

## New Combinations For the Moss Flora of China

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**Abstract:** The following twenty three new combinations and new names are proposed for Chinese moss taxa: *Barbula chenia*, *B. dixoniana*, *Barbula propaguliferum*, *Bryum ochianum*, *Chrysocladium retrorsum* var. *pinfaense*, *Dicliadiella trichophora*, *Didymodon rigidulus* var. *perobustus*, *Entodon caliginosus* var. *subtilis*, *Microdus brotheri*, *Platydictya sinensis-subtilis*, *P. yuennanensis*, *Pohlia cavalieri*, *P. ciliifera*, *C. graciliformis*, *P. laticuspes*, *P. propagulifera*, *P. pygmaea*, *P. tapintzense*, *P. timmioides*, *Sinskea flammea* ssp. *ochracea*, *S. flammea* ssp. *rufifolioides*, *Trichostomum sinochenii* and *T. zanderi*.

During the preparation of an updated and comprehensive checklist of all published moss taxa of China, the following 23 new combinations and new names were found to be necessary. However, these nomenclatural proposals do not necessarily indicate our taxonomic endorsement. Since many of the taxa involved were published in rather inaccessible literature and mostly were known only from the type collection from China, we have decided to include, for each of the taxa, the type specimen information extracted from the protologue to help facilitate future taxonomic revision. Information placed within the brackets [] have been added by us to complete the type data.

***Barbula chenia*** Redfearn & B. C. Tan, *nom. nov.*

Name replaced: *Trichostomum obtusifolium* Broth., Sitzungsber. Akad. Wiss. Wien Math.-Nat. Kl. Abt. 1, 131: 210. 1922, *hom. illeg.* - *Oxystegus obtusifolius* Hilp., Beih. Bot. Centralbl. 50(2): 667. 1933. - *Streblotrichum obtusifolium* (Hilp.) P.-C. Chen, Hedwigia 80: 220. 1941. TYPE: Prov. Hunan, prope urbem Tschang-scha in muris ad pedem montis Yolu-schan, ca 100 m, [no collection date], [Handel-Mazzetti] 11.435.

This species has a complicated nomenclatural history. Although it has also several heterotypic synonyms (see Chen 1941), none of them is



available for a legitimate new combination in the genus *Barbula*; hence, the necessity of a new name.

***Barbula dixoniana*** (Chen) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Hydrogonium dixonianum* P.-C. Chen, *Hedwigia* 80: 250. 1941. -*Barbula inflexa* Dix. non Duby, *Symb. Sinica Nachträge und Berichtigungen* 2: 77. 1937, *hom. illeg.* TYPE: Prov. Setschwan, an der heissen Quelle bei Lemoka im Lolo-Lande östlich von Ningyüen, [Handel-Mazzetti] 1617.

***Barbula propaguliferum*** (X.-J. Li & M.-X. Zhang) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Streblotrichum propaguliferum* X.-J. Li & M.-X. Zhang, *Acta Bot. Yunnanica* 5(4): 385. 1983. TYPE: Shansi, Hu-xian, Shi-jing-cun, Su-yu-gou, Hei-hu-zui Mt. [Chinling Range], 1600 m, 6 IX 1962, C.-P. Wei 4349.

Following Zander (1993), we do not accept *Streblotrichum* as a separate genus from *Barbula*; hence, the need for this new combination.

***Bryum ochianum*** Redfearn & B. C. Tan, *nom. nov.*

Name replaced: *Bryum albidum* Copp., *Bull. Séances Soc. Sci. Nancy ser. 3*, 12: 11. 1911, *hom. illeg.* TYPE: Yunnan, R. P. Marie, comm. G. Bonati.

***Chrysocladium retrorsum*** var. *pinfaense* (Card. & Thér.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Meteorium retrorsum* var. *pinfaense* Card. & Thér., *Bull. Acad. Int. Géogr. Bot.* 19[18]: 20. 1909. TYPE: [Kouy-Tcheou], Pinfa, leg. Cavalerie.

***Dicladella trichophora*** (Mont.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Isothecium trichophorum* Mont., *Ann. Sci. Nat. Bot.* 2, 19: 238. 1843. TYPE: Ad corticem *Radulae reflexae* N. et M. consors, in

*insulis Sandwich à celeb. Gaudichaud inventum.*

Buck (1994) transferred *Meteorium cubense* Mitt. to *Dicladella*. He apparently did not consider the earlier synonymy of this species and *Barbella trichophora* (Mont.) Fleisch. ex Broth. proposed by Streimann (1993).

