



## *Phlegmariurus lehnertii*, a new name for *Phlegmariurus lancifolius* (Lycopodiaceae)

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The pantropical lycophyte genus *Phlegmariurus* Holub (1964: 21) (Lycopodiaceae) comprises approximately 250 species (PPG I, 2016) and despite extensive study, its taxonomy remains poorly understood (Øllgaard 1992, Field & Bostock 2013). In recent years, many species have been transferred to *Phlegmariurus* from the closely related temperate genus *Huperzia* Bernhardt (1801: 126) (Øllgaard 2012a,b, Field & Bostock 2013, Arana 2016, Duy *et al.* 2016, Field *et al.* 2016) and new species continue to be described from both the New World (Øllgaard 2015, 2016a,b) and Old World tropics (Hsieh *et al.* 2012, Duy *et al.* 2016).

Duy *et al.* (2016) recently discovered a new species from Vietnam that they named *Phlegmariurus lancifolius* V.T. Tran & N.V. Duy in Duy *et al.* (2016: 152). Unfortunately, they overlooked the previously published name *Phlegmariurus lancifolius* (Maxon 1913: 177) Øllgaard (2012: 16) and created an illegitimate later homonym. Thus, a new name is chosen here:

***Phlegmariurus lehnertii* Testo, nom. nov. for *Phlegmariurus lancifolius* V.T. Tran & N.V. Duy in Duy *et al.* (2016: 152)**

Type:—VIETNAM. Lam Dong: Lac Duong District, Lang Bian mountain, 2014 m, 12°02'6.54"N, 108°26'02.78"E, 20 August 2013, *N.V. Duy & V.T. Tran 00011* (holotype DLU, image seen; isotype VTN, not seen).

Blocking name:—*Phlegmariurus lancifolius* (Maxon 1913: 177) Øllgaard (2012a: 16).

Type:—PANAMA. Chiriquí: above Boquete, Holcomb's trail, ca. 1650 m, 23 March 1911, *W.R. Maxon 5627* (holotype, US!; isotypes, BM, image seen; GH!).

Note:—The name provided here honors Dr. Marcus Lehnert for his extensive contributions to pteridophyte taxonomy and in particular his important collections of Lycopodiaceae from both the Old World and New World tropics.

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### References

- Arana, M.D. (2016) Nomenclatural notes on *Phlegmariurus dentatus* (Lycopodiaceae). *Phytotaxa* 252: 298–300.  
<https://doi.org/10.11646/phytotaxa.252.4.8>
- Bernhardt, J.J. (1801) Tentamen alterum filices in genera redigende. *Journal für die Botanik* 1800: 121–136.
- Duy, N.V., Vinh, T.T., Nguyen, H.N., Vu, T.C., Trieu, L.N., Hau, H.V. & Tran, V.T. (2016) A new combination and a new species in *Phlegmariurus* (Herter) Holub (Lycopodiaceae) from Southern Vietnam. *Adansonia* 38: 151–157.  
<https://doi.org/10.5252/a2016n2a1>
- Field, A.R. & Bostock, P.D. (2013) New and existing combinations in Palaeotropical *Phlegmariurus* (Lycopodiaceae) and lectotypification of the type species *Phlegmariurus phlegmaria* (L.) T. Sen & U. Sen. *PhytoKeys* 20: 33–51.  
<https://doi.org/10.3897/phytokeys.20.4007>
- Field, A.R., Testo, W., Bostock, P.D., Holtum, J.A. & Waycott, M. (2016) Molecular phylogenetics and the morphology of the Lycopodiaceae

- subfamily Huperzioidae supports three genera: *Huperzia*, *Phlegmariurus* and *Phylloglossum*. *Molecular Phylogenetics and Evolution* 94: 635–657.  
<https://doi.org/10.1016/j.ympev.2015.09.024>
- Holub, J. (1964) Lycopodiella, nový rod radu Lycopodiales. *Preslia* 36: 16–22.
- Hsieh, T.Y., Hatch, K.A. & Chang, Y.M. (2012) *Phlegmariurus changii* (Huperziaceae), a new hanging firmoss from Taiwan. *American Fern Journal* 102: 283–288.  
<https://doi.org/10.1640/0002-8444-102.4.283>
- Maxon, W.R. (1913) Studies of tropical American ferns—No. 4. *Contributions from the United States National Herbarium* 17: 177.
- Øllgaard, B. (1992) Neotropical Lycopodiaceae—an overview. *Annals of the Missouri Botanical Garden* 79: 687–717.  
<https://doi.org/10.2307/2399760>
- Øllgaard, B. (2012a) New combinations in neotropical Lycopodiaceae. *Phytotaxa* 57: 10–22.  
<https://doi.org/10.11646/phytotaxa.57.1.3>
- Øllgaard, B. (2012b) Nomenclatural changes in Brazilian Lycopodiaceae. *Rodriguésia*, 63: 479–482.  
<https://doi.org/10.1590/S2175-78602012000200020>
- Øllgaard, B. (2015) Six new species and some nomenclatural changes in neotropical Lycopodiaceae. *Nordic Journal of Botany* 33: 186–196.  
<https://doi.org/10.1111/njb.00652>
- Øllgaard, B. (2016a) Additions, deletions and changes to the Ecuadorian Lycopodiaceae. *Phytotaxa* 246: 93–106.  
<https://doi.org/10.11646/phytotaxa.246.2.1>
- Øllgaard, B. (2016b) New neotropical Lycopodiaceae. *Phytotaxa* 277: 266–274.  
<https://doi.org/10.11646/phytotaxa.277.3.4>
- PPG I (2016) A community-derived classification for extant lycophytes and ferns. *Journal of Systematics and Evolution* 54: 563–603.  
<https://doi.org/10.1111/jse.12229>