

中国橐吾属(菊科-千里光族)的分类学研究(五): 君范橐吾、长毛橐吾和南川橐吾原白中一些排印错误的改正

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摘要: 对我国菊科橐吾属(*Ligularia* Cass.) 3 种植物原白中模式标本引证的排印错误进行了改正。君范橐吾(*L. lingiana* S. W. Liu)原白中错误地将主模式标本引证为赵清盛 82946, 实际应为赵清盛、牟克平和杨亚斌 8294。长毛橐吾(*L. changiana* S. W. Liu ex Y. L. Chen & Z. Yu Li)(= *L. heterophylla* C. C. Chang, 为 *L. heterophylla* Rupr. 的晚出同名)主模式为蔡希陶 59771, 但 *L. heterophylla* C. C. Chang 的原白中错误地将主模式标本引证为蔡希陶 59711; 该号标本属于唇形科的灯笼草[*Clinopodium polycephalum* (Vaniot) C. Y. Wu & Hsuan]。南川橐吾(*L. nanchuanica* S. W. Liu)原白中引证的副模式标本熊济华和周子林 93871 实际应为李国凤 63871, 前者属于桤叶树科的城口桤叶树(*Clethra fargesii* Franch.)。

关键词: 菊科; 橐吾属; 排印错误

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Taxonomic Studies on the Genus *Ligularia* Cass. (Asteraceae, Senecioneae) from China (V): Correction of Typographical Errors in the Protologue of *L. lingiana*, *L. changiana* and *L. nanchuanica*

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Abstract: We correct several typographical errors in the protologue of three species in the genus *Ligularia* Cass. (Asteraceae, Senecioneae). The holotype of *L. lingiana* S. W. Liu, incorrectly cited as Q. S. Zhao 82946 in the protologue, is actually Q. S. Zhao, K. P. Mou & Y. B. Yang 8294. The holotype of *L. changiana* S. W. Liu ex Y. L. Chen & Z. Yu Li (= *L. heterophylla* C. C. Chang, a later homonym of *L. heterophylla* Rupr.), incorrectly cited as H. T. Tsai 59711 in the protologue of *L. heterophylla* C. C. Chang, is actually H. T. Tsai 59771; the former collection belongs to *Clinopodium polycephalum* (Vaniot) C. Y. Wu & Hsuan in the Labiateae. One of the paratype collections of *L. nanchuanica* S. W. Liu was wrongly cited as J. H. Xiong & Z. L. Zhou 93871 in the protologue, but actually is K. F. Li 63871; the former collection belongs to *Clethra fargesii* Franch. in the Clethraceae.

Key words: Asteraceae; *Ligularia*; Typographical error

In the course of revising the Chinese *Ligularia* Cass. (Asteraceae, Senecioneae), we discovered several

errors in the citation of type collections of *L. lingiana* S. W. Liu, *L. changiana* S. W. Liu ex Y. L. Chen & Z.

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Yu Li, and *L. nanchuanica* S. W. Liu. The aim of this paper is to correct these errors.

1. *Ligularia lingiana* S. W. Liu

This species was named and described by Liu^[1] in 1985. In the protologue, he cited the type collection as “Sichuan: Muli, The side of forest and shrubby (sic), alt. 3600 m, 25 VIII 1978, Q. S. Zhao (赵清盛) 82946 (Typus in SZ)”.

We have been unable to trace Q. S. Zhao 82946 from the Herbarium of Sichuan University (SZ) and any other major Chinese herbaria. We have discovered, however, two specimen sheets labeled Q. S. Zhao, K. P. Mou & Y. B. Yang 8294 from the Herbarium of the Chengdu Institute of Biology, Chinese Academy of Sciences (CDBI). On one sheet (Fig. 1: A) was annotated, in Liu's hand, “*Ligularia lingiana* S. W. Liu, Typus”, whereas on the other (Fig. 1: B) was annotated, also in Liu's hand, “*Ligularia neurophylla* sp. nov.”, and the latter name has never been published.

The two sheets just mentioned above match perfectly the original description of *Ligularia lingiana* and thus should be the type material of the species.

Moreover, the accompanying line illustration in the original description seems to be made from the CDBI sheet annotated “*Ligularia lingiana* S. W. Liu, Typus”. It can be safely assumed, therefore, that this sheet should be the holotype specimen of *L. lingiana*, while the other one (annotated “*Ligularia neurophylla* sp. nov.”) should be an isotype of it.

