

AUSTRAL HEPATICA 23. NEW TAXA AND NEW COMBINATIONS IN  
*TELARANEA SPRUCE EX SCHIFFN.* (LEPIDOZIACEAE)

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ABSTRACT

*Telaranea* sect. *Cancellatae*, sect. *Capillares*, sect. *Latifoliae*, and sect. *Transversae* are described as new sections of the genus. *Telaranea hodgsoniae*, *T. pennata*, *T. lindenbergii* var. *complanata*, *T. lindenbergii* var. *mellea*, and *T. praenitens* var. *dentifolia* are described as new species and varieties from New Zealand. *Telaranea complanata*, *T. elegans*, *T. lindenbergii*, *T. paludicola*, *T. tasmanica*, *T. tetrapila*, *T. tetrapila* var. *roseana*, *T. tetrapila* var. *cancellata*, and *T. tridactylis* are new combinations.

KEY WORDS: Hepaticae, Lepidoziaceae, New Zealand, *Telaranea*, systematics

The following new taxa and new combinations are the result of a phylogenetic study of the Australasian species of the genus *Telaranea*, which is currently in preparation by the authors, and a treatment of the genus for the first volume of a Manual of New Zealand Hepaticae. The names are here published separately to make them immediately available for use.

*Telaranea* sect. *Cancellatae* J.J. Engel & G.L. Sm. Merr., *sect. nov.* TYPE: *Lepidozia tetrapila* Hook. f. & Taylor in Taylor, London J. Bot. 5:370. 1846.

Stirpes notabiles foliis symmetricis, cellulis magnis, pulvinatis, manifeste ordinatim dispositis.

The name of the section refers to the prominent, almost geometrical arrangement of the disc cells in regular rows and tiers.

*Telaranea* sect. *Capillares* J.J. Engel & G.L. Sm. Merr., *sect. nov.* TYPE: *Lepidozia grossiseta* Steph., Spec. Hep. 3:584. 1909.

Stirpes foliis lobis ciliformibus, cellulis loborum elongatis capillarisque, parietibus incrassatis, septis loborum incrassatis atque projectis distinctae.

The sectional name refers to the elongated, capillary cells of the leaf lobes.

*Telaranea* sect. *Latifoliae* J.J. Engel & G.L. Sm. Merr., *sect. nov.* TYPE: *Lepidozia meridiana* E.A. Hodgs., Trans. Roy. Soc. New Zealand 83:611. 1956.

Stirpes foliis plerumque longitudinaliter insertis, cellulis disci atque loborum inordinatum dispositis, disco ad basin (8-)14-16 cellulas lato dignoscendae.

The name of the section refers to the width of the leaf disc as compared to the majority of species of *Telaranea* subg. *Neolepidozia*, in which the disc is regularly eight cells wide at the insertion.

*Telaranea* sect. *Transversae* J.J. Engel & G.L. Sm. Merr., *sect. nov.* TYPE: *Lepidozia lindenbergii* Gottsche in G. L. & N., Syn. Hep. 213. 1845.

Stirpes foliis praecipue ± transverse insertis (in *T. tetradactyla* typice oblique insertis), disco humili 2-3(4) cellulas alto distinguendae.

The name of the section refers to the transverse insertion of the leaves in the type species.

*Telaranea complanata* (Herzog) J.J. Engel & G.L. Sm. Merr., *comb. nov.* BASIONYM: *Lepidozia complanata* Herzog, Memoranda Soc. Fauna Fl. Fenn. 27(1950-1951):92, f. 39. 1952.

*Telaranea elegans* (Colenso) J.J. Engel & G.L. Sm. Merr., *comb. nov.* BASIONYM: *Lepidozia elegans* Colenso, Trans. & Proc. New Zealand Inst. 21:65. 1889 (1888).

*Telaranea hodgsoniae* J.J. Engel & G.L. Sm. Merr., *spec. nov.* HOLOTYPE: NEW ZEALAND. South Island: Canterbury Prov., Peel Forest, ca. 1500 ft., Child H2084 --c. o (F); Isotype: (CHR).

*T. tetrapilae* (Taylor) J.J. Engel & G.L. Sm. Merr. aemulans, differt cellulis foliorum minoribus haud pellucidus autem obscuris, lobulis foliorum brevibus non attenuatis.

The leaf cells have a "hazy" granular appearance under the compound microscope, like frosted glass. Mrs. Hodgson's concept of *T. roseana* Steph. (Hodgson 1956)

was apparently this plant, since all of the specimens in the Christchurch Herbarium (CHR) identified by her as that species belong here; the species is named in her honor.