***Didymodon rigidulus*** Hedw. var. *perobustus* (Broth.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Barbula rigidula* (Hedw.) Mild. var. *perobusta* Broth., *Symb. Sin.* 4: 41. 1929. TYPE: NW Yunnan, an trockenen Glimmerschieferfelsen der Hg. St. im birm. Mons. am Westhange des Si-la zwischen Mekong und Salwin, 4350 m, 29 IX 1915, Handel-Mazzetti 8441.

***Entodon caliginosus*** (Mitt.) Jaeg. var. *subtilis* (C. Muell.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Entodon pseudo-orthocarpus* C. Muell. var. *subtilis* C. Muell., *Nuov. Giorn. Bot. Ital. n. ser.* 5: 195. 1898. TYPE: [Shen-si], Monte Tui-kio-shan, parcissime fructiferus, Sep 1896 [J. Giraldi].

***Microdus brotheri*** Redfearn & B. C. Tan, *nom. nov.*

Name replaced: *Microdus laxiretis* Broth., *Symb. Sinicae* 4: 16. 1929, *hom. illeg.* TYPE: NW Yunnan, in der ktp. St. des birm. Mons. auf Moder beim See Tsuka zwischen dem Landsang-djiang (Mekong) und dem Lu-djiang (Salwin), Glimmerschiefer, 4100 m, 26 VIII 1916, [Handel-Mazzetti] 9945.

***Platydictya sinensis-subtilis*** (C. Muell.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Amblystegium sinensis-subtile* C. Muell., *Nuov. Giorn. Bot. Ital. ser.* 2, 3: 123. 1896. TYPE: [Shen-si], ad latera montis Kuantou-shan, [J. Giraldi].

***Platydictya yuennanensis*** (Broth.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Amblystegiella yuennanensis* Broth.,



Symb. Sin. 4: 103. 1929. TYPE: NW Yunnan, auf Granitboden der wtp. St. im birms. Mons. in einem schattigen Hain ober Londjre in einem w. Seitentale des Mekong gegen den Lagerplatz Tschoschwa, 2700 m, 15 IX 1915, [Handel-Mazzetti] 8004.

*Pohlia cavaleri* (Card. & Thér. in Thér.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera cavaleri* Card. & Thér. in Thér., Bull. Acad. Int. Géogr. Bot. 21: 270. 1911. -*Pohlia cavaleri* (Card. & Thér.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.* lacking basionym citation. -*Pohlia cavaleri* (Card. & Thér.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPE: Chine, [Kouy-Tcheou], Pin-fa, 1905, leg. Cavalerie no. 1941.

*Pohlia ciliifera* (Broth.) P.-C. Chen ex Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera ciliifera* Broth. Akad. Wiss. Wien. Math.-Nat. Kl., Abt. 1, 133: 568. 1924. -*Pohlia ciliifera* (Broth.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.* lacking basionym citation. -*Pohlia ciliifera* (Broth.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPE: Prov. Yunnan: in regione calide temperata prope urbem Yunnanfu, locis abruptis apricis ad templum Djindien-se; s. arenaceo, ca 2000 m, [Handel-Mazzetti] 60.

*Pohlia graciliformis* (Card. & Thér. in Thér.) P.-C. Chen ex Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Pohlia graciliformis* Card. & Thér. in Thér., Bull. Acad. Int. Géogr. Bot. 21: 270. 1911. -*Pohlia graciliformis* (Card. & Thér.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.*, lacking basionym citation. -*Pohlia graciliformis* (Card. & Thér.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPE: Chine, prov. Kouy-Tcheou, Pin-fa, sur grosses pierres dans un ruisseau; 1904, leg. Cavalerie.

*Pohlia laticuspes* (Broth.) P.-C. Chen ex Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera laticuspes* Broth., Symb. Sin. 4: 51. 1929. -*Pohlia laticuspes* (Broth.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.* lacking basionym citation. -*Pohlia laticuspes* (Broth.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPE: NW Yunnan, Granitfelsen im Walde der ktp. St. im birm. Mons. unter dem Doker-la an der tibetischen Grenze, 3750 m, 16 IX 1915, [Handel-Mazzetti] 8020.