2. *Ligularia changiana* S. W. Liu ex Y. L. Chen & Z. Yu Li

In 1951, Chang^[2] named and described *Ligularia heterophylla* C. C. Chang. In the protologue, he cited the type collection as “Yunnan: Wei-si, alt. 2900 m, in ravine, herbs, fls. white, Oct. 12, 1934, H. T. Tsai 59711 (type)”. According to a statement at the end of the paper in which the species was published, its type material was kept in the Herbarium of the Institute of Botany, Chinese Academy of Sciences (PE).

We found, however, that the collection H. T. Tsai 59711 (two sheets in KUN and another two in PE; Fig. 2: A, B) actually belongs to *Clinopodium polyccephalum* (Vaniot) C. Y. Wu & Hsuan in the Labiateae, but the collection H. T. Tsai 59771 (one



Fig. 1 Type specimens of *Ligularia lingiana*, Q. S. Zhao, K. P. Mou & Y. B. Yang 8294, Muli, Sichuan, China. A: Holotype (CDBI); B: Isotype (CDBI).



Fig. 2 Specimens of *Clinopodium polycephalum* (A, B) and *Ligularia changiana* (= *L. heterophylla*) C. C. Chang, a later homonym of *L. heterophylla* Rupr.; C, D). A: H. T. Tsai 59711 (KUN), Weixi, Yunnan, China; B: H. T. Tsai 59711 (PE); C: H. T. Tsai 59771 (holotype, PE), Weixi, Yunnan, China; D: H. T. Tsai 59771 (isotype, KUN).