*Telaranea lindenbergii* (Gottsche) J.J. Engel & G.L. Sm. Merr., *comb. nov.*  
BASIONYM: *Lepidozia lindenbergii* Gottsche in G. L. & N., *Syn. Hep.* 213.  
1845.

*Telaranea lindenbergii* (Gottsche) J.J. Engel & G.L. Sm. Merr. var. *complanata*  
J.J. Engel & G.L. Sm. Merr., *var. nov.* HOLOTYPE: NEW ZEALAND. South  
Island: Otago Prov., Whare Flat, W of Dunedin, 70 m, *Engel 17641--c.* sporo.  
(F).

A *T. lindenbergii* (Gottsche) J.J. Engel & G.L. Sm. Merr. var.  
*lindenbergii* ramis distincte complanatis, foliis ramorum imbricatis incubis  
atque oblique patentibus recedit.

*Telaranea lindenbergii* (Gottsche) J.J. Engel & G.L. Sm. Merr. var. *mellea* J.J.  
Engel & G.L. Sm. Merr., *var. nov.* HOLOTYPE: NEW ZEALAND. South  
Island: Otago Prov., near Herbert, *Allison H5674* (CHR).

A *T. lindenbergii* (Gottsche) J.J. Engel & G.L. Sm. Merr. var.  
*lindenbergii* differt pigmentis dilute aeneis, caulis rigidioris, ramis  
distantibus flagelliformibus, lobulis foliorum supra basin saepe biseriatis.

The plants are a distinctive pale bronze color, an exception to the absence of  
secondary pigmentation characteristic of the genus.

*Telaranea paludicola* (E.A. Hodgs.) J.J. Engel & G.L. Sm. Merr., *comb. & stat.  
nov.* BASIONYM: *Lepidozia meridiana* var. *paludicola* E.A. Hodgs., *Trans.  
Roy. Soc. New Zealand* 83:611, pl. 2, f. 21. 1956.

*Telaranea pennata* J.J. Engel & G.L. Sm. Merr., *spec. nov.* HOLOTYPE: NEW  
ZEALAND. South Island: Westland Prov., Route 73, 8 miles W of Turiwhate,  
*Engel 6754* (F); Isotype: (CHR).

Species insignis, differt ramis pectinatibus, foliis asymmetricis, lobis  
ventralibus ad apicem spectantibus, longitudine lobum dorsalem superantibus.

Other *Telaranea* species with asymmetrical leaves have the dorsal lobe(s) larger  
than the ventral, as in species of *Lepidozia*; the leaves of *T. pennata* are a mirror-image  
of this, with the dorsal lobe smallest, and the ventral lobes larger and brushed toward  
the branch tips. The branches are flattened and comb-like.

*Telaranea praenitens* (Hook. f. & Taylor) E.A. Hodgs. var. *dentifolia* J.J. Engel & G.L. Sm. Merr., var. nov. HOLOTYPE: NEW ZEALAND. South Island: Fiordland, Dusky Sound, Supper Cove, 11 Feb. 1946, Allan (CHR).

Varietas folis ad marginem dentatis lobulis lationibus differt.

*Telaranea tasmanica* (Steph.) J.J. Engel & G.L. Sm. Merr., comb. nov.  
BASIONYM: *Lepidozia tasmanica* Steph., Spec. Hep. 3:580. 1900.

*Telaranea tetrapila* (Taylor) J.J. Engel & G.L. Sm. Merr., comb. nov.  
BASIONYM: *Lepidozia tetrapila* Hook. f. & Taylor in Taylor, London J. Bot. 5:370. 1846.

*Telaranea tetrapila* (Taylor) J.J. Engel & G.L. Sm. Merr. var. *roseana* (Steph.) J.J. Engel & G.L. Sm. Merr., comb. & stat. nov. BASIONYM: *Lepidozia roseana* Steph., Spec. Hep. 3:590. 1909.

*Telaranea tetrapila* (Taylor) J.J. Engel & G.L. Sm. Merr. var. *cancellata* (Colenso) J.J. Engel & G.L. Sm. Merr., comb. & stat. nov. BASIONYM: *Lepidozia cancellata* Colenso, Trans. & Proc. New Zealand Inst. 18:244. 1886.

*Telaranea tridactylis* (Lehm. & Lindenb.) J.J. Engel & G.L. Sm. Merr., comb. nov. BASIONYM: *Jungermannia tridactylis* Lehm. & Lindenb. in Lehmann, Nov. Min. Cogn. Stirp. Pug. 4:41. 1832.

#### LITERATURE CITED

- Hodgson, E.A. 1956. New Zealand Hepaticae (Liverworts) -- IX. A review of the New Zealand species of the genus *Lepidozia*. Trans. Roy. Soc. New Zealand 83:589-620.