



Nomenclatural note for *Pedicularis oederi* var. *angustiflora* (Orobanchaceae)

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The genus *Pedicularis* L. comprises approximately 600 species (Li 1948; Fischer 2004), and as such, it is the largest genus of the family Orobanchaceae (Olmstead 2012). More than 350 species are recorded from China (Yang *et al.* 1998). In this study, the validity of Tsoong's (1963: 334) new combination *P. oederi* var. *angustiflora* (H.Limpricht) P.C.Tsoong and its taxonomical history are discussed, and a lectotype is designated.

Franchet (1891: 149) proposed *Pedicularis stenantha* Franchet as a new species for a whorled-leaved *Pedicularis* taxon. Later, he (1900: 32) proposed *P. stenocorys* Franchet as another whorled-leaved new species. Furthermore, perhaps absentmindedly, he (1900: 36) proposed the name *P. stenantha* again as a new species for an alternate-leaved *Pedicularis* taxon and thus created a later homonym. The whorled-leaved *Pedicularis* species belongs to the series *Lyratae* Maximovicz (1888: 603), whereas the alternate-leaved *Pedicularis* species belongs to the series *Flammeae* Prain (1890: 100). Franchet (1900: 32) proposed *P. stenocorys* Franchet as another whorled-leaved new species. Presently, the preceding species is treated as conspecific with the 1891 whorled-leaved species (see Yu *et al.* 2013). Bonati (1910: 32) and Limpricht (1922a: 485) overlooked the difference between the 1891 (whorled-leaved) and 1900 (alternate-leaved) taxa and applied the 1891 name to refer to the alternate-leaved species. Limpricht (1922b: 244), however, realized his mistake and proposed *P. angustiflora* as a replacement name for the 1900 alternate-leaved species.

For the current usage (Tsoong 1963; Yang *et al.* 1998), *Pedicularis angustiflora* is treated as a variety under *P. oederi* Vahl (in Hornemann 1806: 580). In volume 68 of the *Flora Reipublicae Popularis Sinicae*, Tsoong (1963: 334) proposed the new combination *P. oederi* var. *angustiflora* and provided a direct full reference to the basionym *P. angustiflora* H. Limpricht (see Art. 41.5; McNeill *et al.* 2012). In his basionym reference, he made a minor error. The correct page number of the basionym *P. angustiflora* is “244”. Tsoong, however, cited the page number as “18”, which is the same as the volume number of this journal published in 1922. This error is likely a *lapsus calami* (= slip of the pen) overlooked by the author and the editors. Interestingly, Wang & Wu (1994) and Yang *et al.* (1998) perpetuated Tsoong's error in the subsequent revision of *Pedicularis*. According to Article 41.6, this error is correctable for name published during 1953–2006, and therefore, we conclude that Tsoong validly published his new combination. For the formal usage, the publication page *P. oederi* var. *angustiflora* is corrected herein.

Pedicularis oederi Vahl (in Hornemann 1806: 580) var. *angustiflora* (H.Limpricht) P.C.Tsoong (1963: 334)

Basionym: *Pedicularis angustiflora* H.Limpricht (1922: 244). Homotypic synonym:—*Pedicularis stenantha* Franchet (1900: 36, non Franchet 1891).

Lectotype (designated here):—CHINA. Sichuan: Kangding (Ta-tsien-lou), *J.A.Soulié* 768 (lectotype P-02969040!; isolectotype P-02969043!). Syntype:—CHINA. Sichuan: Kangding (Ta-tsien-lou), *Henri D'Orléans s.n.* (syntype P-02969041!).

In the protologue, Franchet (1900: 36) listed two gatherings, i.e., *J. A. Soulié* 768 and *Henri D'Orléans s.n.* for the name *P. stenantha*. The first gathering comprises of two sheet specimens: sheets P-02969040 and P-02969043 including 10 and four flowering plants, respectively, and the second gathering includes one sheet (P-02969041) alone with a fragmental inflorescence. Herein, we favor to choose the sheet P-02969040, with more flowering plants, as the lectotype of *P. stenantha* (1900).

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References

- Bonati, G. (1910) Contribution à l'étude du genre *Pedicularis*. *Bulletin de la Société Botanique de France* 57 (18): 1–35.
- Fischer, E. (2004) Scrophulariaceae. In: Kadereit, J.W. (ed.) *The Families and genera of vascular plants*. Springer-Verlag, Berlin, pp. 333–432.
- Franchet, A.R. (1891) Diagnoses D'espèces nouvelles provenant d'une collection de plantes du Thibet chinois envoyée au muséum par M. L'abbé Soulié. *Bulletin de la Société Philomatique de Paris* series 3, 3: 140–150.
- Franchet, A.R. (1900) Les Scrophulariaceae de la Chine, dans L'herbier du Muséum de Paris. *Bulletin de la Société botanique de France* 47: 10–37.
- Hornemann, J.M. (1806) *Forsøg til en dansk oekonomisk Plantelaere*. C.L. Buchs forlag, Kjøbenhavn [Copenhagen], 990 pp.
- Li, H.-L. (1948) A revision of the genus *Pedicularis* in China. part I. *Proceedings of the Academy of Natural Sciences of Philadelphia* 100: 205–378.
- Limpricht, H. W. (1922a) Botanische Reisen in den Hochgebirgen Chinas und Ost-Tibets. *Repertorium specierum novarum regni vegetabilis, Beihefte* 12: 1–555.
- Limpricht, H. W. (1922b) Neue *Pedicularis* aus Ost-Tibet. I. *Repertorium Specierum Novarum Regni Vegetabilis* 18: 243–244. <http://dx.doi.org/10.1002/fedr.19220181016>
- Maximovicz, C.J. (1888) Diagnoses des plantes nouvelles asiatiques. VII. *Bulletin de l'Académie Impériale des Sciences de St-Petersbourg* 32: 477–629.
- 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. (2012) *International Code of Nomenclature for algae, fungi, and plants (Melbourne Code), adopted by the eighteenth International Botanical Congress Melbourne, Australia, July 2011 (Regnum Vegetabile, 154)*. A.R.G. Gantner Verlag, Ruggell, 240 pp.
- Olmstead, R.G. (2012) A synoptical classification of the Lamiales (version 2.4). Available from: <http://depts.washington.edu/phylo/Classification.pdf> (accessed: 30 May 2013).
- Prain, D. (1890) The species of *Pedicularis* of the Indian Empire and its frontiers. *Annals of the Royal Botanical Garden* 3: 1–196.
- Tsoong, P.-C. (1963) Scrophulariaceae (Pars II). In: Chien, S.-S. & Chun, W.-Y. (eds.), *Flora Reipublicae Popularis Sinicae, Vol. 68*. Science Press, Beijing, pp. 1–378.
- Wang, W.-T. & Wu, S.-G. (1994) *Vascular plants of the Hengduan Mountains (Part II)*. Science Press, Beijing, 1244 pp.
- Yang, H.-B., Holmgren, N.H. & Mill, R.R. (1998) *Pedicularis* In: Wu, Z.-Y. & Raven, P.-H. (eds.), *Flora of China (Vol. 18)*. Missouri Botanical Garden Press, Science Press, St. Louis, Beijing, pp. 97–209.
- Yu, W.-B., Wang, H. & Li, D.-Z. (2013) Proposal to conserve *Pedicularis stenocorys* against *P. stenantha* (Orobanchaceae). *Taxon* 62: 1066–1067. <http://dx.doi.org/10.12705/625.33>