal.730. *S. synoicum* H. Rob. [Lal, 2005]; Present status: **Synonym** of *Splachnobryum assamicum* Dixon**225. *Tayloria* Hook.**731. *T. froelichiana* (Hedw.) Mitt. & Broth. [Lal, 2005]; **Present status: Accepted name**732. *T. indica* Mitt.**Present status: Accepted name**733. *T. jacquemontii* (Bruch & Schimp.) Mitt. [Lal, 2005]; **Present status: Accepted name**734. *T. tenella* Mitt. [Lal, 2005]; [Lal, 2005]; Present status: **Synonym** of *Tayloria hornschurchii* (Grev. & Arn.) Broth.**18. ORDER: TETRAPHIDALES M. FLEISCH.****53. Buxbaumiaceae Schimp.****226. *Buxbaumia* Hedw.**735. *B. himalayensis* Udar, S.C. Srivast. & D. Kumar [Lal, 2005]; Present **status: Unresolved name** Endemic**227. *Theriotia* Cardot**736. *T. kashmirensis* H. Rob. [Lal, 2005]; Present status: **Synonym** of *Diphyscium kashmirensis* (H. Rob.) Magombo, Zacharia Lekodi737. *T. lorifolia* Cardot [Lal, 2005]; Present status: **Synonym** of *Diphyscium lorifolium* (Cardot) Magombo, Zacharia Lekodi**19. ORDER: TIMMIALES OCHYRA****54. Family: Timmiaceae Schimp.****228. *Timmia* Hedw.**738. *T. austriaca* Hedw. [Lal, 2005]; **Present status: Accepted name**

739. *T. bavarica* Hessel. [Lal, 2005]; Present status: **Synonym** of *Timmia megapolitana* subsp. *bavarica* (Hessel.) Brassard

740. *T. megapolitana* Hedw. [Lal, 2005]; **Present status: Accepted name**

55. Family: Hypopterygiaceae Mitt.

229. *Cyathophorella* (Broth.) M. Fleisch.

741. *C. adiantum* (Griff.) M. Fleisch. [Lal, 2005]; **Present status: Accepted name**

742. *C. intermedia* (Mitt.) Broth. [Lal, 2005]; **Present status: Accepted name**

743. *C. tonkinensis* (Broth. & Paris) Broth. [Lal, 2005]; **Present status: Accepted name**

230. *Hypopterygium* Brid.

745. *H. flavolimbatum* Müll. Hal. [Lal, 2005]; **Present status: Accepted name**

3. Result

The present compilation of moss flora of Western Himalayas revealed the occurrence of total 745 species of mosses which are belonging to 19 orders; 55 families and 230 genera. Out of these 468 retained their valid status, while 196 species have been synonymied and status of 86 species is still doubtful i.e. unresolved name. 17 taxa have been reported endemic from Western Himalayas. This great diversity of mosses proves the potential of Western Himalayas in terms of bryodiversity specifically the mosses. At present only 463 species are validly identified from western Himalayas.

4. Discussion

The checklist of mosses of these regions reveals that the most diversified order is Hypnales with 20 families, 104 genera and 306 species. It is followed by Pottiales (2 families, 33 genera and 120 species), then order Bryales (4 families, 20 genera and 115 species), followed by order Dicranales (7 families, 28 genera and 88 species). While in terms of family, the most prominent family is Pottiaceae consisting of 32 genera with 116 species. Genera like *Bryum*, *Fissidens* and *Barbula* are most diversified while *Archidium* has its representation with a single species only. Interestingly, orders like Andreaeales, Archidiales, Encalyptales, Funariales, Hedwigiales, Polytrichales, Selageriales, Sphagnales and Tetraphidales are represented in this mountain range only by a single family.

However, this work is based on the available reports so far from the Western Himalayas and very few attempts have been made in recent past therefore to provide the current status of the bryofloristic (mosses) wealth of the region, many more explorations and some serious efforts are required to find out the actual wealth of some of the lesser known remote areas of this mountain range in future.

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6. Literature

AHMAD, T. (2011). Geology of the Himalayan Mountain Range, with special reference to the western Himalaya. GEOLOGI 63: 142-147.