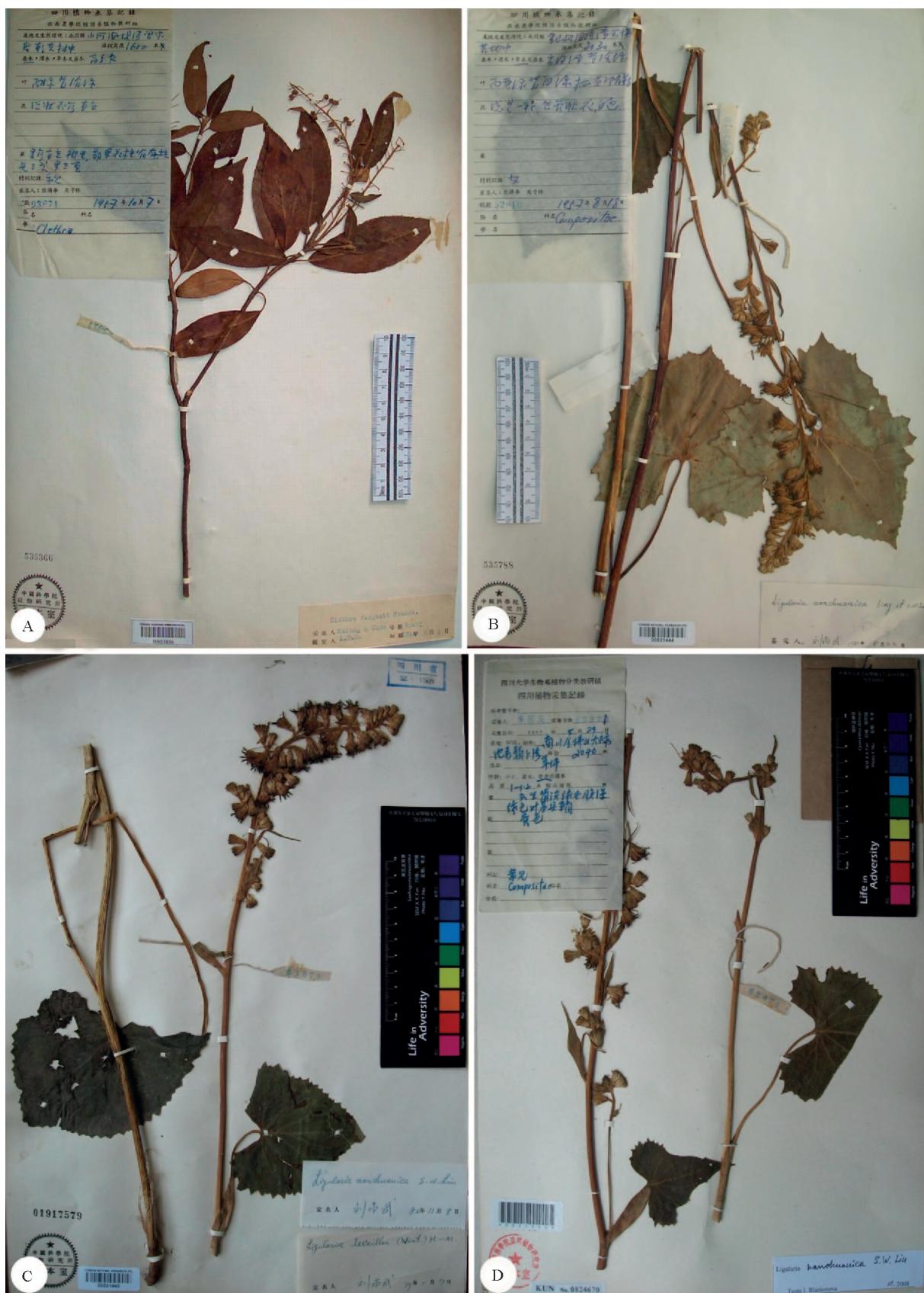


Fig. 3 Specimens of *Clethra fargesii* (A) and *Ligularia nanchuanica* (B-D). A: J. H. Xiong & Z. L. Zhou 93871 (PE), Nanchuan, Chongqing, China; B: J. H. Xiong & Z. L. Zhou 92810 (holotype, PE), Nanchuan, Chongqing, China; C: K. F. Li 63871 (paratype, PE), Nanchuan, Chongqing, China; D: K. F. Li 63871 (paratype, KUN). Note that J. H. Xiong & Z. L. Zhou 93871 has been incorrectly cited as one of the paratypes of *L. nanchuanica*.

sheet in PE) was annotated, in Chang's hand, “*Ligularia heterophylla* sp. nov.” (Fig. 2: C), and was indicated as the holotype on a seal on the sheet. Two duplicates of this collection are kept in KUN (one of them is shown in Fig. 2: D) and perfectly match the original description of *L. heterophylla*, and thus are the isotypes. It is evident that H. T. Tsai 59771, instead of H. T. Tsai 59711, is the type collection of *L. heterophylla* C. C. Chang.

To make the matter more complicated, *Ligularia heterophylla* C. C. Chang is a later homonym of *L. heterophylla* Rupr., a species distributed in central Asia^[3]. Being aware of this nomenclatural problem and considering that *L. phyllocolea* Hand.-Mazz. var. *villosa* Hand.-Mazz. is identical with *L. heterophylla* C. C. Chang, Liu^[4] in 1988 proposed a new combination, i.e. *L. villosa* (Hand.-Mazz.) S. W. Liu, as replacement name of *L. heterophylla* C. C. Chang. It is evident that in proposing this combination he overlooked the former homonym *L. villosa* Eckl. & Zeyh. in the Geraniaceae^[5]. In 1994, Chen and Li^[6] proposed *L. changiana* S. W. Liu ex Y. L. Chen & Z. Yu Li as replacement name of *L. heterophylla* C. C. Chang, but at the same time they recognized *L. villosa* (Hand.-Mazz.) S. W. Liu as a distinct species and, obviously having also overlooked *L. villosa* Eckl. & Zeyh., did not propose a replacement name for it. They also incorrectly cited H. T. Tsai 59711 under *L. changiana*, not citing H. T. Tsai 59771, the authentic type collection of this species. In 2011, Liu and Illarionova^[7] treated *L. changiana* as being identical with *L. villosa* (Hand.-Mazz.) S. W. Liu, and correctly chose *L. changiana* as the name of the plant in question.

3. *Ligularia nanchuanica* S. W. Liu

This species was named and described by Liu^[1] in 1985. In the protologue, he cited the type material as “Sichuan: Nanchuan, 8 VIII 1926, C. Y. Hwang (黄昌裕) 25; ibid. (sic) loc. Jing-Shan, alt. 1320–2040 m, 18 VIII 1957, J. H. Xiong et Z. L. Zhou (熊济华、周子林) 92810 (Typus in PE), 93187, 93871”.

From the major Chinese herbaria we have successfully retrieved C. Y. Hwang 25 (PE), J. H. Xiong & Z. L. Zhou 92810 (PE; Fig. 3: B), J. H. Xiong & Z. L. Zhou 93187 (HIB, HNWP, IBSC, PE), and J. H. Xiong & Z. L. Zhou 93871 (HIB, IBSC, PE). Of these collections, the former three do belong to *Ligularia nanchuanica*, but the last one (the sheet in PE is shown in Fig. 3: A), although also made from Jinfo Shan in Nanchuan, Chongqing, the type locality of *L. nanchuanica*, actually belongs to *Clethra fargesii* Franch. in the Clethraceae. Interestingly, we found that the collection K. F. Li 63871 (HIB, KUN, PE; Fig. 3: C, D) from Jinfo Shan has been identified as *L. nanchuanica* by Liu in 1982 and by Illarionova in 2008, respectively. We assume, therefore, that Liu^[1] originally intended to cite K. F. Li 63871, instead of J. H. Xiong & Z. L. Zhou 93871, as a paratype of *L. nanchuanica*.

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