Notes on early land plants today. 79 Transfer of African Taxilejeunea to Lejeunea (Lejeuneaceae, Marchantiophyta)

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Notes on early land plants today. 79 Transfer of African *Taxilejeunea* to *Lejeunea* (Lejeuneaceae, Marchantiophyta)

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*Lejeunea* Lib. including *Taxilejeunea* (Spruce) Schiffn. is one of the largest genera in *Lejeuneaceae* and diverged from its sister group, *Microlejeunea* (Spruce) Steph., during Eocene around 52 Ma (million years ago) (Lee et al. 2020). The morphology of *Lejeunea* and *Taxilejeunea* are largely overlapping, e.g. the arrangement of the gynoeceia in rows on lateral branches, the stem with seven large epidermal cells and numerous medullary cells and the large bifid underleaves with cordate or auriculate bases. The molecular work has shown that *Taxilejeunea* elements are diffusely distributed in almost all lineages of *Lejeunea* (Heinrichs et al. 2013). Taxonomic treatment of 11 unrevised names of Asian *Taxilejeunea* and four of Indian origin were revised by Singh and Pócs (2016) and Lee et al. (2018), respectively. However, four species from Africa remain to be transferred, of which three need new combinations and one needs a new name in *Lejeunea*.

**Formal treatment**

The format of this note follows Söderström et al. (2012).


*Lejeunea simii* G.E.Lee & Pócs, nom. nov. pro *Taxilejeunea elobulata* Sim, Trans. R. Soc. S. Afr. 15: 66. 1926 (Sim 1926). Type: South Africa, Maritzburg: Natal, Sim 8302 & 8257 (lectotype PRU!, here designated). Blocking name: *Lejeunea elobulata* (Sim) S.W.Arnell, Hepat. S. Afr. 203, 1963 (Arnell 1963). Note: Sim’s original description seems to refer to two gatherings (‘Sim 8302, fertile; 8257, etc.’), but indicating that there may be more gatherings. However, on the packet in PRU, which seems to be a single gathering (cf. ICN Art. 8) both numbers are written. We here lectotypify it with that specimen and treat it as being a single gathering although both collection numbers are written on the package.


**Current names and synonyms of African *Taxilejeunea***


*Taxilejeunea borbonica* S.W.Arnell = *Lejeunea eckloniana* Lindem.

*Taxilejeunea cuneistipula* Steph. = *Lejeunea cuneistipula* (Steph.) G.E.Lee et Pócs (this paper)

*Taxilejeunea dusenii* Steph. = *Lejeunea ramosissima* Steph.


*Taxilejeunea elobulata* Sim = *Lejeunea simii* G.E.Lee et Pócs (this paper)

*Taxilejeunea furcicornuta* Grolle = *Lejeunea furcicornuta* (Grolle) G.E.Lee et Pócs (this paper)

Taxilejeunea krakakammae (Lindenb.) Sim ≡ Strepsilejeunea krakakammae (Lindenb.) Steph. ≡ Cheilolejeunea krakakammae (Lindenb.) R.M.Schust.

Taxilejeunea lindblomii Pearson ≡ Taxilejeunea conformis (Nees et Mont.) Steph. (Grolle 1991) ≡ Lejeunea conformis Nees et Mont.

Taxilejeunea longirostris Steph. ≡ Lejeunea grosscristata (Steph.) E.W.Jones

Taxilejeunea lyratiflora (Steph.) Tixier ≡ Lejeunea lyratiflora Steph.

Taxilejeunea mitracalyx Eifrig ≡ Lejeunea alata Gottsche

Taxilejeunea nicholsonii Pearson ≡ Lejeunea grosscristata (Steph.) E.W.Jones

Taxilejeunea pulchriflora Pearson ≡ Lejeunea pulchriflora (Pearson) G.E.Lee, Bechteler, Pócs, Schäf.-Verw. et Heinrichs

Taxilejeunea pusilla Pearson = Lejeunea eckloniana Lindenb.

Taxilejeunea ramosissima (Steph.) Steph. = Lejeunea ramosissima Steph.

Taxilejeunea rotundifolia Steph. = Lejeunea caespitosa Lindenb.

Taxilejeunea sikorae Steph. ≡ Lejeunea sikorae (Steph.) Steph.

Taxilejeunea trichomanoides (Mont. et Nees) Steph. ≡ Lejeunea trichomanoides Mont. et Nees = Taxilejeunea conformis (Nees et Mont.) Steph. ≡ Lejeunea conformis Nees et Mont.

Taxilejeunea vallis-gratiae Steph. ≡ Lejeunea vallis-gratiae (Steph.) G.E.Lee et Pócs (this paper)

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