

Contents

Summary	4
Introduction	4
Materials and methods	6
Sampling, DNA extraction and sequencing	6
Sequence alignment and phylogenetic analysis	6
Results	7
Molecular dataset	7
Morphology	8
Discussion	8
Taxonomic treatment	10
Key to genera of Ptychanthoideae in China	10
<i>Acrolejeunea</i> (Spruce) Steph.	11
Key to Chinese species of <i>Acrolejeunea</i>	12
<i>Caudalejeunea</i> (Steph.) Schiffn.	25
<i>Frullanoides</i> Raddi	27
<i>Gradsteinianthus</i> R.L.Zhu & Jian Wang bis, gen. nov.	29
<i>Lopholejeunea</i> (Spruce) Steph.	31
Key to Chinese species of <i>Lopholejeunea</i>	32
<i>Mastigolejeunea</i> (Spruce) Steph.	43
Key to Chinese species of <i>Mastigolejeunea</i>	44
<i>Ptychanthus</i> Nees	49
<i>Schiffneriolejeunea</i> Verd.	51
Key to Chinese species of <i>Schiffneriolejeunea</i>	52
<i>Spruceanthus</i> Verd.	56
Key to Chinese species of <i>Spruceanthus</i>	57
<i>Thysananthus</i> Lindenb.	67
Key to Chinese species of <i>Thysananthus</i>	67
<i>Tuzibeanthus</i> S.Hatt.	72
Doubtful and excluded records	74
Acknowledgements	76
References	77
Index of scientific names	83
Tables 1–2	87
Plates 1–50	91