ALAM, A. (2013). Moss flora of Munsiyari (Uttarakhand), Western Himalayas, India. Archive for Bryology 161: 1-11.

ALAM, A., SHARMA, V., SHARMA, S. C. & TRIPATHI A. (2012). Bryoflora of Munsiyari and Dharchula Tehsil of Pithoragarh, Uttarakhand, Western Himalayas, India. Archive for Bryology 140: 1-11.

- ASTHANA, V. & SAHU, V. (2013). Bryophyte Diversity in Mukteshwar (Uttarakhand): an overview. *Archive for Bryology* 154: 1-11.
- AZIZ, M. N. AND VOHRA, J. N. (2008). Pottiaceae (Musci) of India, Bishen Singh AND Mahendra Pal Singh, Dehra Dun, India. pp. 366.
- BUCK, W. R. AND GOFFINET, B. (2000). Morphology and classification of mosses. In A.J. Shaw & B. Goffinet (eds.), *Bryophyte Biology*. Cambridge University Press.: 71– 119.
- CHOPRA, R. S. & KUMAR, S. S. (1981). Mosses of the western Himalaya. *Annales Cryptogamici et phytopathologici*, vol 5. The Chronica Botanica Co. New Delhi, India.
- CHOPRA, R. S. (1975). *Taxonomy of Indian Mosses*. C.S.I.R. Publication, New Delhi, India.
- GANGULEE, H. C. (1969-1980). *Mosses of Eastern India AND Adjacent regions*. Fascicles 1-8. Books and Allied Limited, Calcutta.
- LAL, J. (2005). A checklist of Indian Mosses, Bishen Singh Mahendra Pal Singh. Dehra Dun, India. pp. 1–164.
- NATH, V., ASTHANA, A. K. & SAHU, V. (2007). *Fabronia secunda* Mont. – A New addition to western Himalayas. *Indian Journal of Forestry* 30(3): 353-354.
- NATH, V., ASTHANA, A. K. & SAHU, V. (2008). Addition of three moss species to West Himalayan Bryoflora. *Cryptogamie Bryologie* 29(4): 387-392.
- SAXENA, D. & ARFEEN, M. S. (2009). Taxonomy and distribution status of moss *Racomitrium crispulum* in Kumaon hill of Western Himalaya (India)". *Iranian Journal of Botany* 15(2): 248–256.
- SAXENA, D. & GANGWAR, R. (2005). Taxonomical study of *Dicranum scoparium* Hedw. from Kumaon hills. *Geophytology* 35 (1& 2). 61–64.
- SAXENA, D., SINGH, S & SRIVASTAVA, K. (2006). Distribution of Some Mosses in Nainital, Almora and Pithoragarh District of Kumaon Region, India." *Environment Conservation* 7: (1–2): 83–87.
- SAXENA, D., SINGH, S & SRIVASTAVA, K. (2007). Taxonomy of moss *Isopterygium elegans* (Brid.) Lindb., Not Sallsk. F. Fl Fenn. Forh., 1874 from Kumaon hills". *Research Journal (Sci.)*, Panjab University Research Journal (Sci.). 57: 213–216.
- SAXENA, D., SONYIA & SUARABH. (2010). First report of the moss *Rhynchostegiella divaricatifolia* (Renauld & Cardot) Broth. from Western Himalayan region of India, *Phytospecies*, U.K . 8: 59–64.
- SINGH, H., V. SAHU, HUSAIN T. & ASTHANA, A.K. (2010). *Macromitrium rigbyanum* Dixon. In: *Bryological Notes: New national and regional bryophyte records*, 24. *Journal of Bryology* 32: 232–241.
- TEWARI, S. D. & PANT, G. (1994). *Bryophytes of Kumaon Himalaya*. Bishen Singh Mahendra Pal Singh. Dehradun, India
- VALDIYA, K.S. (1980). *Geology of Kumaun Lesser Himalaya*. Wadia Institute of Himalayan Geology, Dehradun, 291p.
- VOHRA, J. N. (1970). A contribution to the moss flora of Western Himalaya. II. *Bull. Botanical Survey of India*. 12: 97–103.