*Pohlia propagulifera* (Broth. in Lev.) P.-C. Chen ex Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera propagulifera* Broth. in Lev., Nuov. Giorn. Bot. Ital. n. ser. 13: 280. 1906. -*Pohlia propagulifera* (Broth.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.* lacking basionym citation. -*Pohlia propagulifera* (Broth.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPE: [Shensi], In-kia-po, ott. 1897, [G. Giraldi].

*Pohlia pygmaea* (Broth.) P.-C. Chen ex Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera pygmaea* Broth., Symb. Sin. 4: 52. 1929. -*Pohlia pygmaea* (Broth.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.* lacking basionym citation. -*Pohlia pygmaea* (Broth.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPES: Auf blosser Erde der Hg. St., 4000-4300 m. NW Yunnan: Osthang des Gipfels Ünlüpe im Yü-lung-shan bei Lidjiang, auf Kalk, 16 VII 1914, [Handel-Mazzetti] 3546. S [Yunnan]: Südseite des Passes Döko ober Muli, auf Tonschiefer, 4 VIII 1915, [Handel-Mazzetti] 7441.

*Pohlia tapintzense* (Besch.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera tapintzense* Besch., Rev. Bryol. 18: 89. 1891. -*Mniobryum tapintzense* (Besch.) Broth., Nat. Pfl. 1(3): 553. 1903. TYPE:



Yunnan, environ d'Hokin et de Tali, M. l'abbé Delavay 2303.

*Pohlia timmioides* (Broth.) P.-C. Chen ex Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Webera timmioides* Broth. Symb. Sin. 4: 52. 1929. -*Pohlia timmioides* (Broth.) P.-C. Chen, Gen. Musc. Sin. 1: 256. 1963, *comb. inval.* lacking basionym citation. -*Pohlia timmioides* (Broth.) P.-C. Chen in P.-C. Wu, J.-X. Luo & M.-Z. Wang, A Glossary of Terms and Names of Bryophytes: 96. 1984, *comb. inval.* TYPE: NW Yunnan: Auf Glimmerschiefer in der ktp. St. des birm. Mons. unter dem Passe Gondon-rungu im Tannenwald am Hange des Tales Schidsaru zwischen Landsang-djiang (Mekong) und Ludjiang (Salwin), 3900-4100 m, 7 VIII 1916, [Handel-Mazzetti] 9761.

*Sinskea flammea* (Mitt.) Buck ssp. *ochracea* (Nog.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Barbella ochracea* Nog., Trans. Nat. Hist. Soc. Formosa 26: 145. 1936. -*Chrysocladium flammeum* (Mitt.) Fleisch. ssp. *ochraceum* (Nog.) Nog., J. Hattori Bot. Lab. 41: 270. 1976. TYPE: [Taiwan] Prov. Taihoku: Mt. Taihei (Mururoau-Tamonkei), Aug 1932, A. Noguchi 6507.

*Sinskea flammea* (Mitt.) Buck ssp. *rufifolioides* (Broth.) Redfearn & B. C. Tan, *comb. nov.*

Basionym: *Chrysocladium rufifolioides* Broth., Philipp. J. Sci. 5: 153. 1910. -*Chrysocladium flammeum* (Mitt.) Fleisch. ssp. *rufifolioides* (Broth.) Nog., J. Hattori Bot. Lab. 41: 269. 1976. TYPE: [Philippines], Luzon, Province of Benguet, Mt. Pulog, McGregor, Bur. Sci. 8914.

*Trichostomum sinochenii* Redfearn & B. C. Tan, *nom. nov.*

Name replaced: *Hyophila barbuloides* Broth., Symb. Sin. 4: 37. 1929. -*Trichostomum barbuloides* (Broth.) P.-C. Chen, Hedwigia 80: 168. 1941, *hom. illeg.* TYPE: NW Yunnan: Nächst voriger, an Schieferfelsen am Rande des Hochwasserstandes des Salwin bei der Fähre unter

Tjiontson, 1675 m, 26 VI 1916, [Handel-Mazzetti] 9101.

*Trichostomum zanderi* Redfearn & B. C. Tan, *nom. nov.*

Name replaced: *Hyophila aristatula* Broth., Sitzungsber. Akad. Wiss. Wien Math.-Nat. Kl. Abt. 1, 131: 211. 1923 (1922), *Trichostomum aristatulum* (Broth.) Hilp. ex Chen, Hedwigia 80: 167. 1941, *hom. illeg.* TYPE: Prope urbem Tschangscha ad terram udam inter gramine inter viam militarem et fluvium, ca. 70 m, [Handel-Mazzetti] 11.603.

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