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Clarification of the typification of Pteris argyraea (Pteridaceae)

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Pteris argyraea Moore (1859: 671), commonly known as silver brake fern, is originally a south-east Asian species, but now cultivated as an ornamental plant throughout the tropical regions of the world.

In the protologue of *Pteris argyraea*, Moore (1859) stated that this plant "... *is a native of Central India, and was introduced by Messrs. Veitch & Son, by whom it was exhibited*". Records of 'Taxonomic Literature' (Stafleu & Cowan 1981) indicate that all the type specimens of Moore are housed at Kew herbarium (K). One herbarium specimen of *P. argyraea* with barcode number K 000501423 is labeled as 'type specimen', but acceptance of this specimen as 'type' is ruled out because J. Day is mentioned as collector in the year 1880, which is much later than the original publication by Moore in 1859.

The other herbarium specimen is barcoded as K 000501424 with the inscription 'Hort. Veitch 1859 Nilgh. India ex McIvor'. This labeling indicates that Messrs. Veitch & Son (mentioned in protologue) apparently got their plant from McIvor, who was director of the Government Botanical and Horticultural Gardens, Ootacamund in Nilgiri in South India from 1854 onwards. As such, we could assume that the herbarium specimen K 000501424 is a part of the original material because it matches with the information given by Moore in the protologue except for the collection area mentioned as "Central India" instead of South India. It seems that Moore either had a misconception of 'Central India' or he was wrongly informed about the collection site.

Walker (1960) cited the type of *Pteris argyraea* as follows: "HOLOTYPE: a living plant from 'Central India' in Hort. Veitch 1859; fragment in Herb. T. Moore, ex India, Nilgiris, coll. *McIvor* (K)". According to the current code (McNeill *et al.* 2012) and a recent paper by McNeill (2014), Walker's citation of *P. argyraea* as 'holotype' cannot be treated as legitimate. In the case of species published validly without citation of a holotype prior to 1958, any citation of a holotype done before 1st January 2001 constitutes an inadvertent lectotypification sensu Prado *et al.* (2015). As such, Walker's statement should be treated as effective inadvertent lectotypification by the 'fragment in Herb. T. Moore, ex India, Nilgiris, coll. *McIvor* (K)" because in this case the living plant cannot be considered as type.

Later, Sreenivas *et al.* (2013) overlooked the publication of Walker (1960) and cited the type of *Pteris argyraea*, as "India, Nilgiris, *W.G. McIvor s.n.* (holotype, K!; isotype CAL!)". The isotype, cited by Sreenivas *et al.* (2013) at CAL could not be retrieved despite a thorough search. Considering the current status of the typification of *P. argyraea*, we intend to elucidate the ambiguity by providing the correct typification as follows:

Pteris argyraea T. Moore (1859: 671)

Type:— INDIA. "Hort. Veitch 1859 Nilgh., India ex, *McIvor*" (lectotype K 000501424, image!, inadvertently designated by Walker, 1960: 321–332; isolectotype CAL, *n.v.*).

Image source: http://specimens.kew.org/herbarium/K000501424

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References

- McNeill, J. (2014) Holotype specimens and type citations: General issues. *Taxon* 63 (5): 1112–1113. http://dx.doi.org/10.12705/635.7
- McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold, K., Prado, J., Prud'homme van Reine, W.F., Smith, G.F., Wiersema, J.H. & Turland, N.J. (Eds.) (2012) *International Code of Nomenclature for algae, fungi, and plants (Melbourne Code)*. Adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011, A.R.G. Gantner Verlag KG. [Regnum Veg. 154].

Moore, T. (1859) New garden ferns. Gardeners' Chronicle and Horticultural Trade Journal. London 1859: 671.

Prado, J., Hirai, R.Y. & Moran, R.C. (2015) (046–048) Proposals concerning inadvertent lectotypifications (and neotypifications). *Taxon* 64 (3): 615.

http://dx.doi.org/10.12705/643.29

- Sreenivas, V.K., Fraser-Jenkins, C.R. & Madhusoodanan, P.V. (2013) The genus *Pteris* L. (Pteridaceae) in South India. *Indian Fern Journal* 30: 268–308.
- Stafleu, F.A. & Cowan, R.S. (1981) *Taxonomic literature*, 2nd edition, vol. 3. Bohn, Scheltema & Holkema, Utrecht, The Hague, pp. 571–573.

Walker, T.G. (1960) The *Pteris quadriaurita* complex in Ceylon. *Kew Bulletin* 14 (3): 321–332. http://dx.doi.org/10.2307/4114745