



New combinations in *Lejeunea* with a new name to *Otigoniolejeunea indica*

S.K. SINGH

Botanical Survey of India, Eastern Regional Centre, Shillong - 793003; sksbsinc@rediffmail.com

The subgenus *Otigoniolejeunea* Spruce (1884: 77) of *Lejeunea* Lib. (1820: 372) was initially described with five species, viz. *L. acanthotis* Spruce (1884: 227), *L. cyrtotis* Spruce (1884: 227), *L. quinqueumbonata* Spruce (1884: 227), *L. schizotis* Spruce (1884: 227) and *L. xiphotis* Spruce (1884: 227), all from South America. A few years later, the subgenus was upgraded to genus level by Schiffner (1895) who made the combinations *Otigoniolejeunea xiphotis* (Spruce) Schiffn. (1895: 125) and *O. schizotis* (Spruce) Schiffn. (1895: 125). The former species was designated as the lectotype of *Otigoniolejeunea* by Vanden Berghen (1948).

Stephani (1914) followed the concept of Schiffner and transferred the remaining three Sprucean species of subgenus *Otigoniolejeunea* to the genus *Otigoniolejeunea*, as *O. acanthotis* (Spruce) Steph. (1914: 514), *O. cyrtotis* (Spruce) Steph. (1914: 515) and *O. quinqueumbonata* (Spruce) Steph. (1914: 515). He (Stephani 1914) also described two additional species viz., *Otigoniolejeunea apiahyna* Steph. (1914: 514) and *O. villaumei* Steph. (1914: 516) from Brazil and Madagascar respectively. Furthermore, Stephani (1923) described *Otigoniolejeunea crenulata* Steph. (1923: 408), *O. ledermannii* Steph. (1923: 409) from New Guinea and *O. indica* Steph. (1923: 408) from India "India Orientalis". Herzog (1951) instituted a new variety, *Otigoniolejeunea quinqueumbonata* var. *rotunda* Herzog (1951: 154) from Honduras, and Winkler (1976) described *Otigoniolejeunea reducta* S. Winkl. (1976: 818) from Colombia. Of the total twelve taxa assigned to *Otigoniolejeunea*, *O. villaumei* was placed in *Lejeunea* by Grolle (1977) as *Lejeunea villaumei* (Steph.) Grolle (1977: 536). Uribe & Gradstein (1998) synonymized *O. reducta* under *Lejeunea tarapotensis* Spruce (1884: 282). Grolle (1983) treated *Otigoniolejeunea* as a taxonomic synonym of *Lejeunea*, which was widely accepted by subsequent workers (Schuster 1984, Yano & Gradstein 1997, Gradstein et al. 2001, Reiner-Drehwald 2000, 2003, Reiner-Drehwald & Ilkiu-Borges 2007, Crandall-Stotler et al. 2009). Hence, all five Sprucean species initially described from South America were reverted back to their original status (see Reiner-Drehwald 2003). Three of them, however, viz. *L. acanthotis*, *L. schizotis* and *L. xiphotis*, were synonymized by Reiner-Drehwald & Ilkiu-Borges (2007) under *Lejeunea huctumalcensis* Lindenb. & Gottsche (Gottsche et al. 1847: 762).

The status of the two New Guinean species described by Stephani (1923), viz., *Otigoniolejeunea crenulata* Steph. (1923: 408) and *O. ledermannii* Steph. (1923: 409), is still uncertain since their types in Berlin were destroyed during the Second World War (see Grolle & Piippo 1984). The remaining three taxa of *Otigoniolejeunea* are moved here to *Lejeunea* and the following taxonomic changes are, therefore, proposed:

Lejeunea apiahyna (Steph.) Sushil K. Singh, *comb. nov.*

Basionym:—*Otigoniolejeunea apiahyna* Steph., *Sp. Hepat.* 5: 514. 1914 (Stephani, 1914). Holotype:—BRAZIL. Apiahy, *J. Puiggari 1412d* (G-69721, <http://www.ville-ge.ch/musinfo/bd/cjb/chg/adetail.php?id=134199&lang=en>).

Lejeunea pfliedereri Sushil K. Singh *nom. nov.*

Replaced name:—*Otigoniolejeunea indica* Steph., *Sp. Hepat.* 6: 408. 1923 (Stephani, 1923). Holotype:—INDIA ("India orientalis"), probably near Jabalpur Madhya Pradesh (79° 36' 58" E / 22° 53' 1" N), *Pfliederer 34*, 1913 (G-47404, <http://www.ville-ge.ch/musinfo/bd/cjb/chg/adetail.php?id=124326&lang=en>). Blocking name:—*Lejeunea indica* Udar & U.S. Awasthi, *Cryptog. Bryol. Lichénol.* 2: 345. 1981 (Udar & Awasthi, 1981).